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Who was Robert Jungk?

His Legacy and His Message for Today and Beyond

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JBZ Working Papers

Arbeitspapiere der Robert-Jungk-Bibliothek für Zukunftsfragen (JBZ) geben nicht notwendigerweise die Meinung der JBZ wieder, sie sollen vielmehr zur Diskussion anregen.

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Robert Jungk's Message for Today

An explorer of the future, a visionary planner, a proponent of peace, a grass-roots activist, a rebel and a motivator for freedom, the figurehead of the anti-nuclear movement, a true cosmopolite, and an extraordinary speaker – that is how Robert Jungk is characterized in contemporary sources.

Who was Robert Jungk?

And what does his work mean in the 21st century?

Robert Jungk can be considered a co-founder of the critical and innovative science of exploring the future, or so-called *Futurology*. At the same time, Robert Jungk is a representative of what we nowadays call *Civil Society*. He was among the pioneers of the international anti-nuclear and environmental movement in the early 1970s. If he were still alive today, he would most likely take part in the global protests against excesses of the financial sector.

Robert Jungk coined the term *Nuclear State* and published a book by the same name in 1977. From 1980 on, he was an activist in the peace movement. He participated in non-violent sit-down blockades at designated stationing sites for U.S. cruise missiles such as Mutlangen, Greenham Common and Comiso. Jungk spoke at a peace rally in Bonn (seat of the German government until 1999) that drew a crowd of 300,000 and was a protestor at various sites of nuclear power plants in Central and Eastern Europe.

In 1986, he was awarded the *Right Livelihood Award*, in Europe commonly referred to as the *Alterative Nobel Prize*. After Leopold Kohr – the author of *The Breakdown of Nations* and inspiration for the *Small is beautiful*-movement, who was honored in 1983 – Jungk was the second citizen of the state of Salzburg to receive this distinction.

In the early 1970s, Robert Jungk established his permanent residence in the city of Salzburg, where he died on July 14, 1994. Both his wife Ruth (née Suschitzky), who passed away eight months later, and he are laid to rest in an honorary grave at Salzburg's Jewish cemetery in Aigen.

This brochure aims to give an introduction into the life and work of Robert Jungk, a brief documentation of his writings and personal beliefs, all of which continue to be highly relevant until today.

Walter Spielmann, the former head of the *International Futures Library [Bibliothek für Zukunftsfragen]* and Jungk's long-time assistant and colleague, says about the eminent futurologist: **“Turning the affected into the involved”** – no other claim fits his concerns better than this one. A co-founder of a social and emancipatory futurology, Robert Jungk built on the creativity and power of people who are willing to choose new paths into the future”.

Jungk's extensive private book collection, comprising at the time approximately 3,500 volumes, became available to the public in 1986. At the same time, it created a base for the discussion of future issues. Conceived in 1985 as a study center for developments in futurology and a site for dialogue about “possible futures,” the *Robert-Jungk-Bibliothek für Zukunftsfragen* publishes the quarterly review magazine *proZukunft*, as well as a series of working papers. It builds on Jungk's focus and spirit. Among others, it conducts *Future Workshops*, provides consulting and in-depth information. Its activities include hosting numerous talks and presentations, organizing, and contributing to discussions, and other local as well as trans-regional and international events.

With all the examples of a different, a better world that he relentlessly collected, Robert Jungk brought together all the eminent pioneers of alternate *futures*, a long time before the term social networking was even heard of. This points out the sustainability and relevance of Jungk's thinking – today, tomorrow, and beyond. After all the wars and catastrophes of the 20th century, *shaping the future* – Robert Jungk's credo – remains a challenge and a chance which is not to be left to the lone individual. ***Future is no fate – it can be created by all of us!***

Information on all current – as well as past – events at the Salzburg-based *Robert-Jungk-Bibliothek für Zukunftsfragen*, on recent publications, as well as a database containing every issue of our *proZukunft* magazine, published since 1987, is available on the internet at <https://jungk-bibliothek.org/>

Reinhard Geiger

A Life Dedicated to the Future

by Hans Holzinger

A search for *Robert Jungk* on the internet or in printed publications will yield many characterizations: Futurologist, author, historian, teacher, political activist, peace campaigner, agitator for survival – to name just a few. His work as a scientific journalist, columnist, highly coveted lecturer and speaker, and head of countless *Future Workshops* must be mentioned as well. More than 4.5 million copies of his books have been sold worldwide.

We owe many valuable insights into Robert Jungk's thoughts and work to his autobiography *Trotzdem. Mein Leben für die Zukunft* [Nevertheless. My Life for the Future], which he managed to complete in 1993, one year before his death. It provides an invaluable inside view into recent world history as well, since Jungk had been close to many of the 20th century's momentous events. A sense of perspective emerges from this rich experience, which tells us much about deep trends in our society.

Youth and Wartime

Born 1913 in Berlin into a family of artists, Robert Jungk grew up during a period that celebrates militarism. In 1932, he took his high-school diploma in his birth city. Even though – like so many other boys – he was enthusiastic about flags, uniforms, march music, victory, fame, and death on the battlefield, visiting the Anti-War Museum in Berlin (a center of cultural and pacifist activities from 1925 until it was destroyed by the Nazis in March of 1933. His founder Ernst Friedrich was arrested) is a key moment for his turn to political pacifism (*Zukunft zwischen Angst und Hoffnung*, p. 240; *Trotzdem*, p. 42).

A role model of the young Robert Jungk is “roving reporter” Egon Erwin Kisch, next door neighbor and a friend of Jungk's parents. Jungk would later-on adopt many views of Kisch's. The day after the *Reichstagsbrand* (the burning of the Reichstag) in February 1933, the young student at Berlin University was temporarily arrested for his protest against antisemitic propaganda. With luck and the help of friends he was released. But Jungk decided that life in Germany had become too dangerous for him. Thus, he left, first for France.

Escape from Germany – Exile in Switzerland

In Paris, Jungk studied psychology and sociology at the Sorbonne. Already deprived of his German citizenship, he returns to Berlin illegally to visit his ailing parents and to write for a subversive press-service. In November 1936, after his cover is blown, he and his family are forced to flee again. His path, via Prague, where Jungk makes friends with the painter and (later-on) writer Peter Weiss, leads him to Switzerland, eventually. Unlike so many of his Jewish relatives, he would remain protected there for the remainder of the war and thus manages to escape the persecution by the Hitler regime.

Reporting Under a Pseudonym about Nazi Germany

Robert Jungk worked on his dissertation in Zurich and St. Gallen – while being temporarily jailed and interned in a camp – and began writing articles under various pseudonyms for Swiss daily and weekly newspapers, especially for the – back then – well reputed *Weltwoche*. As an authority on Germany, he reported about the events in the Third Reich. In his articles, he repeatedly pointed out the terrors and crimes of the Nazi regime. However, no one believes his news from the Polish and Jewish underground about the cruel proceedings in the concentration camps from 1942 onwards; thus, some of his texts never went into print, as he mentioned in the prologue of a book published in 1990. *Deutschland von außen. Beobachtungen eines illegalen Zeitzeugen* [Germany From the Outside. Observations by an Illegal Contemporary Witness] consists of selected contributions to *Weltwoche*. Not even French and English newspaper correspondents in the Swiss capital Berne, who valued him as a reliable source, thought of Hitler being capable of an industrially operated genocide of innumerable women, children, and elderly people. “It – understandably – defied their imagination.”

Observations by an Illegal Contemporary Witness

Of particular interest are Jungk’s observations and analyses depicting the military strategies of Nazi Germany and the psychological mechanisms that kept the terror regime afloat for such a long time.

An article published on December 12, 1941, examined the relationship between the growing dissatisfaction of the German people after the tailing off of the first war victories and the further accentuation of the persecution of

Jews. Dissatisfaction was growing as the German population began to feel the downside of the war due to an increasing number of soldiers being killed. Manipulating the negative feelings of the German population – discomfort, anger and even hatred – in a manner that fostered anger and even hatred towards the already disempowered and humiliated Jews was “not quite enough”, wrote Jungk. (*Deutschland von außen*, p. 93).

The Intangibility of the Holocaust

Another report, dated July 31, 1942, covers the mass deportations that threatened all those who were viewed with suspicion by the Hitler regime. In this article, the deportations are explained by Hitler’s fear of sparking riots caused by the upcoming opening of the second front. Every war entails an increasing bluntness of emotions, in the face of atrocities which otherwise cannot be processed – as Jungk observed. When the first shootings of hostages happened, the world was horrified. The article yet stated that the world had become accustomed to ever increasing numbers of unlawful mass executions. (*Deutschland von außen*, p. 186).

On the Nuremberg Trials

After the end of the war, Robert Jungk, now under his own name, wrote as a foreign correspondent, again primarily for the Zurich weekly *Weltwoche*. In an article about the main defendants of the Nazi regime facing the Nuremberg Trials, published November 23, 1945, he referred to the contributory fault of collaborators abroad and in Germany: Had we all braced ourselves sooner and more urgently against the rising regime of immorality, that is Nazism, a world of things could have turned out differently (*Deutschland von außen*, pp. 252-253). His article, ridden with grief about the inconceivable dimensions of the Holocaust, described the callous nature of the judicial proceedings and desire of most of the Germans to no longer being bothered by a litany of destruction and death.

Jungk explains this with the “tiredness of the heart” adding up to the “inertia of the heart”, eventually threatening us with the possibility of yet another new war. In his memoirs, the journalist much later asked himself-critically how those days of rage could have degenerated into dull, trivial court cases, where prosecutors read off statistics about all the suffering and horrors casually as if they were referring to stock prices (*Trotzdem*, p. 214).

The Fate of *Displaced Persons*

Robert Jungk is critical about the fate of all the refugees in post-war Europe, the so-called *displaced persons*, whom the victorious powers of the war were extremely hesitant to accommodate. His *Weltwoche* article *Aus einem Totenland* [From a Country of the Dead] caused a sensation. It was even read out in the British House of Commons (*Deutschland von außen*, pp. 243-253). In the post-war years, Jungk worked as a correspondent at the UN in New York. According to his memoirs, he got to know the United Nations as the “United Bureaucrats” – an observation which reflects his life-long skepticism towards large organizations (*Trotzdem*, p. 230).

The Lost Peace – the Transition to the Cold War

Der verlorene Friede [The Lost Peace] is the title of his autobiography’s chapter about the transition from the abatement of Nazi Germany to the Cold War: Fascism and nationalism with its millions of victims were not even conquered yet when in 1944 the Russians and the Americans already initialized a new global conflict that should overshadow the following decades (*Trotzdem*, p. 208). The end of fascism, the fall of the brown and black dictatorship, had only set the stage, he believed, for a new conflict between Americans and Soviets. Although the war was finally over, Jungk wrote, it was impossible to “enjoy ourselves like all the others did – because we were aware of the mass killings. The newspapers were full of hope, plans, projects, expectations. Yet the survivors were consumed by sorrow. No quarrels with God, no curse against the perpetrators or bystanders of war crimes could comfort us” (*Trotzdem*, p. 211).

Writing Against Nuclear Weapons

The joy about the end of World War II in Europe was tempered by yet another event – the atomic bombings by U.S. forces of the Japanese cities Hiroshima and Nagasaki in August of 1945 that killed at least 129,000 people. In 1959, Jungk impressively depicted the consequences of these bombings in *Strahlen aus der Asche* [Children of the Ashes]. Writing against the nuclear arms race and an imminent nuclear war subsequently determined his work and established his international reputation as an author.

Immigration to the U.S.

From 1947 to 1948, Robert Jungk worked as a correspondent for European newspapers at the United Nations in New York and in Washington, D.C. In 1948 he married Ruth Suschitzky – an artist and first cousin of photographer Edith Tudor-Hart and cinematographer Wolfgang Suschitzky. One year later, the Jungks moved to Los Angeles where Robert continued his work as a correspondent. He obtained U.S. citizenship in 1950.

Tomorrow is Already Here

In 1952, Robert Jungk's first book *Die Zukunft hat schon begonnen. Amerikas Allmacht und Ohnmacht* [Tomorrow Is Already Here. Scenes from a Man-Made World] got published. It created an international stir well beyond the German-speaking world. The same year his son, Peter Stephan, was born in Santa Monica, CA.

Jungk wrote about U.S. armament laboratories, secret atomic plants, and nuclear weapons tests as well as the uranium mining that destroyed both the land and the lives of Native Americans. This was one of the first books critical of the United States – published at a time when the entire world admired her technological progress! Inspired by reports of technological advancements, he described a hubristic nation challenging God – not only “reaching for the atom” but also for dominance over nature, humankind, and the universe. The central goal of his book was to warn of the dangers of an American post-war “newest world”, of a leading western power which embodies an immense potential threat at a global level.

Many Successful Books

In 1956 his second literary success followed: *Heller als tausend Sonnen. Das Schicksal der Atomforscher* [Brighter Than a Thousand Suns: A Personal History of the Atomic Scientists]. Robert Jungk was probably the first to write about the history of the atomic bomb and its inventors. The reports, based on intense research and many personal conversations with eminent physicists, make clear that scientists can no longer claim to be conducting fundamental research. They must bear responsibility for the technical, political, and social consequences of their actions.

Brighter Than a Thousand Suns describes the technological and industrial development of atomic research in detail -- from the first attempt at nuclear fission and the building of the first atomic bomb to the completion of the American H-bomb, for which President Truman fired the starting pistol in 1950. Jungk was especially interested in those scientists, who were willing to put their knowledge into commission for the military, even after 1945. Key figures are J. Robert Oppenheimer and Edward Teller.

In a revised edition of the book in the 1960s, when the world almost became witness of an atomic confrontation in the days of the Cuba Crisis, Jungk acknowledged those who not only distanced themselves from using nuclear fission at an early stage but also publicly warned of the dangers. This was, among others, done in the context of the *Pugwash Movement*, founded by Albert Einstein and Bertrand Russell.

What if in 1945 “the atomic scientists [had] chosen to remain indifferent and silent after Hiroshima or if they had even been proud of their achievement there? Their contemporaries would then probably have been left ignorant about the nature of the nuclear revolutions”, Jungk speculated: “The men in power on both sides, unhampered by public opinion, would then probably have fallen prey more easily to the temptation to use their atomic swords to slash entangled political knots”.

He ended his book expressing his hope “to contribute something to the great debate which may perhaps eventually lead to plans for a future without fear” (*Brighter Than a Thousand Suns*: 1982 ed., pp. 304-305).

In the same year as *Brighter than a Thousand Suns* was published, Jungk traveled to Japan for research on a book project about the consequences and victims of the nuclear annihilation of Hiroshima and Nagasaki. Germany’s aspirations to get hold of its own nuclear weapons – and her citizens collectively looking away – led Jungk to write *Strahlen aus der Asche*, a book released in 1959. In the early 1960s a film followed, co-produced with German TV journalist Dagobert Lindlau.

Jungk described his encounters with the *Hibakushas*, the survivors of the great *Pikadon*, which is the Japanese term for the atomic bombing and means *lightning and thunder*. He pointed out the publicly neglected long-term effects of radioactive contamination, from which the victims would

suffer all their lives. This was meant to counteract the danger of downplaying dangers and suppression of information, even in Japan. “The monumental municipal buildings are not Hiroshima’s memorial, but the survivors whose skin, blood and genes are branded with the memory of ‘that day’. They are the first victims of an entirely new sort of war,” Jungk pointed out in the epilogue of this book, which got translated into many languages. To him, *Children of the Ashes* became the most important and dearest of all the books he ever wrote.

A Mastermind of the Anti-Nuclear Movement

Meeting the *Hibakushas* motivated Jungk to warn even more intensely about the risks of nuclear weapons in the following years: “What have we, the survivors of the Second World War, so far done to justify our survival? Like many others I had [...] thoughtlessly accepted the fact that I had been spared. But then I met the atomic victims of Hiroshima. From them I received a warning of the new evil that menaces us all”, he ended his book.

Robert Jungk got actively involved in the German movement *Kampf dem Atomtod* [Fighting Nuclear Death] in 1958, as well as in international associations such as the *Pugwash Conferences on Science and World Affairs*, founded in 1957 by Joseph Rotblat and Bertrand Russell after the release of the *Russell–Einstein Manifesto* in 1955.

In 1957, Robert Jungk set up his permanent residence in Vienna. In the 1960s, he became an organizer of the Austrian anti-nuclear movement and made friends with philosopher and poet Günther Anders. Anders’ first volume of *Die Antiquiertheit des Menschen*, 1956 [The Obsolescence of Humankind] revealed the monstrosity of nuclear technology and the atomic bomb, which exceeds the human capacities of control and therefore could lead to the self-effacement of humankind. Anders’ radical philosophical critique of the nuclear age created an international stir.

In 1959, a conference of the *European Committee against Nuclear Armament*, founded by the German writer Hans Werner Richter, took place in London. For this purpose, Jungk drafts a *Charter of Hope* – a call for Europe to fight for complete nuclear disarmament.

Weltwoche Cancels their Collaboration with Robert Jungk

Jungk's staunch anti-nuclear position caused his dismissal from the *Weltwoche* after 20 years of editorial collaboration – at the time, even Switzerland was considering going nuclear! As he mentions in his memoirs, the dismissal might be attributed to pressure from the German government. The “Adenauer regime” had subscribed to a considerable number of copies of *Weltwoche*, paid with a slush fund, to secure an influence on a well reputed publication in neutral Switzerland (*Trotzdem*, pp. 316-317).

In 1966, his well-intentioned book *Die große Maschine. Auf dem Weg in eine andere Welt* [The Big Machine] about the European nuclear research center CERN, located outside of Geneva, was released. This “European science factory” – “considered by many scientists and engineers to be the contemporary counterpart to the temples of antiquity” claimed to contribute to global peace through international co-production, with the common product being knowledge.

Robert Jungk turned much more critical about CERN as he found out that this venture did not so much promote building peace but was rather motivated by a rivalry with scientists both in the U.S. and the Soviet Union (*Trotzdem*, p. 350).

A Co-Founder of Futurology

The early 1960s stirred Jungk's interest for Future Studies, a field growing in international importance. In 1964, he founded the short lived *Institut für Zukunftsfragen* [Institute for Future Studies] in Vienna – the first such institute in Europe – and began to work on a ten-volume series entitled *Modelle für eine neue Welt* [Models for a New World], which he published together with Hans J. Mundt.

In 1967, after the release of his new book, he follows the invitation of *Mankind 2000*, an international association, dedicated to purposes including “to support and promote all aspects of human development: in the individual: within and between groups; and in the emerging world community, with special reference to the mental, moral and essential well-being of each person and of the human community as a whole”, according to the statute. This historical initiative has been closely associated with the early development

of the international futures research movement, notably the World Futures Studies Federation (WFSF). It emerged from the ideas and pioneering work of Igor Bestuzhev-Lada, Bertrand de Jouvenel, Johan Galtung, Robert Jungk, James Wellesley Wesley, John McHale and Magda Cordell McHale who in the 1960s conceived of the concept of futures studies at the global level.

Together with Norwegian sociologist and peace researcher Johan Galtung, Jungk organized the first *World Conference on Future Research* in Oslo in September of 1967. *Mankind 2000* sought ways to promote futures research – with a special focus on human development. The Oslo conference was followed by futures conferences in Kyoto (1970) and Bucharest (1972).

Robert Jungk received an honorary doctorate for founding the science of examining the world of tomorrow from Berlin Technical University (TU) in 1970, where he taught as a guest lecturer between 1968 and 1975, while simultaneously taking part in world conferences on futurology.

In 1973, *Der Jahrtausendmensch* [The Everyman Project. Resources for a Humane Future] was published. It was meant to provide “reassurance to its readers that possibilities of a humane society are alive”. The book contains a tool kit “for social action leading to change” – eventually leading to publications about the method of Future Workshops that Jungk was developing together with students from the TU. This was impressively depicted in the volume *Zukunftswerkstätten* [Future Workshops. How to Create Desirable Futures] originally published in 1981, together with Norbert Müllert.

Protesting the Vietnam War – New Peace Movements

One of Jungk’s first encounters with his new home town of Salzburg – the Jungk family has been living there since 1970 – should not go unmentioned. Attending a student rally against the Vietnam war during U.S. president Richard Nixon’s stop-over in Salzburg on the way to Moscow in May of 1972, Jungk was dragged to the ground by police and injured on the head. The scene was filmed and got broadcasted on Austrian TV news the same evening. According to his memoirs, Jungk joined in the demonstration in solidarity with the students. At the same time, he wanted to keep an eye on his son Peter, who also took part in the rally.

A curious side note: Lord Kenneth, a member of the British Labour party and friend of Jungk's, planned to secretly meet the head of the U.S. State Department, Henry Kissinger, in Jungk's flat the day after the incident. The meeting, however, was cancelled by the American delegation and the two politicians met in a luxury restaurant instead (*Trotzdem*, pp. 432-434).

Resistance Against the *Peaceful Use* of Nuclear Energy

The realization that the *peaceful* and *military use* of atomic power are inseparable turned Jungk into an advocate for the mid-1970's environmental resistance to the construction of new nuclear plants, which demanded the general withdrawal from the nuclear energy program especially in Western Germany. Places such as Whyll in Switzerland (1975) and Brokdorf in Northern Germany (1976) were the first hot spots of the dispute. The long-lasting, but eventually successful civil resistance against a reprocessing plant in Wackersdorf (1984-1988), in vicinity of the Czech border, became a milestone in the history of the anti-nuclear movement.

In 1977, *Der Atomstaat. Vom Fortschritt in die Unmenschlichkeit* [The Nuclear State] was published. Like many of Jungk's earlier publications, this book receives international attention. It particularly addressed social conflicts and threats to civil rights inherent in technologies such as nuclear plants. It exposed the lobbies that stop the development of alternative, replaceable, non-threatening forms of energy and the political pressure put on governments by the nuclear lobby.

Jungk also got actively involved in the resistance against the planned stationing of new nuclear middle-range missiles in Western Europe as part of the so-called *NATO Double-Track Decision* in the early 1980s. He built his hopes on the "survival movement" consisting of hundreds of thousands of demonstrators throughout Europe as well as non-violent blockades at designated stationing sites such as Mutlangen, Greenham Common or Comiso, in which he took part himself. As a participant and engaged observer, Jungk documented this resistance against new nuclear missiles in his book *Menschenbeben, der Aufstand gegen das Unerträgliche* [Humanquake. The Uprising Against the Unbearable], published in 1983.

In 1986, Robert Jungk's columns for the professional journal *Bild der Wissenschaft*, published from 1972 to 1985, were released in the anthology *Und Wasser bricht den Stein* [And Water Splits the Rock]. His op-eds provide a brilliant insight into Jungk's work as a critical science journalist as he discussed new technical inventions and evaluated their social impacts.

Ties to Austria and Salzburg

Robert Jungk moved to Vienna in 1957 and became an Austrian citizen in 1964. From 1970 on, the Jungks' permanent residence was Salzburg, where they obtained a flat at Steingasse 31.

"The historic Steingasse is most beautiful on a late summer afternoon. The sunlight then falls diagonally on the windows and glances off a hundred times on the bumpy street", Jungk writes in his memoirs. "When I walk on this carpet of light I know how fortunate I can consider myself to have found a home here" (*Trotzdem*, p. 435).

He appreciated the city where the musical genius W.A. Mozart was born – a center of culture and public discourse during a time characterized by an atmosphere of change. Memorable are Jungk's contributions to the *Salzburger Humanismusgespräche* on the topic *Is There a Need for a Different Science?* in 1980; the Goldegg dialogues in 1989 featuring *Fears of Life – Living Fears*, where Jungk led a Future Workshop; or the 1992 symposium *Mozartian Future*, organized by the Robert-Jungk foundation jointly with Gerard Mortier, at that time general director of the Salzburg Festival.

A Birthday Wish Comes True: An *International Futures Library*

A long-held wish – establishing a repository of Futures material – expressed to the Austrian scientist, author (and later to become politician) Gerhart Bruckmann for the first time on Jungk's 60th birthday in 1973, came true in 1986. That year, the *Internationale Bibliothek für Zukunftsfragen* [International Futures Library] opened in Salzburg. Jungk donated his extensive private book collection to the library.

Projekt Ermutigung – Streitschrift wider die Resignation [Project Encouragement – A Polemic Against Resignation] summarized Jungk's way to look ahead. It was published in 1989 – his last book prior to his memoirs.

Walter Spielmann, who worked on the implementation of this long-cherished dream together with Jungk, depicted the development and aims of this institution in the commemorative for Robert Jungk's 80th birthday called *Triebkraft Hoffnung* 1993 (p. 279-294).

Running in the 1992 Austrian Presidential Elections

Robert Jungk's affinity for environmental movements and newly emerging Green Parties induced the almost eighty-year-old to make his bid for the Austrian presidency in 1992, at the request of the Austrian Greens. He decided to interrupt writing his memoirs for a year and to run for president instead, aiming to draw media focus on his "perception of a good future" (*Trotzdem*, p. 531). In the first ballot, Jungk received a decent 5.7 percent of the popular vote.

Honors Received in the Late Years of his Life

During the late years of his life, Robert Jungk was accorded many honors such as the Right Livelihood Award in 1986. In 1989, he was declared an honorary citizen of Salzburg. He received an honorary doctorate of Osnabrück University as well as the Austrian Decoration for Science and Art and the Salzburger Landespreis für Zukunftsforschung [Award for Future Research by the Salzburg state Government] in 1993.

Shortly after his 80th birthday, Jungk suffered a severe stroke from which he did not recover. Only some months earlier he had taken part in a demonstration against the Czech nuclear power plant in Temelín. Pictures of the demonstration show, however, that he must have been weak already.

Robert Jungk died on July 14, 1994, the day of liberty, equality and fraternity, in Salzburg. He is laid to rest in the presence of his family and friends in a grave of honor at the Jewish cemetery in Salzburg-Aigen. His wife Ruth followed him one year later, on March 28, 1995.

Robert Jungk's Main Writings

Robert Jungk was a highly active, extraordinary writer. Various editions of his books have been translated into many different languages.

The German publisher Rowohlt Verlag reprinted five of Robert Jungk's books in 2016: *Die Zukunft hat schon begonnen: Amerikas Allmacht und Ohnmacht*; *Heller als tausend Sonnen: Das Schicksal der Atomforscher*; *Strahlen aus der Asche: Geschichte einer Wiedergeburt*; *Der Jahrtausendmensch: Bericht aus den Werkstätten der neuen Gesellschaft*; *Der Atomstaat: Vom Fortschritt in die Unmenschlichkeit*.

- *Die Zukunft hat schon begonnen*, 1952
Tomorrow is Already Here, 1954

Jungk's reports about weapons laboratories, about secret nuclear plants and atomic bomb tests stirred up humankind. His critique of American scientific and cultural development had a major impact on public debate. He wrote that "the future is no fantasy cleanly distinguished from actual life: the future has already begun. But it still can, if recognized in time, be changed" (p. 19).

- *Abdankung der Kultur*, 1955 [Abdication of culture]

This biography of Albert Schweitzer – written under the pseudonym Jean Pierhal – is a critique of modern faith in progress.

- *Heller als tausend Sonnen*, 1956
Brighter Than a Thousand Suns, 1958

This is the first published account of the Manhattan Project and German attempts on building a nuclear bomb. Jungk studied the making and dropping of the bomb from the viewpoints of the scientists, largely based on personal interviews. The "arbitrary and unnatural separation of scientific research from the reality of the individual personality" stroke him as a prerequisite for "the creation of such monstrosities as the atomic bomb and the hydrogen bomb" (1982 paperback ed., p. 13).

- *Strahlen aus der Asche*, 1959
Children of the Ashes, 1961

Jungk's widely translated best seller about the fallout of the atomic bombing of Hiroshima and Nagasaki is a testimony against nuclearism. Writing against the nuclear arms race and the imminent nuclear world war subsequently established his international reputation as an author.

- *Der Jahrtausendmensch*, 1973
The Everyman Project, 1976

This optimistic book is subtitled *A World Report on the Resources for a Humane Society*. Its main thesis: real treasures do not lay in the ground; real resources are within us. But most of those resources are neglected because human development is seen only as educational development.

- *Der Atomstaat*, 1977
The Nuclear State (UK)/The New Tyranny (US), 1979

For a long time, the public was lulled by the enormous care allegedly taken to avoid serious accidents, sabotage and leaking of radiation, about the inherent danger of radiation. Jungk was among the first authors who proved that these assurances are not true and that the *nature* of the technology itself makes further accidents inevitable. This devastating indictment of the nuclear industry claims that military and peaceful usage of nuclear energy is inseparable. The risks of nuclear energy do not only threaten our health and well-being, but our democracy as well.

- *Zukunftswerkstätten* 1981
Future Workshops, 1987

A technique originally developed by Robert Jungk together with Norbert Müllert as a method for people and citizen groups with limited resources to get involved in the processes that would shape their social and technological futures – since the future is best built by the ones most affected!

- *Menschenbeben*, 1983 [Humanquake]

The so-called NATO *Double-Track Decision* – it intended the deployment of nuclear U.S. Cruise Missiles in Western Europe, threatening to intensify the Cold War – caused a new global peace movement. Robert Jungk describes it as a “humanquake”.

- *Und Wasser bricht den Stein*, 1986 [And Water Splits the Rock]

Controversial contributions on pressing issues of the time – a collection of all articles Robert Jungk published in the professional journal *Bild der Wissenschaft*. His personal annotations on his articles, added more than two decades later, make for an intriguing reading.

- *Projekt Ermutigung*, 1988 [The Encouragement Project]

A summary of Robert Jungk’s ideas for a humane future and technology. Referring to the French Revolution, he hopes for an *Encouragement Project*.

- *Zukunft zwischen Angst und Hoffnung*, 1990
[The Future Between Fear and Hope]

A plea for political imagination. This anthology offers a representative cross-section of Jungk’s work since the 1960s. It is proof for his commitment to the spiritual and human development of society and holds proposals for solutions to the pressing questions of humanity’s survival.

- *Trotzdem. Mein Leben für die Zukunft*, 1992
[Nevertheless. My Life for the Future]

Robert Jungk’s autobiography gives insights into his eventful life. At the same time, it is a vivid mirror of an eventful century.

- *Gestern ist heute*, 2011 [Yesterday is Today]

Controversial, and – as of this day – highly topical debates between German physicist and science writer, Heinz Haber, and his friend, Robert Jungk, published 30 years later by Wolfram Huncke, a long-term editor-in-chief of *Bild der Wissenschaft*.

Robert Jungk's Stand Against Nuclear Energy

***The Nuclear State* – the Book's Relevance Today**

The catastrophe that happened at the nuclear power plant in Fukushima, following an earthquake on March 11, 2011, brought the risks of nuclear technology to mind. Even though the operators downplayed the extent of the accident, the consequences and long-term effects were dramatic. In his book *The Nuclear State* (1979) – in the U.S. published the same year under the title *The New Tyranny - How Nuclear Power Enslaves Us* – Robert Jungk had explicitly warned about the new energy's "character hostile to life". These warnings have stayed current, unfortunately.

"The arrival of nuclear fission not only radically changed modern history but opened up new dimensions of terror. Nuclear power was first used to make weapons of total destruction for use against military enemies, but today it even imperils citizens in their own country, because there is no fundamental difference between atoms for peace and atoms for war." (*The Nuclear State*, p. vii)

A New Term for a New Danger

Speaking at a rally against the nuclear plant in Brokdorf, Germany, in February of 1977, Robert Jungk coined the term *Nuclear State*. The atmosphere was quite tense, with police using brutal force against protesters. It was later referred to as *The Battle of Brokdorf*. Obviously, the authorities intended to set an example, aiming to discourage any further protest. Luckily, nobody died there – unlike at a demonstration against the fast breeder reactor in Creys-Malville, France, where a young professor of physics was killed by a police grenade on July 31, 1977. The *Superphénix* project was eventually scrapped twenty years later.

Jungk did not come up with the term *Nuclear State* at his desk, but rather it appeared in his head like a "spontaneous suggestion", he wrote in his memoirs (*Trotzdem*, p. 463). When Rudolf Augstein picked up the term in the German magazine *Der Spiegel*, it became a popular term.

According to Jungk it was quite some coincidence that a few days after the events in Brokdorf, the *Traube Affair* leaked. Klaus Traube, a scientist, and manager of Interatom, the company in charge of the fast breeder reactor in Kalkar, Germany, started out a proponent of nuclear power. However, the report of the Club of Rome, *The Limits to Growth*, in 1972 eventually made him change his view. Thus, suspected of passing on secrets to sympathizers of terrorism, he became the victim of an illegal eavesdropping operation by the German secret service.

The New Energy's Character Hostile to Life

Robert Jungk's book *Der Atomstaat*, first published in German in 1977, addressed the radiation risks of using atomic energy as well as the dangers to democracy inherent in such a high-risk technology. In the preface, entitled *The Hard Path*, he clearly took a stand. It shows the attitude of a critic of industrial technologies. It also gives proof of the power lying in Robert Jungk's voice. His introductory words for the 1979 UK edition read:

"Although it is claimed that peaceful nuclear energy will in future only be used for constructive purposes and for the benefit of mankind, the potentially lethal effect of this new energy cannot be disguised. Certain measures can be taken to eliminate the dangers, but these can only partially succeed, and even the strongest advocates of nuclear energy admit this. There will always be accidents, and although they may for some time be small in scale and localized, there is always the possibility of a major disaster with long-term effects that can quickly wipe out whatever theoretical or practical benefits nuclear energy might bring, and that threat is enough to counterbalance those benefits, even at the present time." (*The Nuclear State*, p. vii).

He continued: "There can be no greater, or more frightening, burden for humanity to bear than the constant nuclear threat, because not only must we live in continual fear that atomic energy will get out of control in our lifetime, but the shadow of plutonium poisoning hangs over the long-term future". His book "was written in fear and indignation: in fear because of the imminent threat to freedom and humanity. In indignation at the realization of how many powerful and influential people are willing to sacrifice these supreme values for the sake of large consumption and profit" (p. viii), Jungk stated. Many people claim that talking about technologies needed to

be done without emotions. This, however, is the modern form of Biedermeier appeasement: “This simply updates the well-known philistine principle that the primary civic duty is to protect law and order,” Jungk argues. “The willingness to face the very real horrors that are indivisible from the plutonium age on the basis of cold uninvolved reason [...] is to betray humanity itself, and those who do so cannot escape their responsibility by attempting to blind ordinary citizens to the danger they face. There are times when strong moral feelings must be expressed and help to guide humanity towards its own long-term self-interest, while at the same time exposing the fallacies that are so often presented as truths.” (p. viii)

Robert Jungk was probably the most important reporter, enlightener, and agitator of the nuclear age so far. He also considered the irreversibility of nuclear fission – “an entirely new phenomenon in history” – as the main problem. “Once a reactor has been started up, processes have been set in motion that cannot be eliminated for an exceptionally long time. From that moment processes of radioactive decay, lasting for generations and involving a threat to all forms of life, must be kept under the most careful permanent control for tens, hundreds, thousands of years. When the number of installations and waste disposal units has passed a certain stage, the necessity for strict surveillance and control will leave their mark permanently on the political climate” (p. xiii). Today, atomic waste is still a constantly suppressed problem that is loaded onto future generations. Plutonium has a half-life period of 27,000 years, which equates to 500 generations.

Seven chapters, Seven Types of People

1. *Radiation Fodder* – The staff of the Atomic Plants are the First Victims

The book *Der Atomstaat* [The Nuclear State] features seven chapters. Right in the beginning Jungk addresses those who are at once exposed to the dangers of radiation, even without a nuclear accident. Those are the staff of the atomic plants. This chapter is titled *Radiation Fodder*.

He described the worries and steadily growing protest of the workers at the reprocessing plant in La Hague, France. In 1967, the first plant of this kind was built; in 1976, at the time the protests began, the second plant was planned by *COGEMA* (Compagnie Générale de Matières Nucléaires).

At the time, only a few reprocessing plants were operable. Thus, the French expected to score a coup by reprocessing nuclear fuel rods. The U.S. plant in West Valley, NY, had been shut down for safety reasons. The one in Windscale, Great Britain, was already overloaded with material from Germany, the Netherlands, Sweden, Spain and even Japan being processed there. On top of that, La Hague and Windscale were the first plants of that size with many uncleared safety issues.

The location of La Hague at the northern tip of Normandy was chosen because of the sparsely inhabited region, the proximity to the sea, which facilitated the delivery of the material to be enriched, and the opportunity provided for effluent disposal. Another reason for the site selection, according to Jungk, were strong currents, ensuring a rapid exchange of water towards the ocean. It was meant to “ensure a rapid removal of pollution from the shores of France” (p. 17). Jungk listed other factors in favor of the location, which the French nuclear authority had already picked by the late 1950s. These were “the strong winds, that would quickly blow all radioactive gases away, the nature of the soils, which in their view was suitable for at least the medium term storage of atomic waste, and – a consideration that was never officially admitted but which nevertheless leaked out – in the event of a catastrophe, a peninsula surrounded on three sides by the sea could more easily be isolated from the rest of the continent than an inland site” (p. 17).

The strengths of Jungk’s journalistic work: He did not only make controversial studies public, but he also always investigated on site and got himself into conversations as well – conversations with experts, opponents and advocates of nuclear energy, residents affected by the plants and, in the case of La Hague, with workers and unionists of the atomic plants. His dialogue partners included the physicist Bernhard Laponche, who was an employee of the French nuclear authority and leading operative of the social democratic and Christian-oriented Federation of Trade Unions *CFDT* (Confédération Française de Travail). Laponche publicly pointed out the safety defects of atomic plants.

Another person he interviewed was Daniel Cauchon, who contributed to forms of resistance like a strike between September and December 1976. He provided Jungk with insights into the strains the workers were facing.

Cauchon also reported that contract workers, so-called *intérimaires*, were employed. Thus, the health check of those workers got outsourced to their companies as well. This way, the obligatory submission of control samples to the health authority, from which the daily dose the COGEMA's workers were exposed to, could be skipped.

Putting the reports about the precarious situation of the workers in the nuclear plants at the beginning of his book was a skilled strategy of Jungk because that way the risks of this technology could be depicted credibly. The workers (and their unions) were not against atomic power per se, which gave them work, but advocated better safety measures. „Thanks to the trade unionists of La Hague, I obtained an insight into conditions of work more alarming than anything that had previously existed. Here men sacrifice not only their health, but also their freedom of speech and their right to self-determination. Realizing that no-one cares, they refer to themselves as ‘radiation fodder’” (p. 4).

“The atomic Sisyphus has a much harder time than his mythical ancestor. Not only are his burdens heavy, they are also contaminated. The never-ending efforts demanded impose great mental as well as physical strains. Fear of the invisible rays that might affect him is just as oppressive as his isolation in the protective armour he wears when doing his work” (p. 6).

It exceeds our knowledge in how far Jungk's reports about La Hague contributed to the awareness of the French public. The book was published in France in 1979. The current job situation of the workers in the atomic plants is not reported publicly these days. However, the courage of the workers back then to go public at least triggered stricter safety measures.

2. The Gamblers – Nuclear Scientists

The second chapter deals with those nuclear scientists who promise a bright energy future if only we let ourselves in for nuclear fission. Robert Jungk calls these scientists *Gamblers*. One of them was German professor Rolf Häfele who worked at the nuclear research center in Karlsruhe for twelve years. He was one of the most vehement advocates of fast breeding reactors. These power plants use Plutonium as nuclear fuel and need even higher temperatures than light water reactors; instead of water, Cadmium is used for cooling. Fast breeding reactors were supposed to supply even

more energy, but are significantly more dangerous than other reactor types, since a core meltdown could result in an atomic explosion. Robert Jungk calls the scientists gamblers because they gamble with the life of others and thereby ignore and ridicule critical studies as several examples in his book show. They are also gamblers because this new type of scientist gambles with enormous sums of money available if they succeed in making the projects tempting to politicians.

3. *The Atomic Man* – Humankind as a Factor of Fallibility

The elimination of human fallibility as a source of error – this is, on the one hand, put into practice by robotization and on the other hand by hard selection processes and trainings for workers. It is crucial that “personnel will not panic in breakdowns” (p. 51). Jungk quoted from a German study entitled *An Investigation into and Analysis of Human Functions in the Work of Nuclear Power Stations*. A pious hope, as the events at *Three Mile Island* have proven. The *Chernobyl* worst-case accident, as well as plenty of later incidents, are proof that human failure is never to be ruled out.

Jungk criticized the technocratic jargon of experts calling staff “lifeware” in addition to computer hard- and software. He pointed out that nobody seemed to be bothered by the fact that supervisory institutions were consulted for the staff selection, not only in the power plants but also in the ancillary industries. He cited a grotesque but also revealing list based on a survey of German companies that was published in the German newspaper *Wirtschaftswoche* on March 4, 1977. The list included possible exclusion criteria for job applicants – smokers (justification: *higher disease frequency, increased tension*), homosexuals (*disagreeable, incapable of filling certain positions such as instructor or staff manager*), women (*incapable of being managers, possible pregnancies*), foreign nationals (*unreliable, prejudiced against customers*), graduates of certain majors at both the Berlin and Bremen universities (*of Marxist cadre factory background*). He concluded that similar or even more rigorous criteria were to be expected eventually: “The atomic industry cannot be satisfied with keeping a check on their employees’ politics but must look into everything that might reveal an instability, an unruly disposition, or even an unorthodox life-style” (pp. 53-54).

Why did he title this chapter *The Atomic Man*? It was not just an act of irony that made him mention research being done on the genetic breeding of perfect and flawless humans to contain this potential factor of interference.

4. *The Intimidated* – Silencing the Insiders

In the fourth chapter, Robert Jungk wrote how individuals considered to be a potential threat to the nuclear power lobby became targets of attacks once they broke their silence about the grievances or just because their resistance could have too much of an impact. Ingo Focke, a German engineer and scion of the famous Focke aviation-dynasty, turned into an opponent of nuclear energy when he could no longer accept irregularities and incidents in his company, a supplier for atomic plants. Thereafter, Jungk reported, the cars of Focke and other nuclear energy opponents were tampered with. The case of Karen Silkwood, who worked at the *Cimarron* plutonium factory near Crescent, Oklahoma, ended fatally: the 28-year old lab assistant was killed in a car accident.

Official reports claimed, she fell asleep after overdosing on tranquilizers. Suspicion of wrongdoing in the accident arose “when two men, who had been waiting for her near the scene of the accident – David Burnheim, a well-known *New York Times* reporter, and Stefan Wodka, the secretary of OCAW – the oil, chemical and atomic workers’ trade union – discovered that an important file she had been bringing them had vanished. As they knew, it contained a great deal of evidence compiled by her about grave breaches of the safety regulations by her employers” (p. 70). On May 18, 1979, after a lawsuit lasting for years, the parents of Karen Silkwood obtained damages worth 10.5 million dollars (although this certainly could not bring their daughter back to life). The health authority later-on closed the plutonium factory.

Jungk, who suggested “an aid fund for dissident researchers” at the *International Conference for a Non-Nuclear Future* in May 1977, reported similar incidents. For example, the case of Leo Kowarski, a pioneer of the French atomic research, who feared for his life because he spoke out against the construction of fast breeding reactors.

To the best of our knowledge, none of the cases described were ever sued for libel or defamation.

5. *The Proliferators* – Danger of Proliferation

Chapter five covers the American euphoria to turn nuclear energy into the energy of the future for the entire world, marketed under the slogan *Atoms for Peace*. An endeavor that was withdrawn after it became known that the *peaceful* nuclear technology could very well be misused for military purposes. In September 1977, the U.S. successfully fired a bomb at the nuclear test site in Nevada that was filled with plutonium “of normal reactor quality”.

Jungk credited Albert Wohlstetter, a long-time advisor to U.S. presidents, with the U.S. ceasing any further development of that technology because a possible sale of nuclear reprocessing technology and expertise was to be expected. Wohlstetter explicitly warned that if Japan and Germany carried out their atomic plans, they would already have disposed of enough plutonium to manufacture nuclear warheads. The intense nuclear connections between Germany and Apartheid-South Africa as well as Germany and Argentina described by Jungk also fit that mold. In South Africa, a large-scale plant for the uranium enrichment was being constructed in Pelindaba. In Argentina, Germany collaborated on a reprocessing plant.

About the political relations to South Africa Jungk writes, “Gerhard Stoltenberg – known for his liking for nuclear energy since his vigorous intervention at the Brokdorf demonstration – flew to South Africa in August 1973 and again in August 1975, and on both occasions spent some time at the reactor centre in Pelindaba. Franz Josef Strauß, Germany’s first Atomic Minister and as Defence Minister [...] a committed advocate of atomic weapons for the Federal Republic, has visited South Africa at least four times since 1971 and several times received representatives of the South African atomic authorities in Munich” (pp. 99-100).

These visits became suspicious due to the secretiveness, Jungk wrote, since there had never been proof that Germany had in fact acquired plutonium for their nuclear missiles. The prolonged conflict with the Iranian nuclear program, which the International Atomic Energy Agency *IAEA* tries to resolve, proves that the problem of proliferation is not off the table yet.

6. *Atomic Terrorists – Plutonium Smuggling*

The sixth chapter covers the threat of nuclear explosives getting into the hands of terrorists. It will never be fully possible to solve the mystery of where all the missing fissile material that gets lost ends up eventually. Studies quoted by Jungk show concerns that workers in the atomic plants could be tempted to consider making money by smuggling uranium or plutonium. “[T]he whereabouts of many kilograms of plutonium will never be definitely known. Perhaps it will have ended up somewhere on the plutonium black market, or in the hands of a nation that has no atomic bomb yet but will soon be making one; and perhaps some of it may already be in the hands of terrorists” (p. 123). During the breakup of the Soviet Union, due to partly desolate conditions in the army of the nuclear power Russia, plenty of fissile material might have been released or stolen.

7. *The Supervised – Civil Rights and Liberties*

In the final chapter, Jungk summed up the fundamental danger of limitations to civil rights and liberties resulting from political terrorism acute in the 1970s [the *German Autumn* of 1977, the terror organization *Rote Armee Fraktion*] and from increasing safety hazards of the quickly multiplying nuclear power plants: “The double stimulus of terrorism and atomic anxiety will [...] cause industrial states to coordinate all the knowledge about their citizens stored in the most varied state and private data banks into a single warning and control system of totally unprecedented comprehensiveness” (p. 134).

In this section, Robert Jungk also reported acts of censorship in the media. “The system of so-called D-notices, which previously restricted the liberty of the press principally on armament matters, has been extended to the publication of information about civilian ‘nuclear matters’ and has been strictly applied” (p. 133). Thus, as early as the 1950s, the *Daily Express* newspaper was hindered from publishing reports about errors and defects in the construction of the Windscale reprocessing plant in Great Britain. “With the planned construction of more and more atomic installations, the multiplication of security measures is inevitable” (p. 133), he predicts.

Prospect: The Soft Path

In the book's outlook, titled *The Soft Path*, Robert Jungk reflected on his fundamental beliefs. Resistance against atomic plants makes clear that the nuclear issue has become the trigger for a debate extending well beyond the immediate cause: "What is at stake is the future, not only of our energy supply, but of our form of government. The conflict is not just about a particular technology, but about all the manifestations and powerful influences of large-scale industrial technology" (p. 147).

Nevertheless, he spoke out optimistically about citizens' movements. "Those who associate the movement against nuclear energy exclusively with the idea of protest or even violence should appreciate that these people are not just 'against' but are primarily for something. The Aldermaston marches and Campaigns for Nuclear Disarmament started international concern for a secure future. The peasants of Whyll, Saint-Laurent, Kalkar and Brokdorf demonstrated for the preservation of their threatened way of life. The workers of La Hague went out on to the streets for the sake of their health and for their rights as union members to be protected. The sit-in at the Seabrook site in the United States was carried out for the sake of the environment [...] and opponents of the atom at Gösigen, Barsebeck and Zwentendorf campaigned for the largest possible democratic voice in planning major technical projects that are to a large extent financed by the taxpayer" (pp. 148-149).

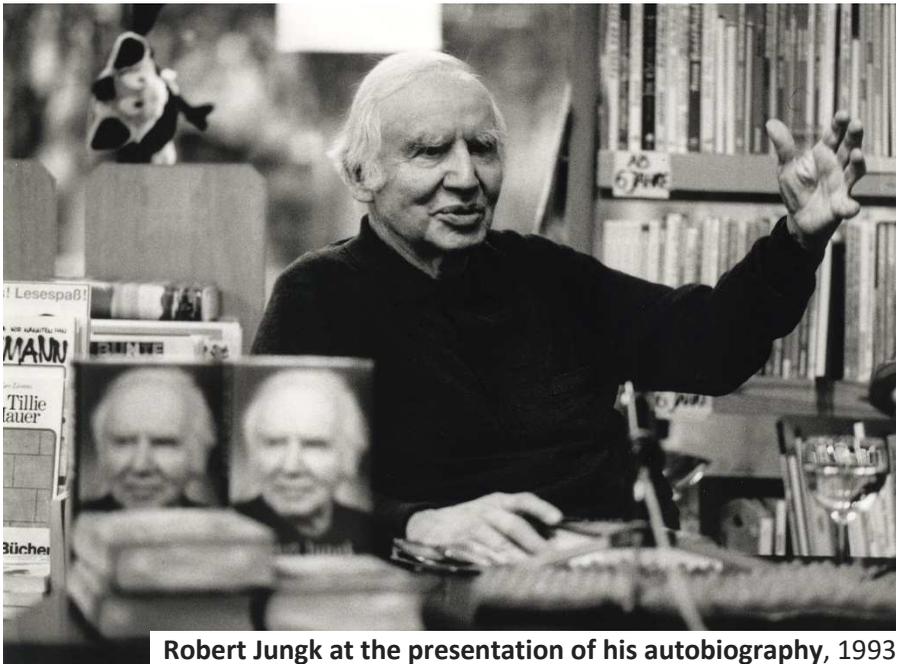
Zwentendorf – Austria's only nuclear plant – never went into operation. In the light of the massive expansion of atomic energy in the Czech Republic (Temelín) and Slovakia (Mohovce), which led to the rise of an anti-nuclear movement in those countries, *The Nuclear State* was translated into Czech in 1994.

Robert Jungk pointed out that different energy politics beyond current risk technologies would require a different lifestyle and conscience. Even here he remained optimistic and foresaw a "new internationalism" in the making. "This 'New International'", as he called it, "is composed of thousands of small groups. The fact that they often differ and quarrel is seen as a sign of vitality, not weakness" (p. 151). He detected a "new belief in a more modest standard of living". People would begin to realize that "material resources

are limited and that the extravagance of the industrial nations cannot last” (p. 150). “We can no longer expect a future of unlimited growth, but of many shortages”. With those words, he took up on what the *Club of Rome* formulated in *The Limits to Growth* in 1972. It also referred to the ideas of the sustainability discourse going on since the 1990s.

Strongly linked to this new way of thinking is according to Jungk “the aspiration for justice. Those who take solidarity seriously cannot ignore the tremendous difference in standards of living between the developed and less developed countries. They can tolerate neither the exploitation of the Third World nor the help programs, themselves often camouflaged business deals, exported as a life style that the people of the industrial societies themselves have discovered to be a heavy burden” (p. 150).

Robert Jungk was right on target with so many of his observations. Yet, so far, he was perhaps overly optimistic about the peace and anti-nuclear movement becoming *the* determining factors for history.



Robert Jungk at the presentation of his autobiography, 1993

Delmar Mavignier/ JBZ Archives

Some Key Theses of Robert Jungk's Work

*“Turning the affected into the involved –
a creative design of the future”*

by Walter Spielmann

Like no other, this statement characterizes Robert Jungk's interdisciplinary and transdisciplinary interests. He focuses on four key themes that the founder of a social and emancipated design of the future relentlessly committed himself to as a journalist, author, and gifted orator.

1. Democratizing the future – We need everyone! We depend on everyone!

The future is too important to leave it to the interests of (often self-proclaimed) experts and policy makers. According to Jungk's beliefs, each and every one is capable of independently co-creating the future. Levelling criticism at existing conditions, expressing concerns and implementing them is the foundation of and guarantee for a lively formation of togetherness.

2. Controlling science, technology, and power

The scientific and military complex aims for a permanent accumulation of power, particularly in the course of globalization. The risks of technological omnipotent fantasies, especially in nuclear and bio-technology, threaten our future. Consequently, this leads to a limitation of individual self-determination. Counteraction requires attentive and critical control by independent media, plus well-informed, responsible, and committed citizens. Science and research should not serve the interests of power and capital, but the inherent necessities of the powerless and the needy.

3. Commitment to justice and humane life forms

Being conscious of the beauty and vulnerability of planet Earth, it is our responsibility to stand up for fair, sustainable, and livable forms of togetherness on all levels. Not technological, but social inventions and new forms of informal and social cooperation, of living, of cultural encounter, of mobility, of work and not least of leisure, should be developed, tested, and steadily improved in dialogues and in Future Workshops.

4. Creativity and art as seismograph of the upcoming

Robert Jungk placed emphasis on the appreciation and promotion of creativity. He saw artists of all sorts as “eternal revolutionaries”, as seismographs and pioneers of the upcoming. These artists, who are more alert and sensitive for the imaginable and desirable, could lay tracks into the future, as well as take up a warning function. He was convinced that the particularly noticeable and tangible creative potential of children and adolescents is still present in every adult, only waiting to be awakened.

“Resistance against nuclear armament, inhumane technology and the power of new social movements” by Hans Holzinger

1. A dominance of the scientific-technological ideas of progress lead to the dehumanization of our society. This is illustrated by defense research and the development of large-scale nuclear facilities.

Robert Jungk is among the central figures of the first peace movements against nuclear armament in the 1950s (the *Pugwash movement*), as well as the second one of the 1980s. These protests were directed against the accelerating arms race devised by the so-called *NATO Double-Track Decision*, which designated Europe as the prime arena for a (winnable!) nuclear war. The development of the U.S. Strategic Defense Initiative, the strategic shift of war into space, was another cause for protest. Jungk was extremely critical of the powers that fought a systematic fight on the back of the extorted population (*Trotzdem*, p. 257).

He also cared about dialogues and contact between East and West. The 1980's peace movement probably played a pivotal role for Mikhail Gorbachev initiating reforms that eventually led to the dissolution of the USSR and the end of the Cold War. However, the peace dividend promised to the people, has never been paid. Defense spending is as high as it has never before. After the Cold War ended, several “hot” shooting wars occurred in Yugoslavia, Iraq, Libya, and Syria, with new arenas for confrontations coming up: China and Japan are arming themselves to an alarming extent.

Robert Jungk's thesis might hold true: Leaving the spiral of armament is extremely hard to achieve. U.S. President Obama neither prevailed against the gun lobby, nor did he succeed with his plans of disarmament and cutting the military budget. This proves just how frustrating attempts to demilitarize the world can be.

Resistance against nuclear power seems (at least momentarily) fairly high, due in part to the *Fukushima* catastrophe – and rightly so. Apart from the risks of power plants, the final deposition of nuclear waste has been anything but solved yet. Safety standards in more recently commissioned atomic plants have certainly improved since their precursors went into operation in the 1960s and 70s. However, it would be highly negligent to claim them being free of risks. Furthermore, more than 20 years have passed since the *Chernobyl* nuclear disaster – and the collective memory is known to be of limited range.

Major incidents have not surfaced recently, which might have contributed to popular protests tailing off. What needs to be explored: whether residents next to nuclear power plants have gotten used to their industrial-scale neighbors (*a habituation effect*) – or have they resigned? At present it seems that construction and commission of new atomic plants would not stand a political chance in Germany, Austria, or Switzerland, at least.

The use of atomic energy as the main cause for the proclamation of a police state – as Jungk had feared – has not come true by now. Yet, a crisis including hushed up accidents, major quantities of nuclear material disappearing, and the danger of terrorist blackmailing could put it to the test.

2. Major industrial applications have changed the character of scientists. Not an interest in new insights, but the acquisition of lucrative orders becomes the driving force.

Jungk describes how the industry made fast breeder reactors (at least in Germany) palatable to politicians: great promises, a downplaying of the risks, and – in the beginning – strongly understated costs did the trick. He calls it “project swinging”. This means selling projects as being feasible without any solid insights just to get access to further research funds. This “audacious, speculative style of scientific advance was born in the armament laboratories of the Second World War” and initially tested on major military

projects (*The Nuclear State*, p. 33). An enormous euphoria for technology in the 1950s – with Hermann Kahn paradigmatically arguing for “Thinking the unthinkable” – might have fostered this approach. However, this eminent military strategist did not advocate social creativity, but technology futures such as colonies under the sea that would produce food and nuclear-powered airplanes (Hermann Kahn, Anthony J. Wiener, *The year 2000. A Framework for Speculation on the Next Thirty-Three Years*: London/New York, 1967).

Nuclear fusion might be considered a contemporary embodiment of this style of research. British physicist, Alexander M. Bradshaw, previously head of the German *Max-Planck Research Center for Plasma Physics*, praises nuclear fusion as *the* energy of the future, which should be ready for series production before the end of the 21st century. Environmentally friendly attributes, such as the price-competitive and more-or-less CO₂-free energy generation, the short durability of the nuclear waste, make nuclear fusion an attractive choice, he claims. The scientist admits, however, that this technology is still going through development and its success cannot be guaranteed (Alex Bradshaw, *Kernfusion – Klimaretter oder Utopie?* Chemie Ingenieur Technik, 80: 2008, p. 308).

Nuclear fusion still wastes much more energy than it produces. The first experimental reactor *ITER* (Latin for “the way”) is being built in Cadarache, in southern France. Construction of the complex – a co-production between China, Europe, Japan, South Korea, and the U.S. – began in 2007. It is projected to begin plasma-generating operations sometime in the 2020s.

Robert Jungk’s thesis about research, continually striving to maximize profit and having its own dynamics, stays relevant as of this day.

3. Major technologies will always cause discomfort in people who justifiably feel excluded from the controllability of the risks.

In *Der Atomstaat* (*The Nuclear State*, p. 64), Jungk quotes Austrian scientist Helga Nowotny, who back in the day worked at the International Institute für Applied Systems Analysis (*IIASA*) in Laxenburg near Vienna, saying that “opposition to nuclear power is rooted in distrust of and opposition to the power of the big international, multinational and industrial corporations

with their ever greater concentration of economic strength and political influence. It is the opposition of those who feel small and impotent against the might of big industry, the bureaucratic state and big science, and who suspect that their basic rights and freedoms, which have taken centuries to win, and which have been either lost or threatened in recent history, are again being rapidly eroded.” Her finding of how this undermines democracy is still relevant as of today.

4. People from within the “system”, who point out drawbacks, disadvantages, risks, and the uncertainties of modern major technologies, must achieve a transparent and democratic examination of major technologies.

During his research, Robert Jungk repeatedly referred to such converts, whose identities he did not divulge in order not to endanger their jobs. They provided him with important insider information. In his book *Menschenbeben* (Humanquake), which covers the second peace movement of the 1980’s, Jungk dedicates one chapter to those critical thinkers and whistle blowers, the undercover informants (*Menschenbeben*, pp. 19–39).

Due to the growing complexity of our societies, critics from within the “system” become increasingly important for a functioning democracy, in many different sectors. For instance, the international financial crisis would have asked for many more experts – bankers, academic leaders, and economists – to take a stand against the mainstream and its “solutions”.

5. Parliamentary democracy is no longer capable of establishing a critical public sphere necessary to point out the dangers of possible aberrations and to initiate policy changes.

Political parties are often entangled in the interests of industry lobbies. This undermines politicians’ ability to keep their critical distance. Therefore, it is up to a new political force – social movements, public campaigns, and civil society – to assume this role. *NGOs* (non-governmental organizations) are *the* innovative political factor of the current parliamentary democracies. *NGOs* such as *Attac*, an international movement working towards social, environmental, and democratic alternatives in the globalization process, provide a good example.

Robert Jungk understood democracy as a space for an active civil society and the possibility of citizens' self-organization. The peace, feminist, human rights, environmental and anti-nuclear movements of the last decades concur with his positions.

In Austria and Germany, most of the population opposes nuclear energy. In other European countries this did not seem to be the case for a long time. This could be due to improved safety standards achieved by the anti-nuclear movement. There have not been any reports of bigger nuclear accidents recently. The issue of the final deposition of radioactive material has been mostly put off by politics. Yet the *Fukushima* catastrophe has somewhat changed the picture; in Japan, as well as in other technology-affine countries, such as France, active resistance has grown, with results still pending.

6. Movements in favor of a lifestyle beyond consumerism, non-alienating workplaces, new ways of decentralized energy production and nutrition sovereignty, new forms of neighborhoods, and economic co-operation lead to a cultural renewal of the prosperous democracy.

So far, Jungk's belief in a people-centered democracy – one that he shares with Erich Fromm, an eminent psychoanalyst and critic of consumerism, with Ivan Illich and Leopold Kohr, the advocate of *Menschliches Maß* (The human scale) – has not (yet) or only partially come true. The power of the entertainment and event industry, mass media, as well as massive propaganda of the advertising industry apparently have a greater grip on peoples' brains and hearts than utopian dreams about a simple, solid, and sensual lifestyle that has swapped competition for co-operation and community spirit.

Klaus Firlei, the president of the *Robert-Jungk Foundation*, calls this phenomenon *experience capitalism*, which heavily interferes with the former private sphere of feelings and experiences for profit's sake. The Western, resource-intensive lifestyle spreads throughout all continents and spans the whole globe. One third of the so-called transnational consumerism class now lives in Southern countries, fostering a meat-centered culture, a fixation on cars and technological devices. This goes hand in hand with a high consumption of energy!

Future Workshops

Turning the affected into the involved was one of Robert Jungk's main goals. Together with Norbert Müllert, he developed a method meant to include citizens constructively and creatively, to enable them to devise their own ideas. The idea is that the future is best to be built by the ones who will be most affected by the changing world.

The Workshops started in the early 1960s. Back then, it became obvious that knowledge of the future's possibilities means power. Consequently, the economy and industry, state and military, the government and political parties had experts create a future convenient for them. Those in power took care that future was depicted and developed rather one-sidedly. The ones primarily affected, however, had hardly any influence.

Robert Jungk was convinced that *different futures* are thinkable and possible, that Future Workshops would pose a counterweight: they would evoke peoples' self-confidence and create a source for the support of citizen's initiatives, actions, and broad involvement in the transformation of society. He started experimenting on how average citizens could develop and voice their own ideas. The book *Zukunftswerkstätten* [Future Workshops] describes both the method and its philosophical background. Originally published in 1981 in German, it was subsequently translated into several languages.

The technique is meant to shed light on a particular situation, to generate visions, and to discuss how they can be realized. The method includes a triad, starting with "stock taking" (*the criticism phase*), followed by the development of ideas for the future (*the utopia phase*) and specific action steps (*the realization phase*). Such workshops are a well-tried method in various countries, used in adult education, organizational development and in political co-determination processes. JBZ has implemented more than 100 projects so far, with moderators developing innovative ideas together with citizens, reaching from topics such as *sustainable area development to future of the work environment*. In Germany, similar activities are co-ordinated by *Zukunftswerkstätten – Verein zur Förderung demokratischer Zukunftsgestaltung* www.zukunftswerkstaetten-verein.de

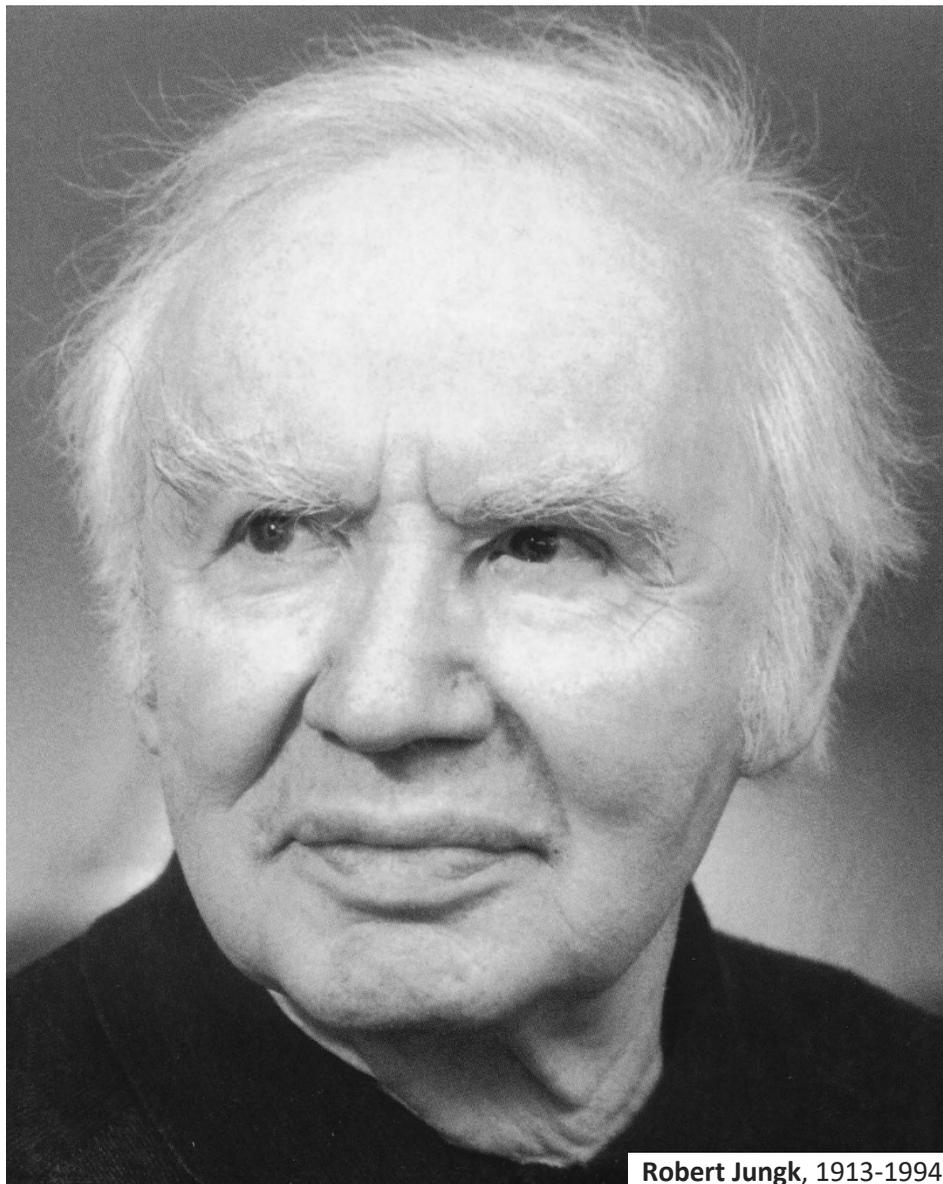
JBZ - The Robert-Jungk-Library in Salzburg, Austria

In 1986, Robert Jungk's long-cherished wish came true: the *Internationale Bibliothek für Zukunftsfragen* [International Futures Library] opened in Salzburg. Jungk's extensive private book collection – back then around 3,500 books – became publicly accessible. At the same time, the Futures Library was meant as a place of involvement with future issues. Today, he transdisciplinary library features a collection of more than 16,000 printed books. It devotes itself to work in four areas, namely: *communication* – offering the stage for most interesting debates; *documentation* – striving to become a creative commons provider; *critical and creative future research*; *activation* – to share our tools to help people find solutions responsive to their concerns.

Since JBZ is a not-for-profit organization, it breaks away from trend research approaches and research primarily geared to the short term. According to its foundation charter of 1985, JBZ's mission is to look at “possible, probable, desired or undesirable futures” and make them accessible to the interested public – “to turn those being affected into participants”. By 2018, JBZ has become an information center for all questions and problems concerning the future. The aim is to collect and communicate information relevant to the future to the public, to promote interdisciplinary and future-oriented thinking and to create opportunities for encounters. About 100 events and lectures take place in the library every year.

With a strong commitment to education, science, and culture, the *Robert-Jungk-Bibliothek für Zukunftsfragen* is part of Salzburg's “knowledge landscape”, acting regionally, nationally, and internationally. Future orientation, interdisciplinarity and independence in the sense of Robert Jungk's guiding principles remain of crucial importance.

In 2015, under the long-time managing director Walter Spielmann, JBZ moved from the city of Salzburg's old town to the Robert-Jungk-Platz (Robert-Jungk Square) 1 / Strubergasse 18, located in a revitalized part of the city named *STADTWERK*, where the majority of the city's civic education institutions have been sheltered since then. In this inspirational new atmosphere of mutual exchange, the work of JBZ in Robert Jungk's spirit continues – striving for a good future for all.



Robert Jungk, 1913-1994

Lilian Birnbaum/JBZ Archives