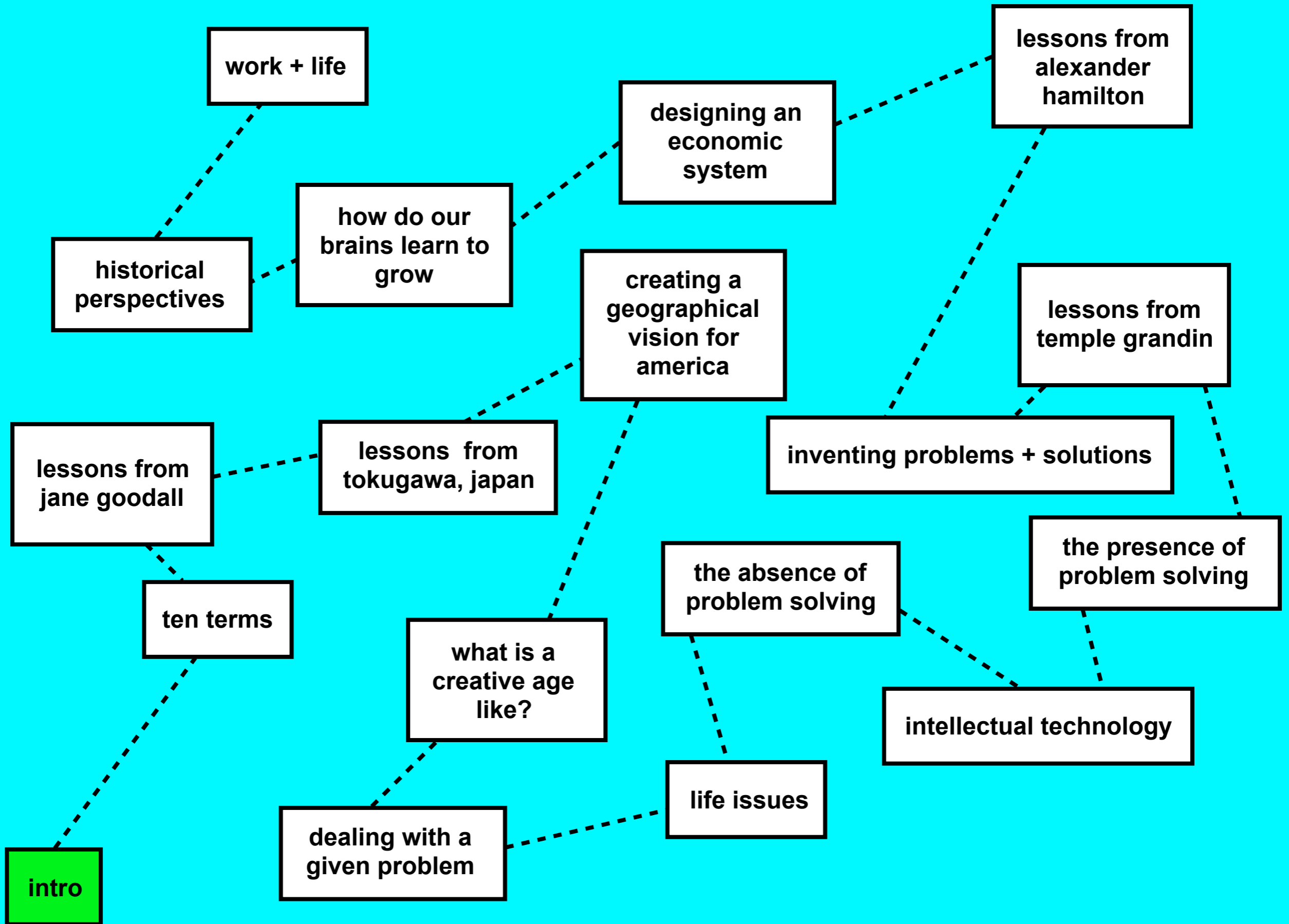




**creative
problem
solving**



1 problem solving

2 indeterminacy

3 design

4 invention

5 creativity

6 independent thinking

7 vision

8 values

9 confidence

10 rebellion

ten terms

problem

any question involving
doubt, uncertainty, or
difficulty

solve

to find an answer;
to explain

1 problem solving

2 indeterminacy

3 design

4 invention

5 creativity

6 independent thinking

7 vision

8 values

9 confidence

10 rebellion

1 self-defined or given

2 many solutions

3 huge or tiny

4 quantifiable measures

5 open-ended

here are five
characteristics of these
problems + solutions

1 problem solving

2 indeterminacy

3 design

4 invention

5 creativity

6 independent thinking

7 vision

8 values

9 confidence

10 rebellion

- 1 problem solving
 - 1 self-defined or given
 - 2 many solutions
 - 3 huge or tiny
 - 4 quantifiable measures
 - 5 open-ended



Jane Goodall

problems may be self-defined

- 2 indeterminacy
 - 3 design
 - 4 invention
 - 5 creativity
 - 6 independent thinking
 - 7 vision
 - 8 values
 - 9 confidence
 - 10 rebellion

- 1 problem solving
 - 1 self-defined or given
 - 2 many solutions
 - 3 huge or tiny
 - 4 quantifiable measures
 - 5 open-ended

- 2 indeterminacy
 - 3 design
 - 4 invention
 - 5 creativity
 - 6 independent thinking
 - 7 vision
 - 8 values
 - 9 confidence
 - 10 rebellion



Eleanor Roosevelt

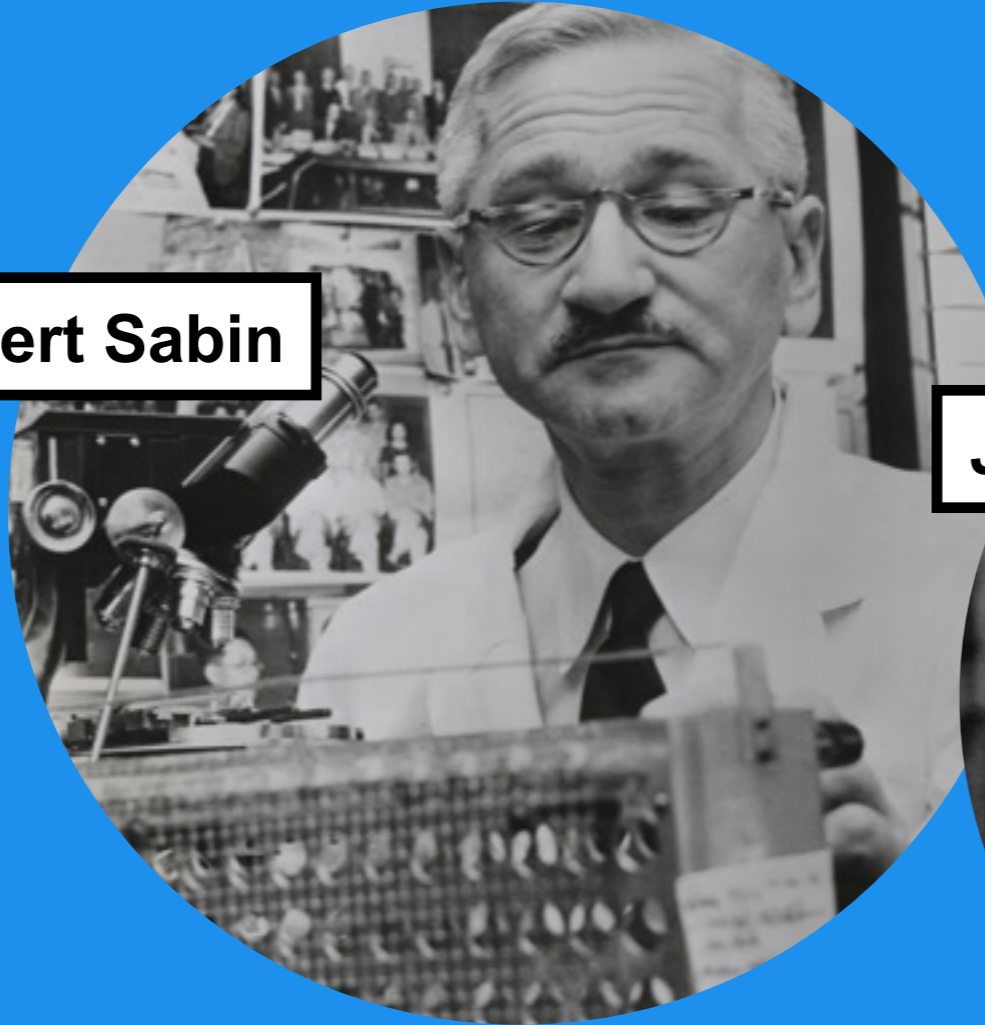
problems may be given

- 1 problem solving
 - 1 self-defined or given
 - 2 many solutions
 - 3 huge or tiny
 - 4 quantifiable measures
 - 5 open-ended

problems may have many solutions

- 2 indeterminacy
- 3 design
- 4 invention
- 5 creativity
- 6 independent thinking
- 7 vision
- 8 values
- 9 confidence
- 10 rebellion

Albert Sabin



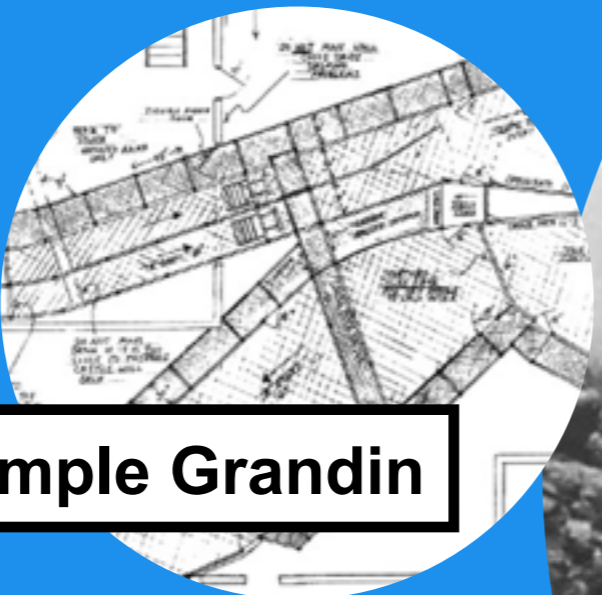
Jonas Salk



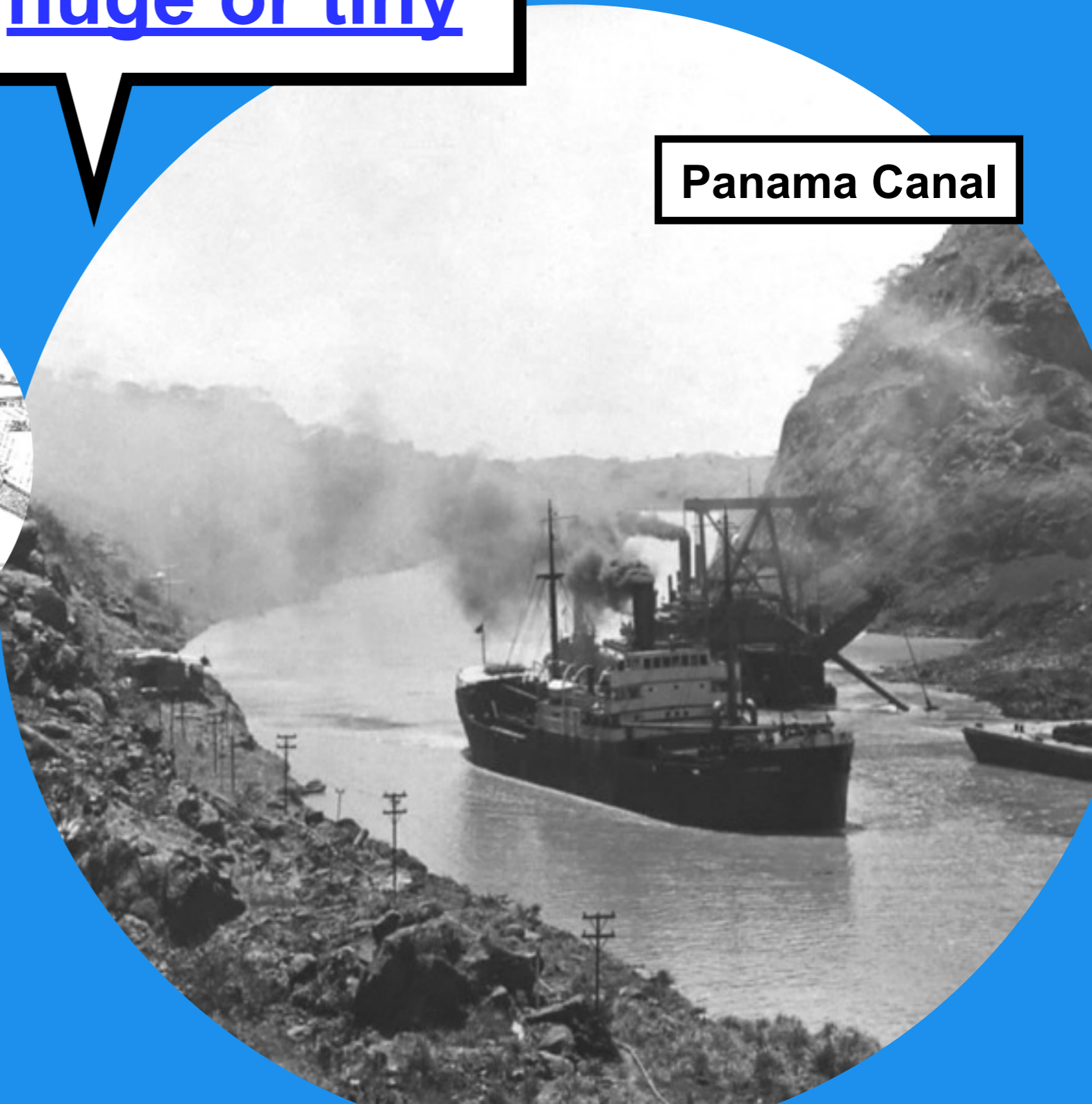
problems may be huge or tiny

- 1 problem solving
- 1 self-defined or given
- 2 many solutions
- 3 huge or tiny
- 4 quantifiable measures
- 5 open-ended

Panama Canal



Temple Grandin



- 2 indeterminacy
- 3 design
- 4 invention
- 5 creativity
- 6 independent thinking
- 7 vision
- 8 values
- 9 confidence
- 10 rebellion

- 1 problem solving
 - 1 self-defined or given
 - 2 many solutions
 - 3 huge or tiny
 - 4 quantifiable measures
 - 5 open-ended



- 2 indeterminacy
- 3 design
- 4 invention
- 5 creativity
- 6 independent thinking
- 7 vision
- 8 values
- 9 confidence
- 10 rebellion

Solutions may be measurable in terms of their success, or they may not lend themselves to quantifiable measures

Questions are likely to be open-ended

- 1 problem solving
 - 1 self-defined or given
 - 2 many solutions
 - 3 huge or tiny
 - 4 quantifiable measures
 - 5 open-ended

- 2 indeterminacy
- 3 design
- 4 invention
- 5 creativity
- 6 independent thinking
- 7 vision
- 8 values
- 9 confidence
- 10 rebellion



1 problem solving

self-defined or given 1

many solutions 2

huge or tiny 3

quantifiable measures 4

open-ended

How do you know when you have enough of a solution to become productive?

2 indeterminacy

3 design

4 invention

5 creativity

6 independent thinking

7 vision

8 values

9 confidence

10 rebellion

indeterminacy

- 1) when something is not fixed in extent, it's indefinite or uncertain
- 2) not clear, vague
- 3) not established
- 4) not settled, undecided
- 5a) (math) able to be satisfied by more than one value for each unknown
- 5b) (engineering) unable to analyze completely

1 problem solving

2 indeterminacy

3 design

4 invention

5 creativity

6 independent thinking

7 vision

8 values

9 confidence

10 rebellion

design

- 1) to plan the form or structure of something
- 2) to form or conceive in the mind; contrive, plan
- 3) an outline sketch or plan to be executed or constructed
- 4) intention; purpose; end

1 problem solving

2 indeterminacy

3 design

4 invention

5 creativity

6 independent thinking

7 vision

8 values

9 confidence

10 rebellion

invent

1) to originate as a product of one's contrivance

2) to produce or create with imagination

invention

the conception of an idea and the means or apparatus to bring it to a result

1 problem solving

2 indeterminacy

3 design

4 invention

5 creativity

6 independent thinking

7 vision

8 values

9 confidence

10 rebellion

create

- 1) to cause something unique to come into being that would not naturally evolve or is not made by ordinary processes
- 2) to evolve from one's own thoughts or imagination
- 3) to cause to happen, bring about, or arrange by intention or design

creativity

- 1) resulting from originality of thought or expression
- 2) originative, productive

1) problem solving

2) indeterminacy

3) design

4) invention

5) creativity

6) independent thinking

7) vision

8) values

9) confidence

10) rebellion

creativity is different
than intelligence...

- it's generative; it must produce something
- it involves taking risks

1 problem solving

2 indeterminacy

3 design

4 invention

5 creativity

6 independent thinking

7 vision

8 values

9 confidence

10 rebellion

Courage

Bill Stumpf

Fearlessness

Hard-headedness

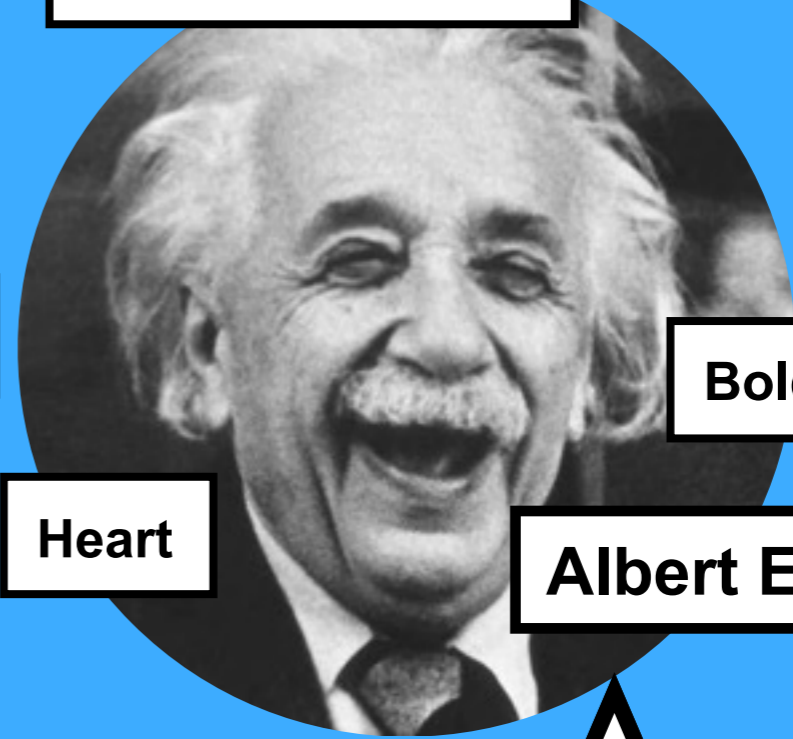
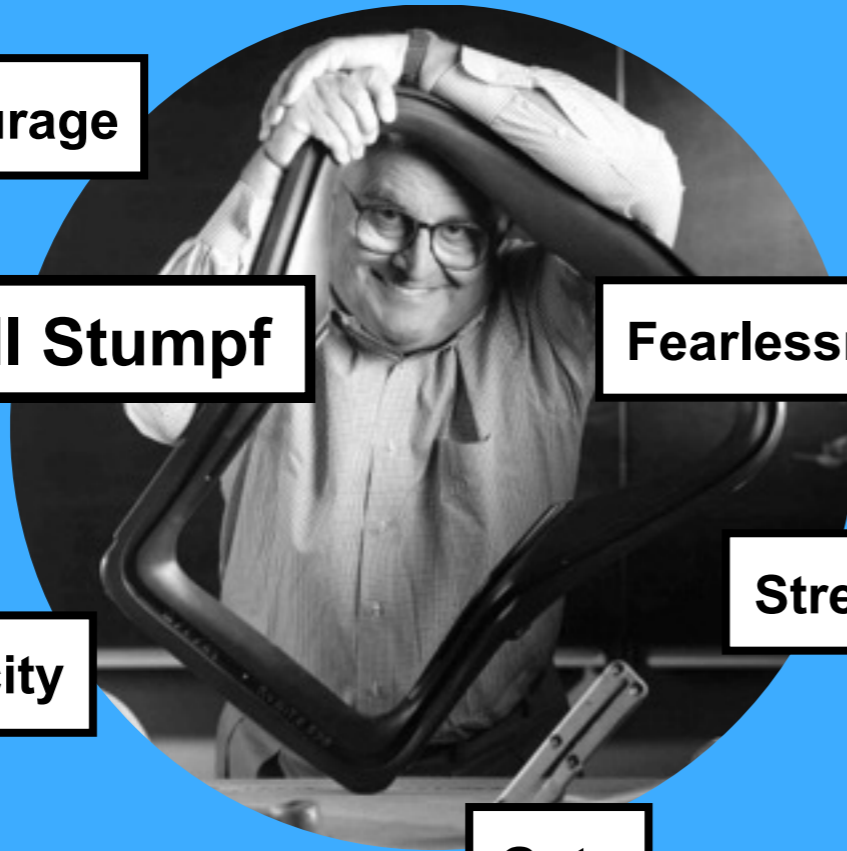
Strength

Boldness

Tenacity

Heart

Albert Einstein



Guts

1 problem solving

2 indeterminacy

3 design

4 invention

5 creativity

6 independent thinking

7 vision

8 values

9 confidence

10 rebellion

independent

1) not influenced or controlled by the thoughts or actions of others

2) autonomous, free

3) self-confident, unrestrained

vision

- 1) the act or power of anticipating that which will or may come to be
- 2) a vivid imagination, conception, or anticipation

visionary

- 1) given to or characterized by the fanciful; not presently workable or unpractical ideas, views, or schemes
- 2) purely idealistic or speculative, impractical, unrealizable
- 3) a person who is given to audacious, highly speculative or impractical ideas, or schemes; a dreamer

1 problem solving

2 indeterminacy

3 design

4 invention

5 creativity

6 independent thinking

7 vision

8 values

9 confidence

10 rebellion

vision applies not just at the level of earth-shattering discoveries, but at a more mundane level

how do you resist practicality and the tried-and-true to become a real dreamer?

where do hare-brained ideas come from?

- 1 problem solving
- 2 indeterminacy
- 3 design
- 4 invention
- 5 creativity
- 6 independent thinking
- 7 vision
- 8 values
- 9 confidence
- 10 rebellion

values

- 1) ethical standards that are used as a basis for judgement
- 2) trust in the truth or existence of ideals; not immediately susceptible to rigorous proof
- 3) indeterminate design problems are often best solved by inserting values for some of the variables

1 problem solving

2 indeterminacy

3 design

4 invention

5 creativity

6 independent thinking

7 vision

8 values

9 confidence

10 rebellion

Joel Salatin





Robert Moses

confidence

- 1) self-reliance, assurance, boldness
- 2) presumption, impudence
- 3) certitude

1) problem solving

2) indeterminacy

3) design

4) invention

5) creativity

6) independent thinking

7) vision

8) values

9) confidence

10) rebellion

rebellion

1) resistance to or defiance of any authority, control, or tradition

Americans may be so successful at design/creative problem solving because we are a culture of rebels

- 1 problem solving
- 2 indeterminacy
- 3 design
- 4 invention
- 5 creativity
- 6 independent thinking
- 7 vision
- 8 values
- 9 confidence
- 10 rebellion

Alexander Hamilton



Thomas Jefferson



1 problem solving

2 indeterminacy

3 design

4 invention

5 creativity

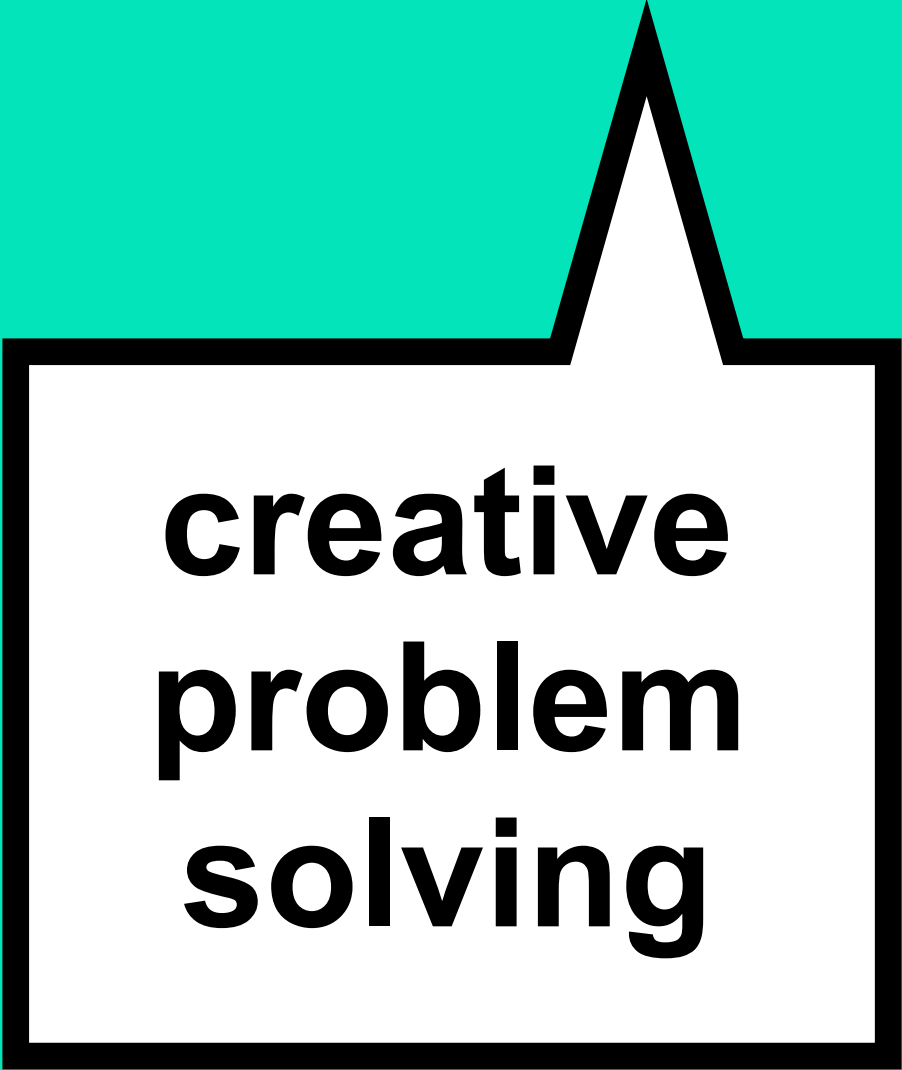
6 independent thinking

7 vision

8 values

9 confidence

10 rebellion



**creative
problem
solving**