### Gestalt Psychology

By Amy Quarton

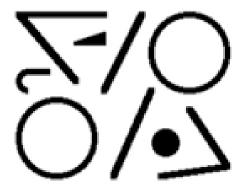
#### Discussion Questions

- What is gestalt psychology?
- What are the principles of perceptual organization?
- How did Max Wertheimer, Kurt Koffka, and Wolfgang Köhler establish gestalt psychology?
- How did gestalt psychology spread to the USA?
   How did Kurt Lewin spread gestalt psychology?
- How did gestalt psychology impact the field of psychology?

- In the early 1910s, German scholars established a macroscopic approach called gestalt psychology.
  - "Gestalt" means "shape" in German.
  - It was founded by Max Wertheimer, Kurt Koffka, and Wolfgang Köhler.
  - They studied perception, learning, and problem solving.
  - By the 1920s, it was popular in Germany and in the USA.

- It disagreed with structuralism and functionalism.
  - In 1926, Max Wertheimer said we perceive the whole sum of objects (not their individual parts).
  - In 1886, Ernst Mach (1838-1916) said the whole experience of an object is more important to perception than the experience of just its individual parts.

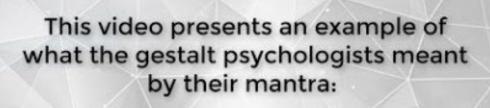
Wolfgang Köhler's quote became their mantra:
 "The whole is different from the sum of its parts".





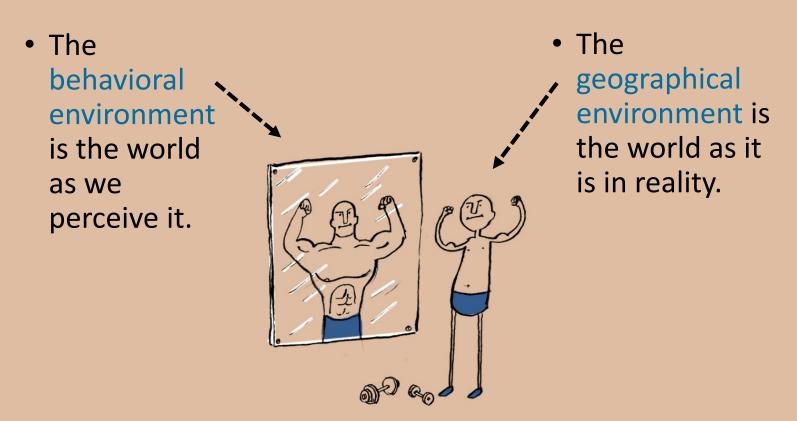
- Christian von Ehrenfels said some qualities of experience persist even if the elements change.
  - A song (the whole) consists of notes (the parts).
  - The song (the whole) is recognizable even when the key changes or the instrument changes (the parts).



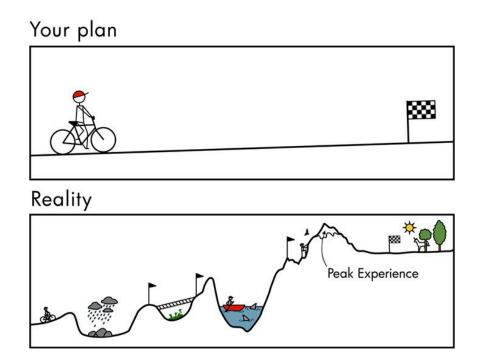


"The whole is different from the sum of its parts."

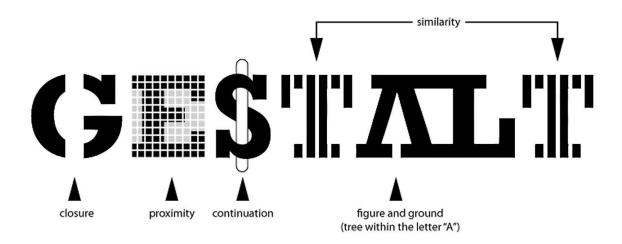
• In 1935, Kurt Koffka made a distinction between our perceptions and reality.



- A match = our perceptions are accurate.
- A mismatch = our perceptions are inaccurate.



- To explain how bits of information are organized into meaningful wholes, gestalt psychologists established principles of perceptual organization.
  - These principles were said to help humans make the most reasonable guess about the nature of reality.



- All of the organizing principles have one thing in common: the law of simplicity.
  - Also known as prägnanz, it is the tendency to perceive ambiguous or complex objects in their simplest form.





- The figure-ground principle is the tendency to perceive an object as part of either the foreground (figure) or the background (ground).
  - By changing the focus of our attention, we can reverse the figure-ground relations.

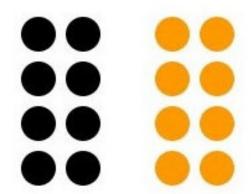




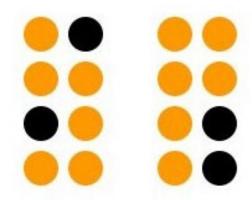
- Hedwig von
   Restorff identified
   the isolation effect.
  - It occurs when an object in an information array stands out, attracts attention, and is more easily recalled than the other objects.

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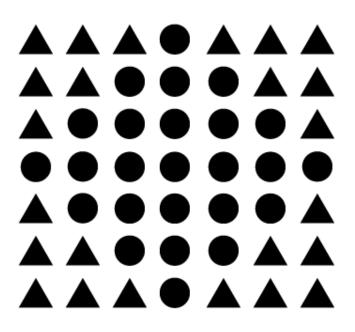
- The proximity principle is the tendency to group together objects that are close to one another.
  - Even if the objects are different, they appear as a group because they are close to one another.



These groups appear to be separated by color or contrast.



Proximity overpowers other signals of distinction, as seen in this example.



- The similarity principle is the tendency to group together objects that appear to be similar.
  - Groupings occur across a variety of characteristics, including shape, color, and size.

- The continuity principle is the tendency to perceive lines as part of a continuous movement.
  - The goal is to minimize abrupt changes.

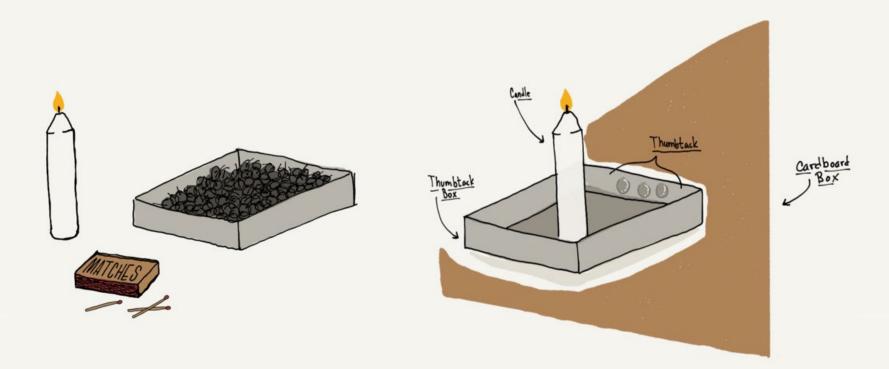


Parts Whole

- The closure principle is the tendency to look for a recognizable pattern in incomplete figures.
  - The mind fills in missing information.



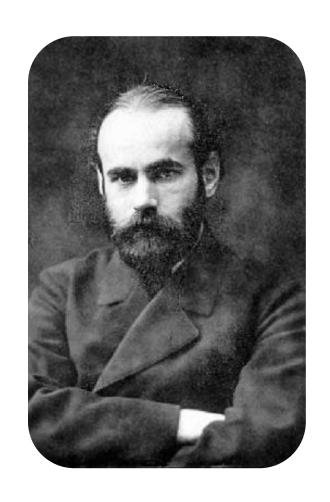
 Karl Duncker's (1903-1940) functional fixedness is a cognitive bias that prevents us from thinking beyond the typical function of an object.



How did Max Wertheimer, Kurt Koffka, and Wolfgang Köhler establish gestalt psychology?

#### Who is Max Wertheimer?

- Max Wertheimer (1880-1943) was a German psychologist.
- In 1904, he earned a PhD from the University of Würzburg and studied with Külpe.
  - He also studied at the University of Berlin with Stumpf and Müller.

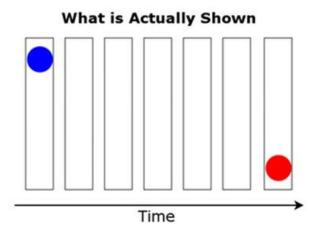


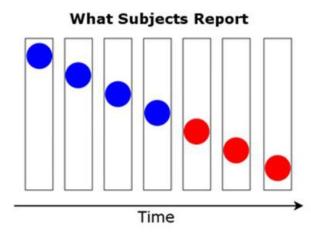
# How did Wertheimer establish gestalt psychology?

- In 1910, he started teaching at the University of Frankfurt, where he met Kurt Koffka.
- In 1912, he published the founding article, Experimental Studies on the Perception of Movement.
- In 1923, he wrote about the principles of proximity, similarity, and good continuation.
- In 1933, he began promoting his ideas in the USA.

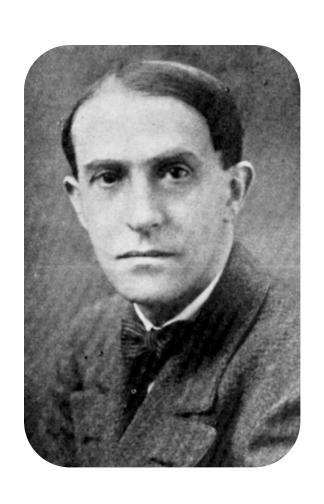
# How did Wertheimer establish gestalt psychology?

- The phi phenomenon occurs when rapid sequences of sensory events (flashes of light) create the illusion of motion.
  - This principle forms the basis for motion pictures!





#### Who is Kurt Koffka?



- Kurt Koffka (1886-1941)
   was a German
   psychologist.
- In 1909, he earned a PhD from the University of Berlin and studied with Stumpf.
- From 1910 to 1913, he and Köhler assisted Wertheimer.

# How did Koffka establish gestalt psychology?

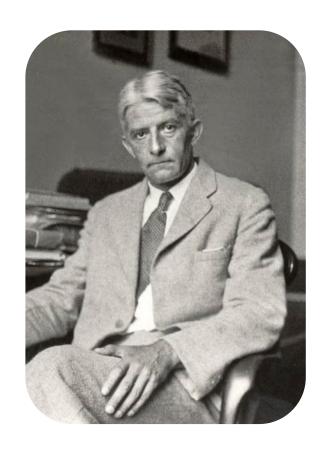
- In 1921, he applied it to developmental psychology in The Growth of the Mind.
- In 1922, he introduced gestalt psychology to the USA with his article "Perception: An Introduction to Gestalt-Theorie".
- In the mid-1920s, he was a visiting professor at both Cornell University and the University of Wisconsin-Madison.

# How did Koffka establish gestalt psychology?

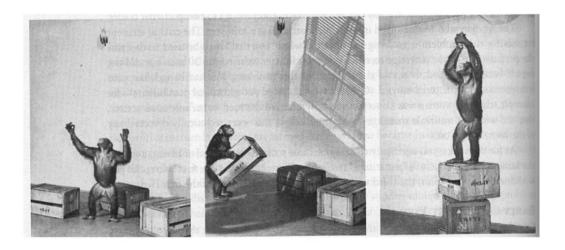
- In 1927, he moved to the USA.
  - From 1927 to 1941, he taught at Smith College.
- In 1935, he wrote about perception, learning, and memory in his book, <u>Principles of Gestalt</u> <u>Psychology</u>.
  - It helped united other gestalt psychologists.

### Who is Wolfgang Köhler?

- Wolfgang Köhler (1887-1967) was a German psychologist.
- In 1909, he earned a PhD from the University of Berlin and studied with Stumpf.
- From 1910 to 1913, he and Koffka assisted Wertheimer.



- In the 1910s, he spent 6 years observing chimpanzee behavior on the Canary Islands.
  - He watched them solve problems.
  - They learned to "think outside the box".



- In 1917, he published The Mentality of Apes.
  - He disagreed with Thorndike's trial-and-accidentalsuccess learning.
  - Solutions to problems appear quickly through insight, a sudden perceptual rearranging of the elements of the problem situation into a new configuration.
  - With Thorndike's cats, no insight was possible because they could not see the entire problem situation.

- During WWI, he was accused of being a spy!
  - After WWI, he succeeded Stumpf at the University of Berlin's Psychology Institute.
- In 1929, he criticized introspection in *Gestalt Psychology*.
  - It was more popular than Koffka's book because it was shorter and easier to read.



- In 1935, he moved to the USA.
  - Although he was not Jewish, he was appalled by the Nazi interference in academia.
  - He first taught at Clark University and then at Swarthmore College.
- In 1958, he was elected president of the APA.

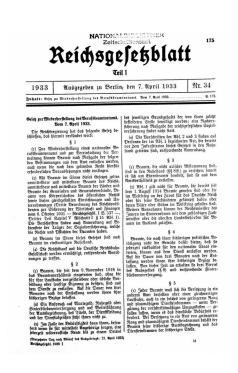
How did gestalt psychology spread to the USA? How did Kurt Lewin promote it?

### How did gestalt psychology spread to the USA?



### How did gestalt psychology spread to the USA?

- Years before WWII began in 1939, the Nazi regime began to rise in power in Germany.
  - In 1933, Hitler established the "Law for the Reestablishment of the Professional Civil Service".
    - It removed all Jewish people from positions funded by the state.
    - This included university professors!



### How did gestalt psychology spread to the USA?

- As a result, many Jewish psychologists fled from Europe and immigrated to the USA.
  - In 1927, Kurt Koffka moved to Massachusetts.
  - In 1933, Max Wertheimer and Kurt Lewin both moved to New York.
  - In 1935, Wolfgang Köhler left Germany.
  - In 1938, Sigmund Freud and Anna Freud left Austria.

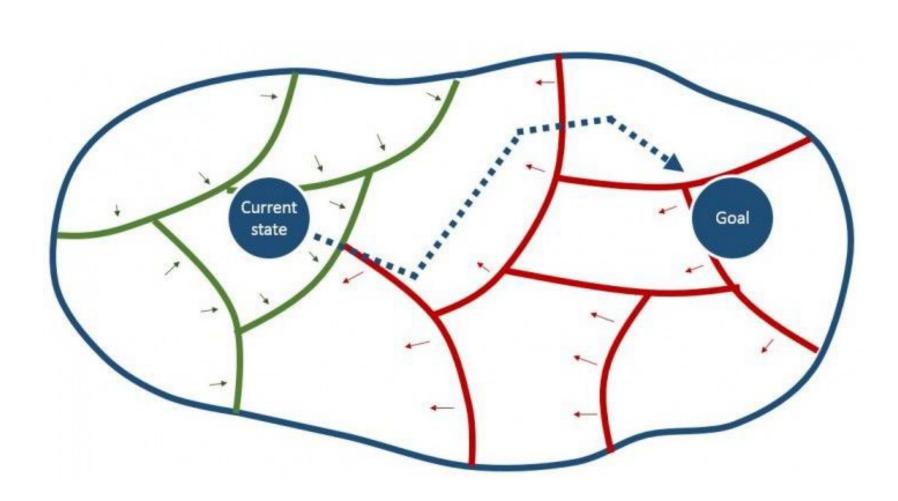


- Kurt Lewin (1890-1947)
   was a German social
   psychologist and
   promoter of applied
   psychology.
- In 1914, he earned a
   PhD from the University
   of Berlin and studied
   with Stumpf.

- After serving in WWI, he worked with Wertheimer and Köhler at the Psychological Institute.
  - He also befriended Koffka.
  - He established a research program, recruited graduate students, and developed an international reputation.
- Cornell University hired him in 1933.
  - He changed the pronunciation of his name from "Leveen" to "Lou-in".

- Compared to the major gestalt psychologists,
   Lewin was more interested in motivation.
- According to field theory, understanding human behavior (B) requires knowledge of all the personal (P) and environmental (E) forces acting on a person in a given moment.

$$\mathsf{B} = f(\mathsf{P}, \mathsf{E})$$

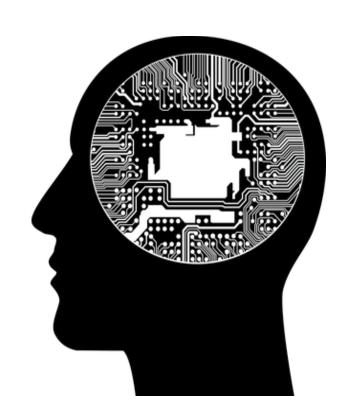


- Lewin and his students completed a number of action research projects such as:
  - A study of in-group loyalty that compared Catholic and Jewish college women.
  - A study that examined different patterns of interracial housing.
  - A study on ways to train effective leaders.

# How did gestalt psychology impact the field of psychology?

### How did gestalt psychology impact the field of psychology?

- In the 1920s, gestalt psychology was popular in Germany and the USA.
- It impacted many modern psychological principles.
- It influenced the development of cognitive psychology.



### How did gestalt psychology impact the field of psychology?

- However, it failed to become a major school of thought in American psychology.
  - Behaviorism was gaining popularity in the USA.
  - Gestalt psychology was too theoretical for the typical American pragmatist.
  - Many incorrectly assumed gestalt psychologists only studied perception.
  - Many of the founders taught in small colleges without graduate programs.