#### 1927



The American airmail pilot, Charles A. Lindbergh, flew across the Atlantic in his "Spirit of St. Louis", landing in Paris.

### 1928

The Dutch painter, Piet Mondrian, had a great influence on non-objective art with his "Compositions"

## 1934



The German physicist, Albert Einstein, described his new theories on the equivalence of mass and energy to the press in New York.

#### 1939



The Austrian founder of psychoanalysis, Sigmund Freud, died in exile in London.

# \_childhood and youth

In 1930 Kurt Gödel publishes his incompleteness theorems, showing that no sufficiently strong consistent system can prove its own completeness, i.e. such a system is, in principle, "incomplete". Man's belief in science as the deliverer of perfection is shattered.

In the 1930's psychology meets with enormous public interest. Man is introduced to the deep, shadow side of his own psyche and once again Man stumbles into a limitation – this time the more personal limitation of his own soul.

In 1935 Alan Turing publishes his article "On computable numbers with an application to the Entscheidungsproblem", generally regarded as the theoretical basis for building computers. His abstract model of computing and storage becomes known as the **Turing machine**.

In the 2nd half of the thirties a large number of scientists leave Europe for the USA – among others Kurt Gödel (Austria) and John von Neumann (Hungary), who introduces the stored program concept – also called the **von Neumann machine**.

In the early fifties the number of USA Nobel Prize winners overtakes that of Germany, England or France. The USA becomes the leading power in science and the dominant figure in the emerging field of computing, or informatics.

**Ole-Johan Dahl** was born on October 12, 1931 in Mandal, a small coastal town in southern Norway. All his male ancestors had been sea captains, and the family sagas were replete with sailing vessels and world travels. Ole-Johan was the firstborn and his father hoped for another seaman, but these expectations remained unfulfilled. He was a quiet boy with a gift for music, mathematics, and intellectual pursuits in general. He played the piano well, but for Dahl music was private, neither to be shared with the public nor to be sacrificed to obligations. Thus he chose an academic career, with mathematics as the main subject.

Edsger Wybe Dijkstra was born on May 11, 1930 in Rotterdam. His father, a chemist, taught in secondary school. Prominent in his field and president of the Dutch Chemical Society, Dijkstra Sr. dedicated his work to teaching, yet he forbade his son to become a school teacher. His mother, a mathematician, had a lasting influence on his interest in mathematics. Dijkstra recalled one of her counsels:

"Know your formulae, and always remember that you are on the wrong track when you need more than five lines – in retrospect, I think that no other advice has had such a profound influence on my way of working."

Dijkstra considered studying law, with the idea of representing his country in the UN. But wiser people convinced Dijkstra to base his choice on ability rather than on idealism; it would be a pity if he did not devote himself to science.

Kristen Nygaard was born on August 27, 1926 in Oslo. About his background Nygaard wrote:

"I have had the advantage of living in many different worlds. My mother's family were farmers, my father's family were city dwellers. My grandfather was an industrial lawyer, my father a painter who got his Master's in classical Greek, Latin and French, and later became a stage director... Another aspect of the war was that work on my uncle's farm had priority over school. I had to participate in the production of the food we needed to survive. I always wanted to become a scientist, but I also know much about what it is to be a farmer."

At thirteen, Nygaard wanted to become a Professor of Astronomy and in 1940 was presented to the staff of the Institute of Astrophysics at the University of Oslo. But it was Nygaard's interest in mathematics which brought him in contact with Jan W. Garwick, an assistant at the University of Oslo who later played an important role in Nygaard's career.





#### 1940



German troops attempted to occupy Norway in the face of bitter opposition from the Norwegians who were aided by the British.

