In your Agile Teams

5 minutes: Daily stand-up

What did I accomplish yesterday?
What will I accomplish today?
What obstacles are impeding my progress?

UI, Interface design, is an inexact science.

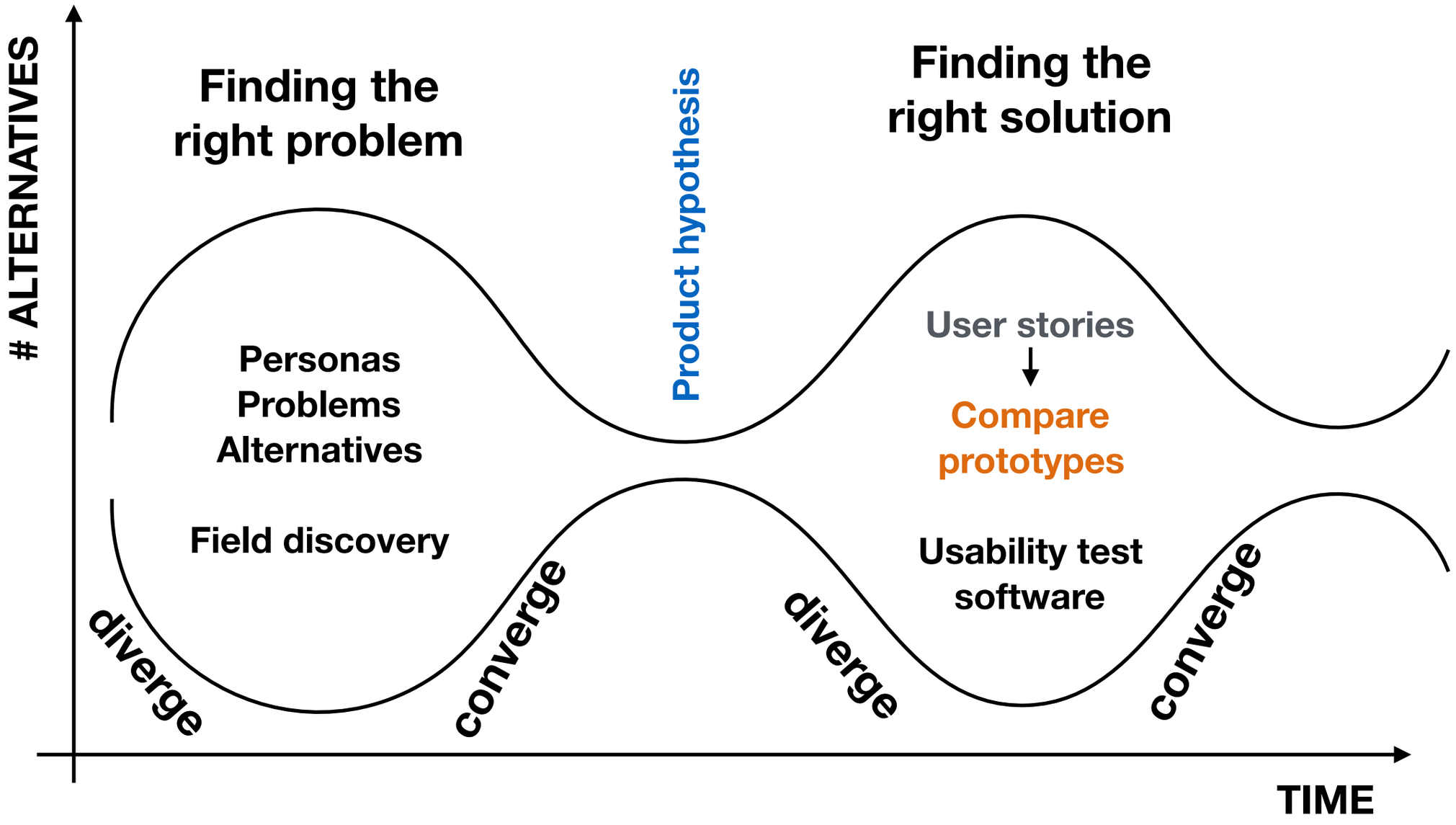
How we improve usability before we develop the software to avoid develop it and then release it without testing?

Guiding questions:

- **Is a strong narrative (user story) guiding my work?**
- **Do the UI's affordance deliver against those narratives?**

Tools

- User Stories
- Prototype / Wireframes
- Test plans


ALTERNATIVES
Finding the right problem
Product hypothesis
Finding the right solution
Personas
Problems
Alternatives
User stories
Compare prototypes
Field discovery
Usability test software
diverge
converge
diverge
converge
TIME

What the design process is not about:

- Lots of colours and shapes
- Art
- Using the latest technology
- Flashy demo’s
- Doing what everyone else is doing
- Doing what the users say
- Always having the answer

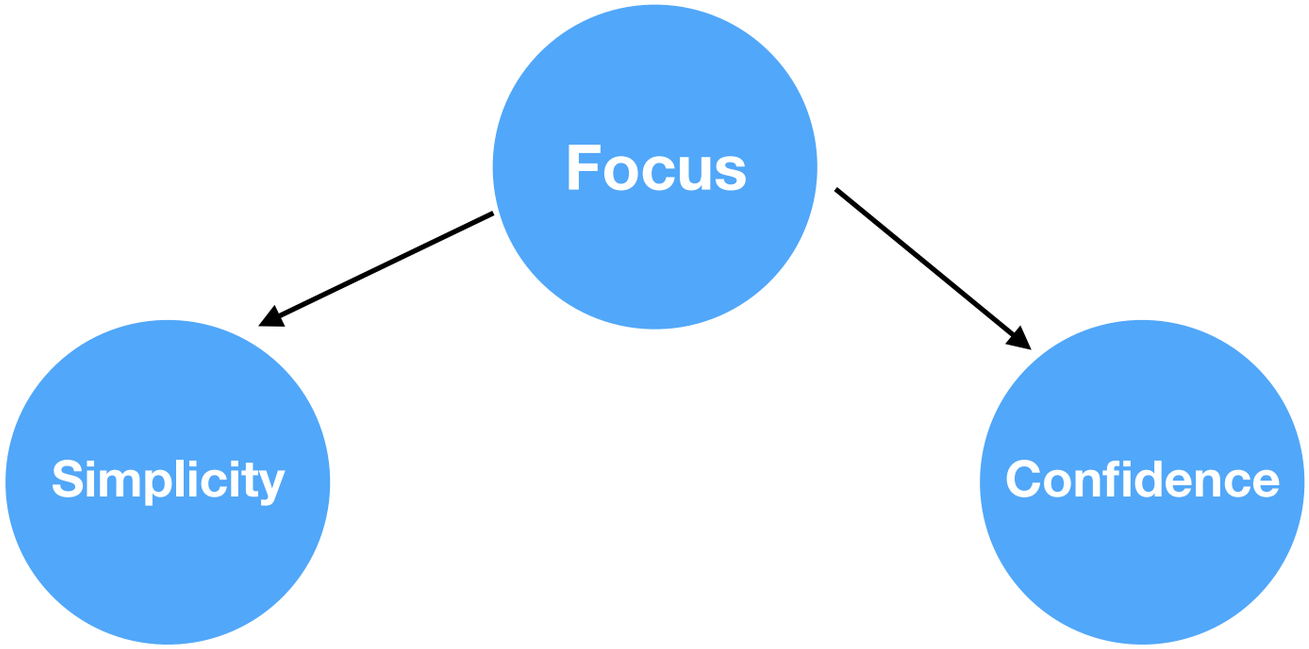
What the design process is about:

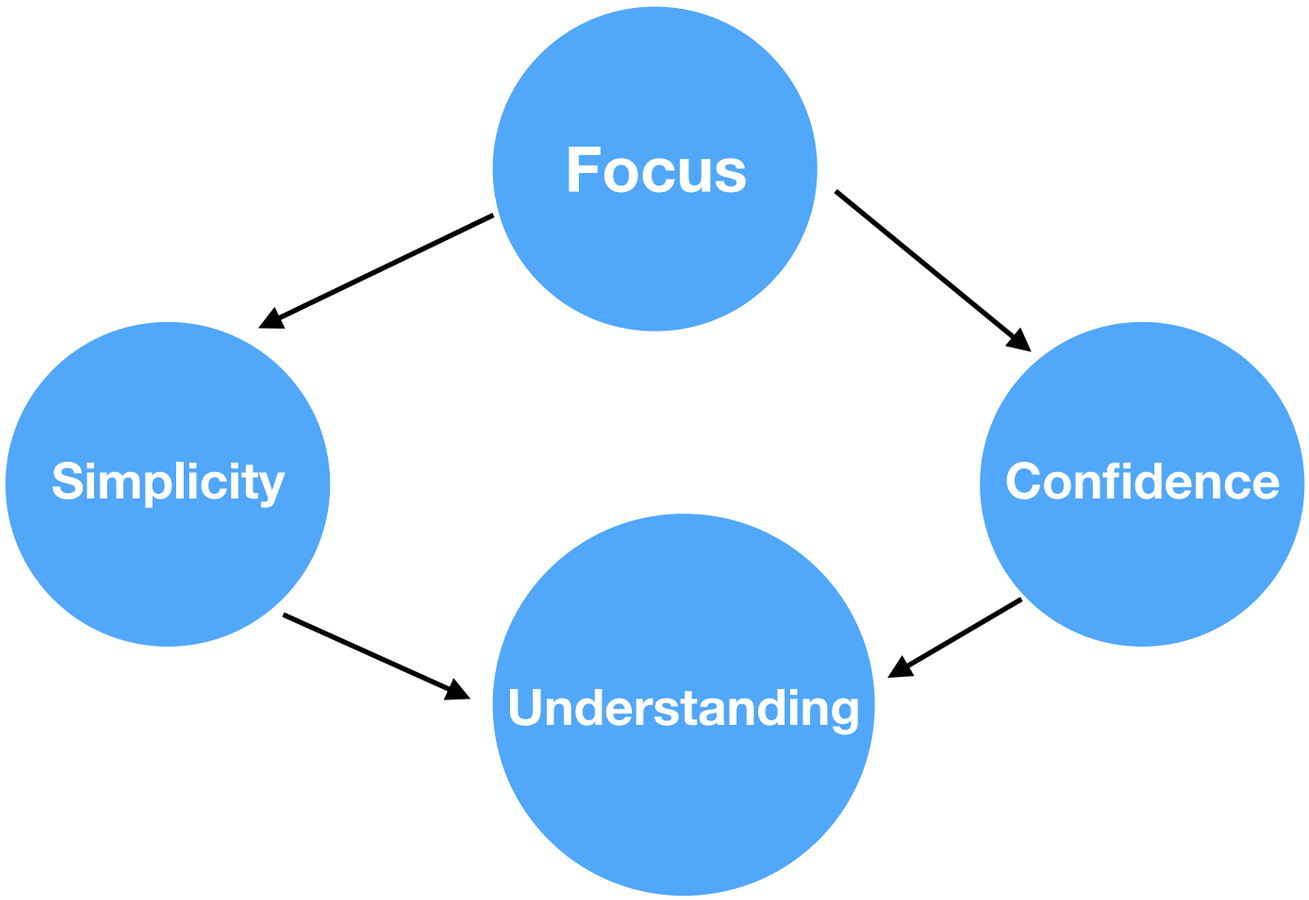
1. Focus
2. Consistency
3. Experimentation

1_ Focus

“Keep it simple”

…ok, but how?


Focus
Simplicity
Confidence


Focus
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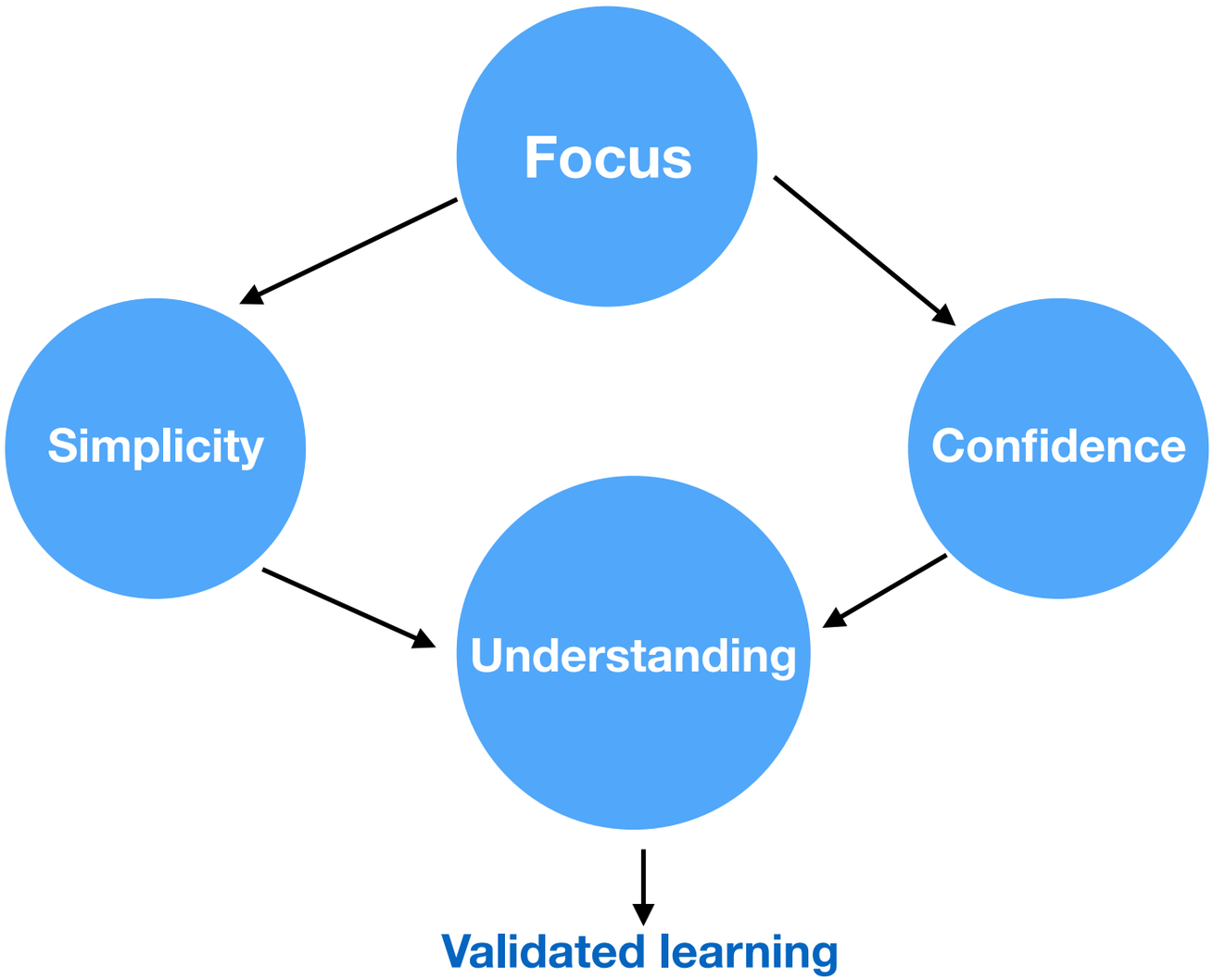
Understanding


Focus
Simplicity
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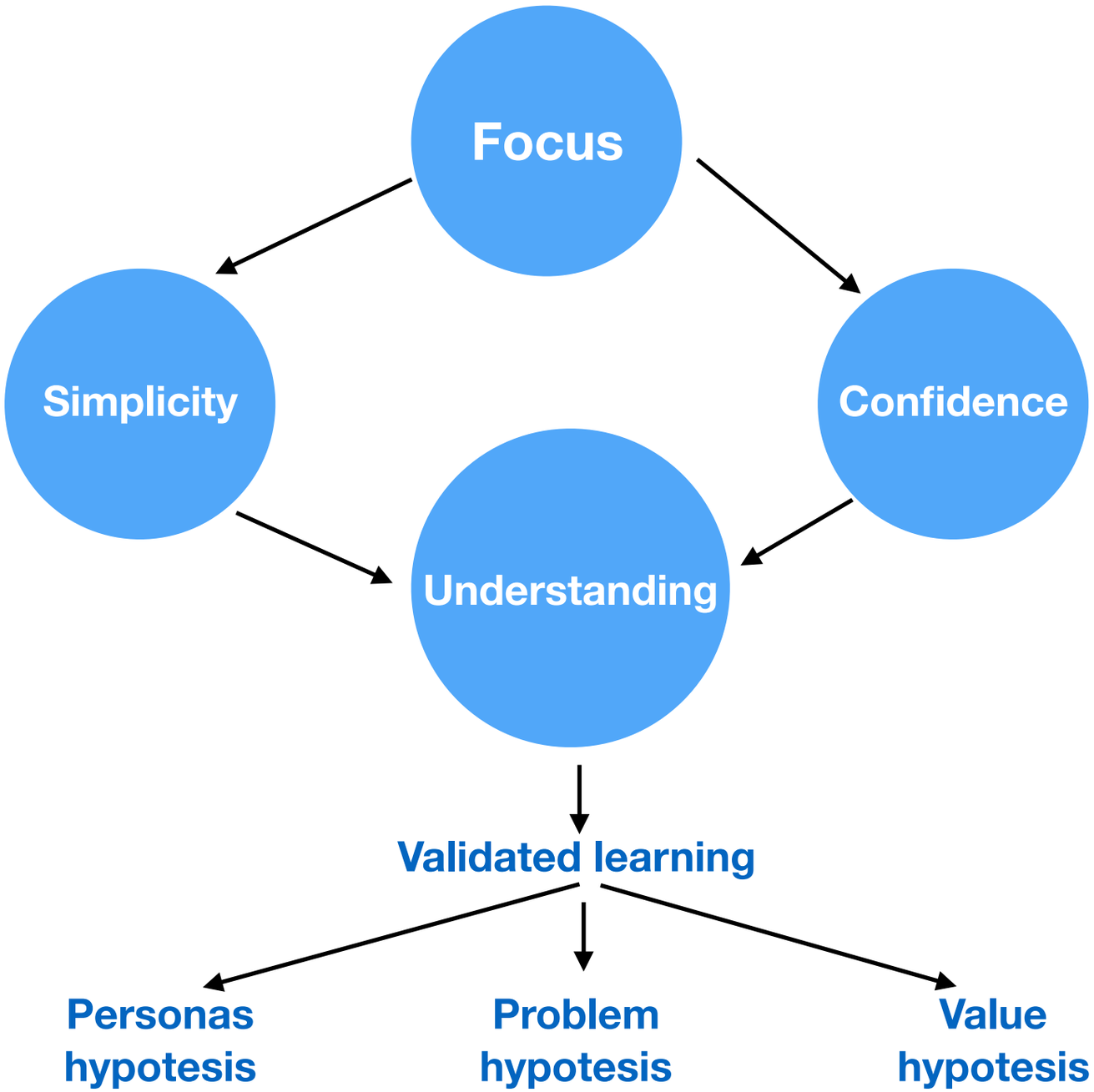
Understanding
Validated learning


Focus
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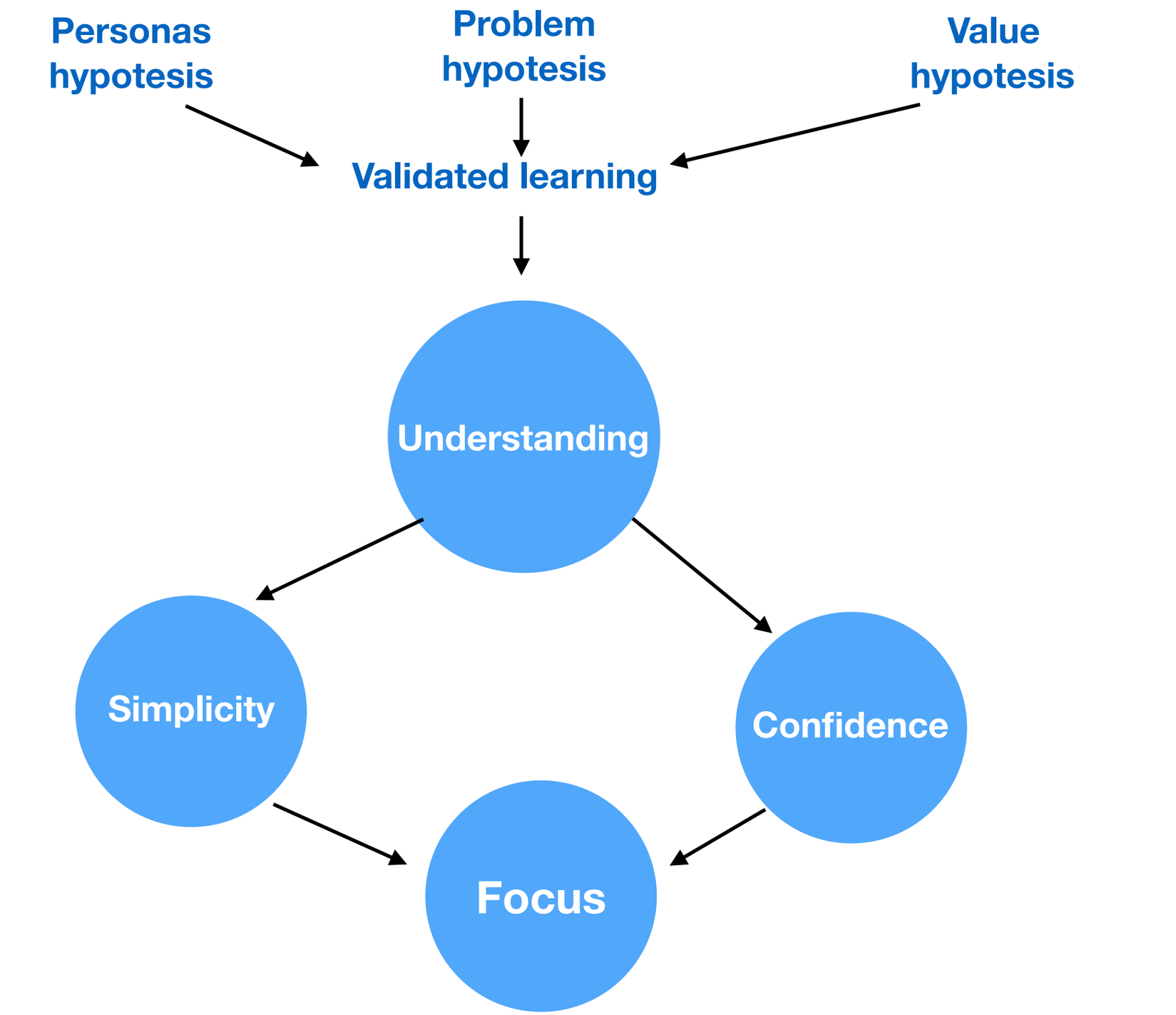
Personas hypotesis
Problem hypotesis
Value hypotesis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Value hypotesis
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Understanding
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Confidence
Focus

What the design process is about:

1. Focus
2. Consistency
3. Experimentation

2_ Consistency

- **Icons:** **If a magnifying glass means “search” it can’t also mean “zoom”**
- **Colours:** **once you decide a palette (set of colours) the need to use always that so that the users will always respond to it.**

Silver bullet:

There are a lot of material on existing patterns and best practices.

Icons: https://thenounproject.com
Colours: https://color.adobe.com/

3_ Experimentation

1. Idea
2. Hypotesis
3. Experimental design
4. Experimentation
5. Pivot or persevere?
6. Persevere

1. **Idea** Start from validate learning on your personas, problems, propositions

2. **Hypotesis** Usability hypotesis + user stories

3. **Experimental design** Exploration, assessment, validations, test case

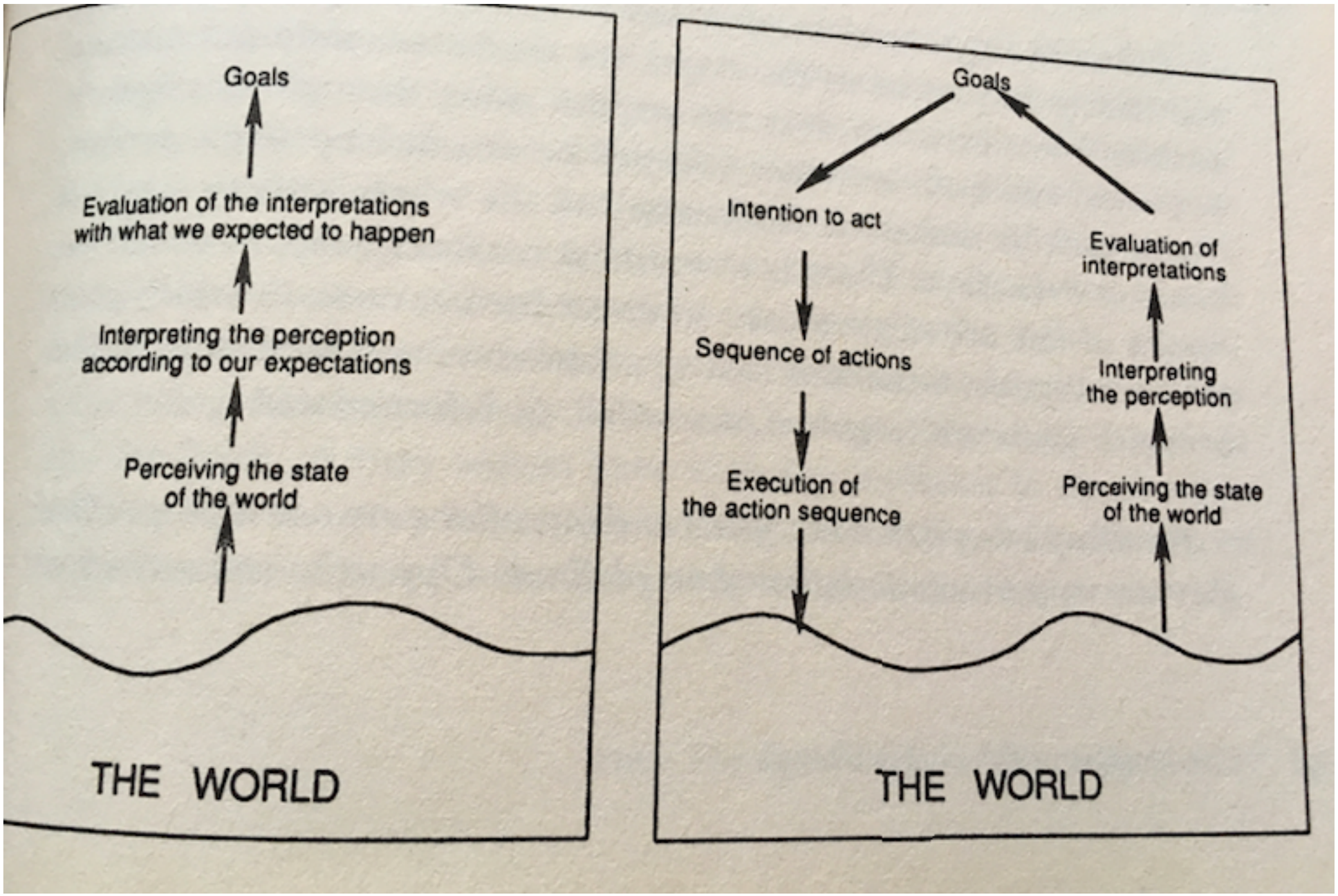
4. **Experimentation** Do the result validate or invalidate your hypothesis?

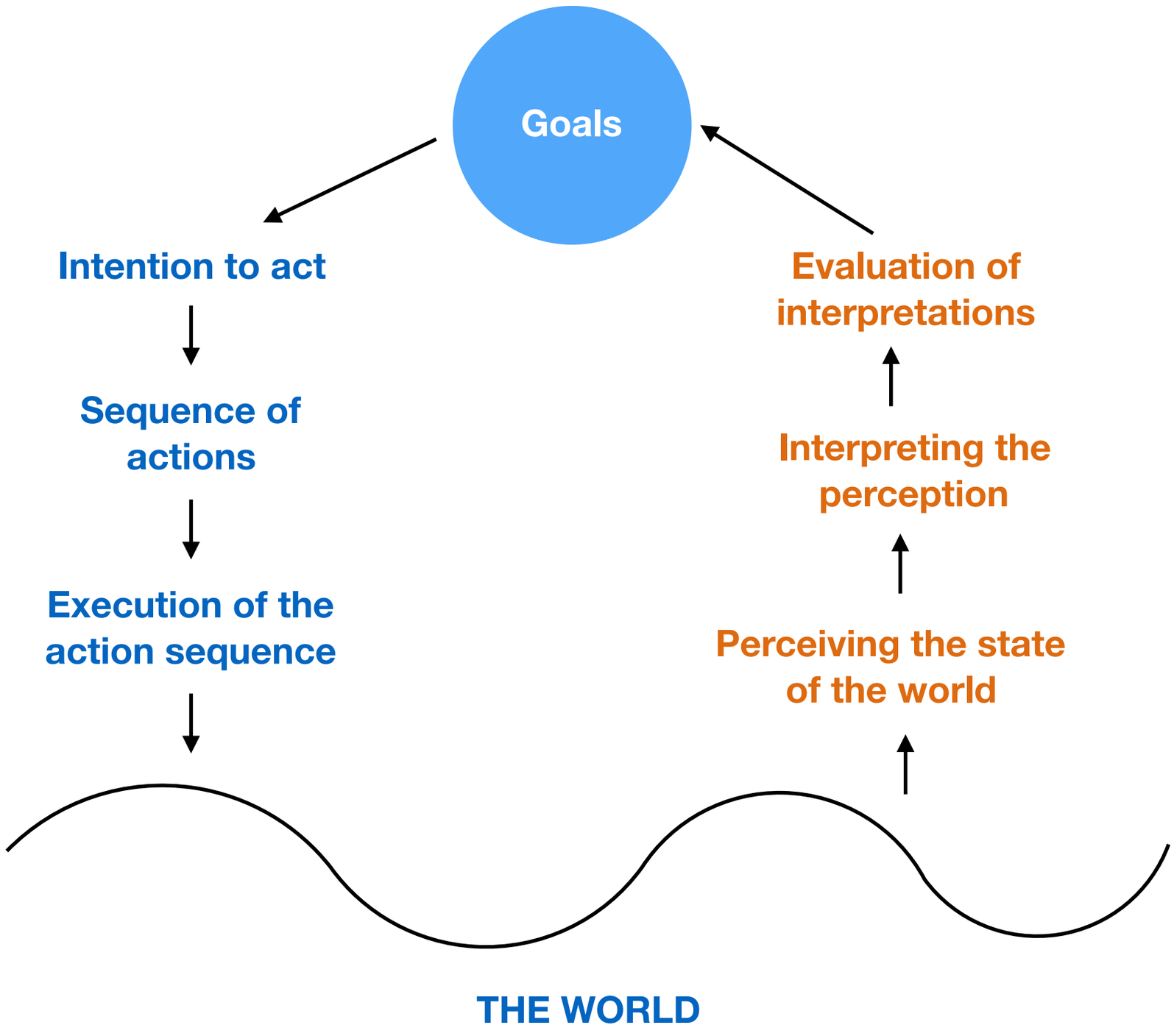
5. **Pivot or persevere?** **Yes = go to 6 | No= go to 1**

6. **Persevere** Experiment prove hypothesis

Donald Norman

https://www.nngroup.com


Goals
Evaluation of the interpretations with what we expected to happen
Interpreting the perception according to our expectations
Perceiving the state of the world
THE WORLD
Goals
Intention to act
Sequence of actions
Execution of the action sequence
Evaluation of interpretations
Interpreting the perception
Perceiving the state of the world
THE WORLD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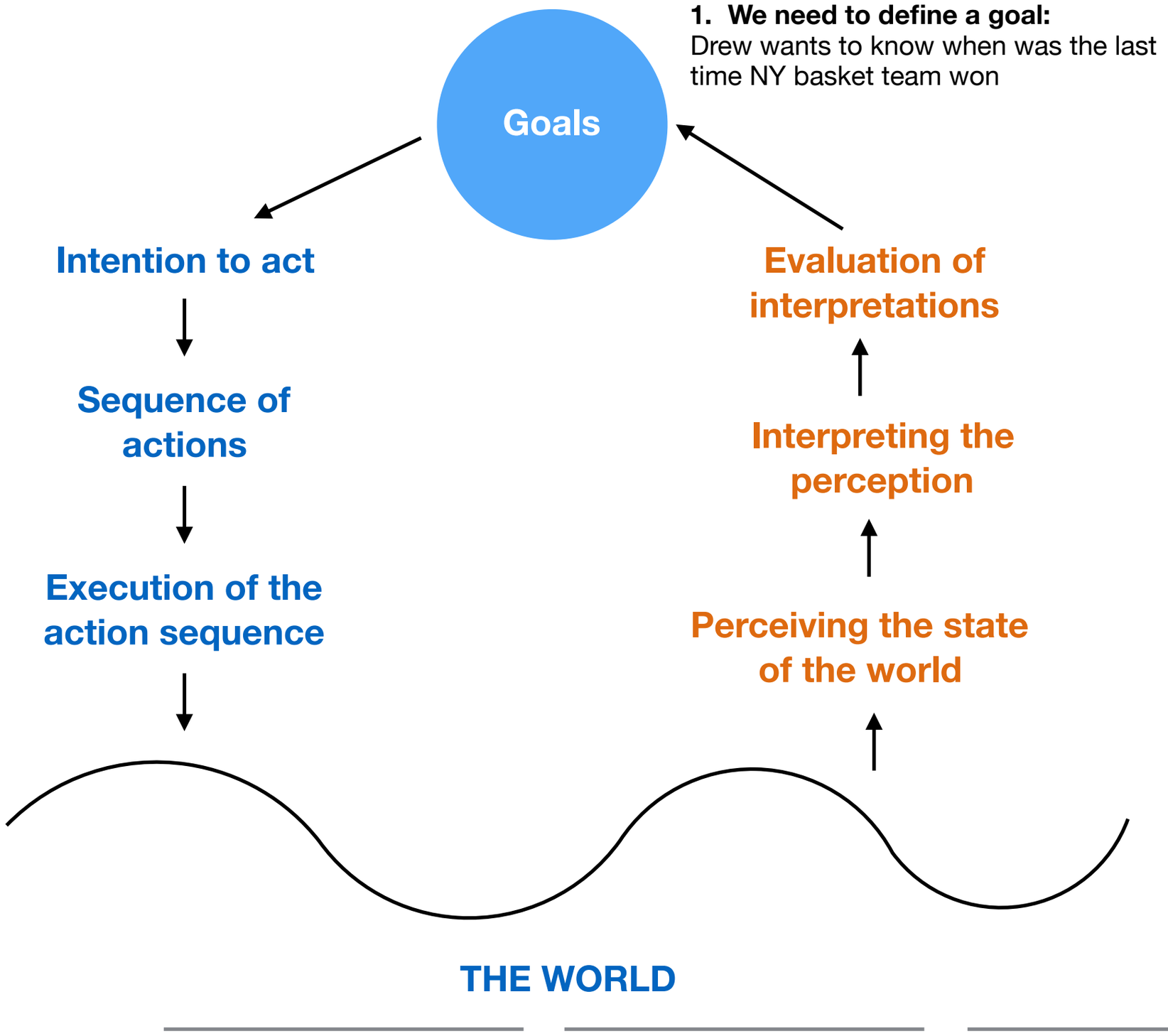
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Drew wants to know when was the last time NY basket team won
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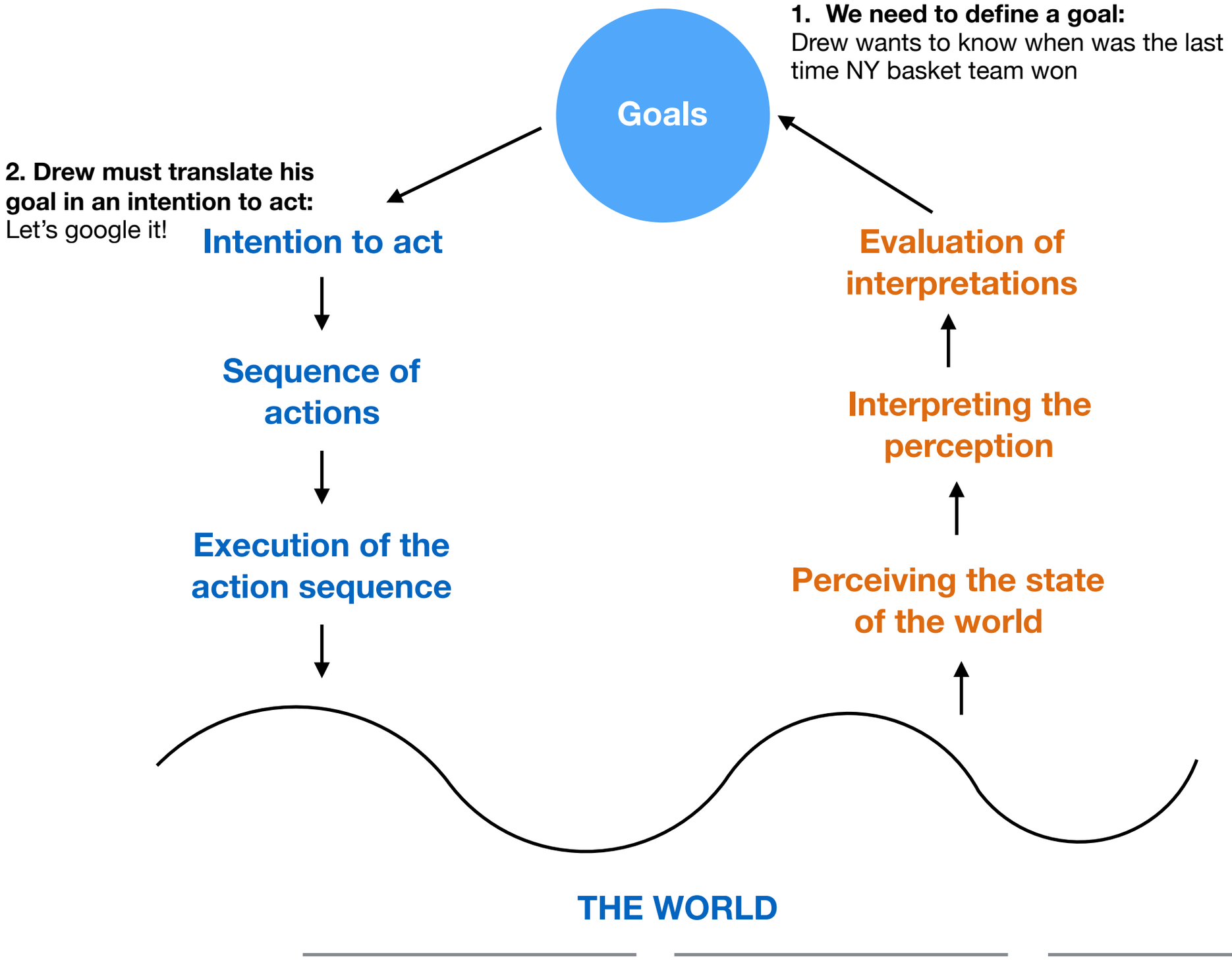
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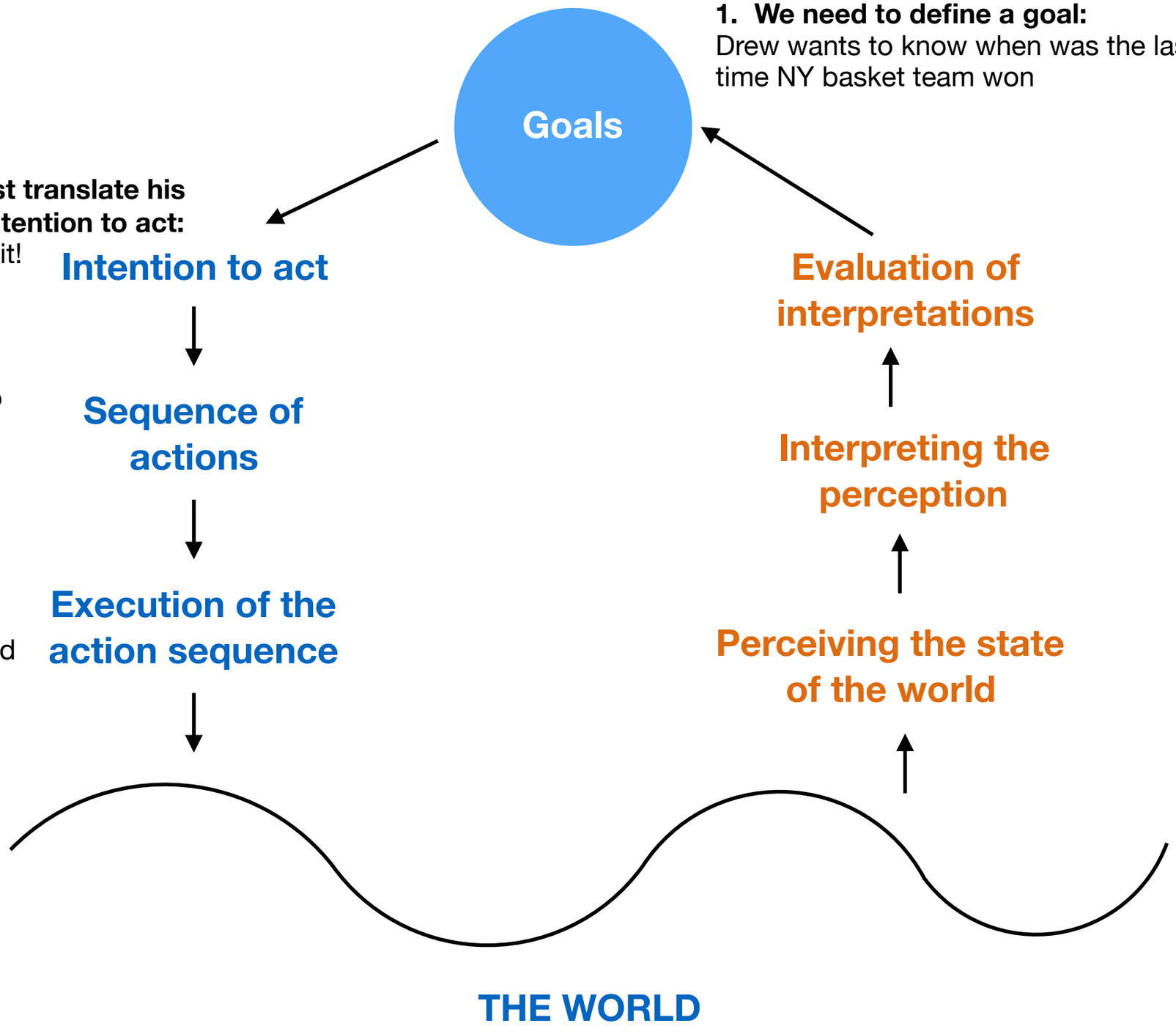
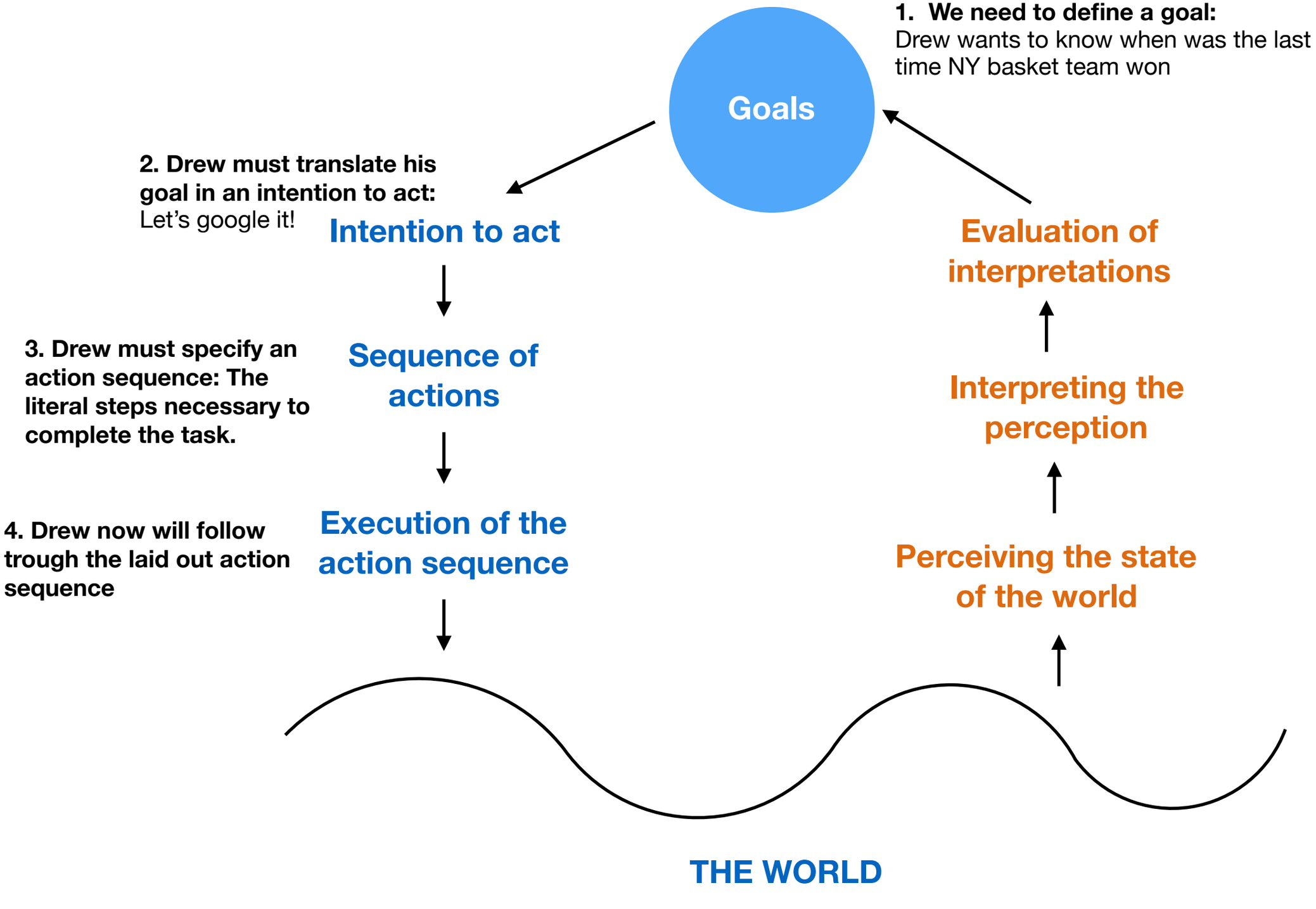
1. We need to define a goal:
Drew wants to know when was the last time NY basket team won

2. Drew must translate his goal in an intention to act:
Let's google it!

3. Drew must specify an action sequence: The literal steps necessary to complete the task.
a. Open laptop
b. Open browser
c. go to: google.com
d. type in the search bar "when was last time…"
e. Click enter
f. Wait for the page to load
g. View results

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Interpreting the perception
4. Drew now will follow trough the laid out action sequence
Execution of the action sequence
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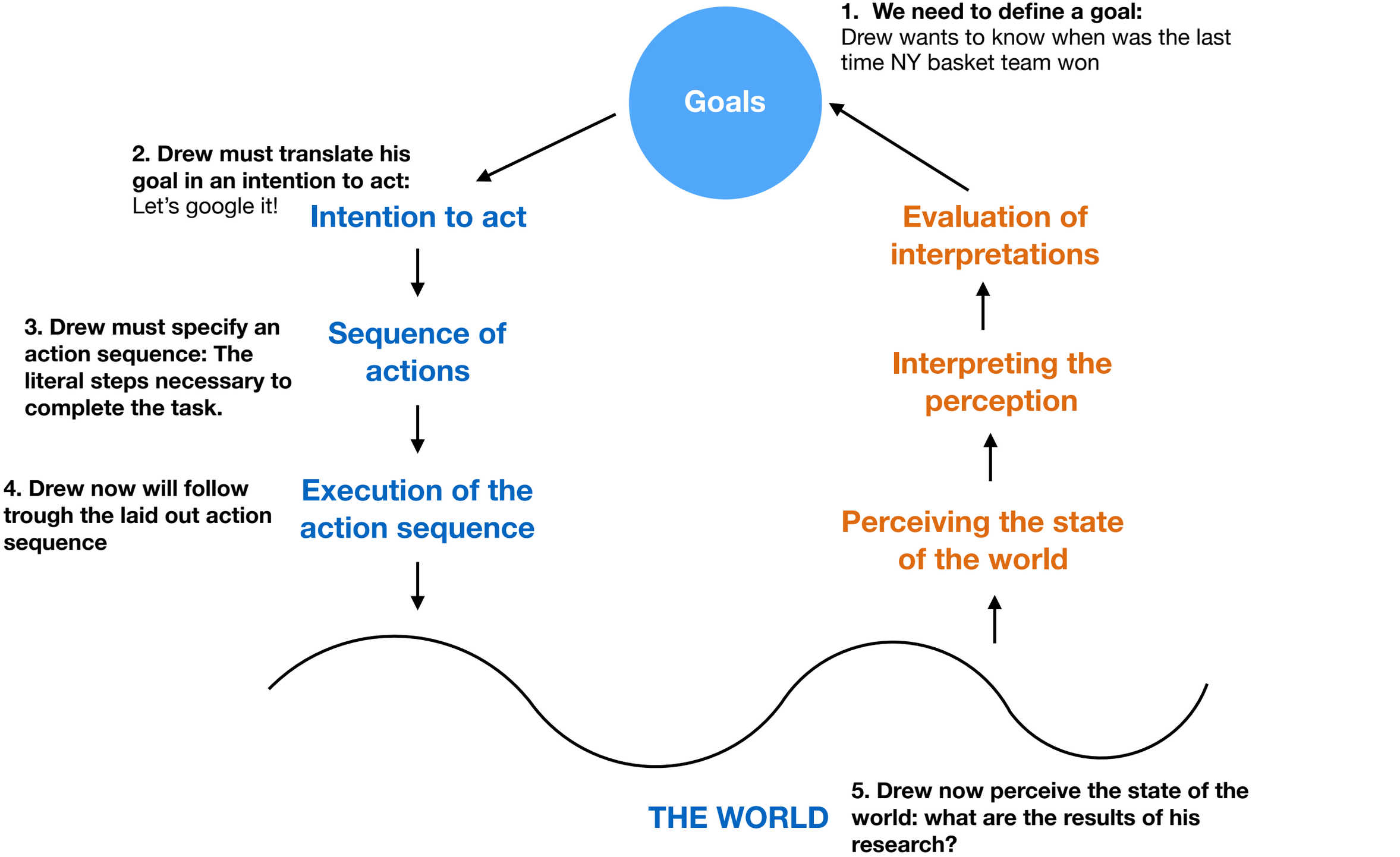
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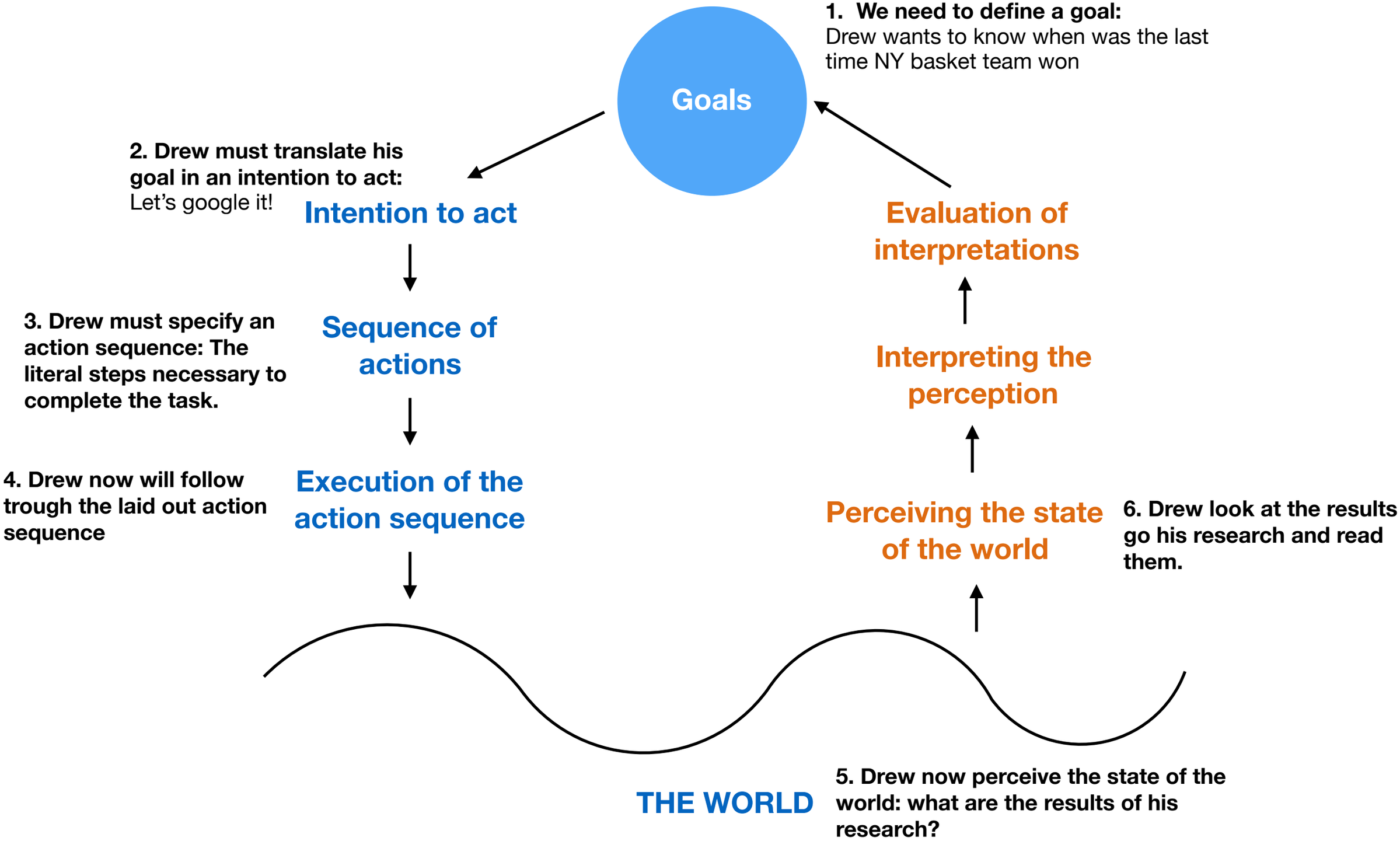
5. Drew now perceive the state of the world: what are the results of his research?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6. Drew look at the results go his research and read them.
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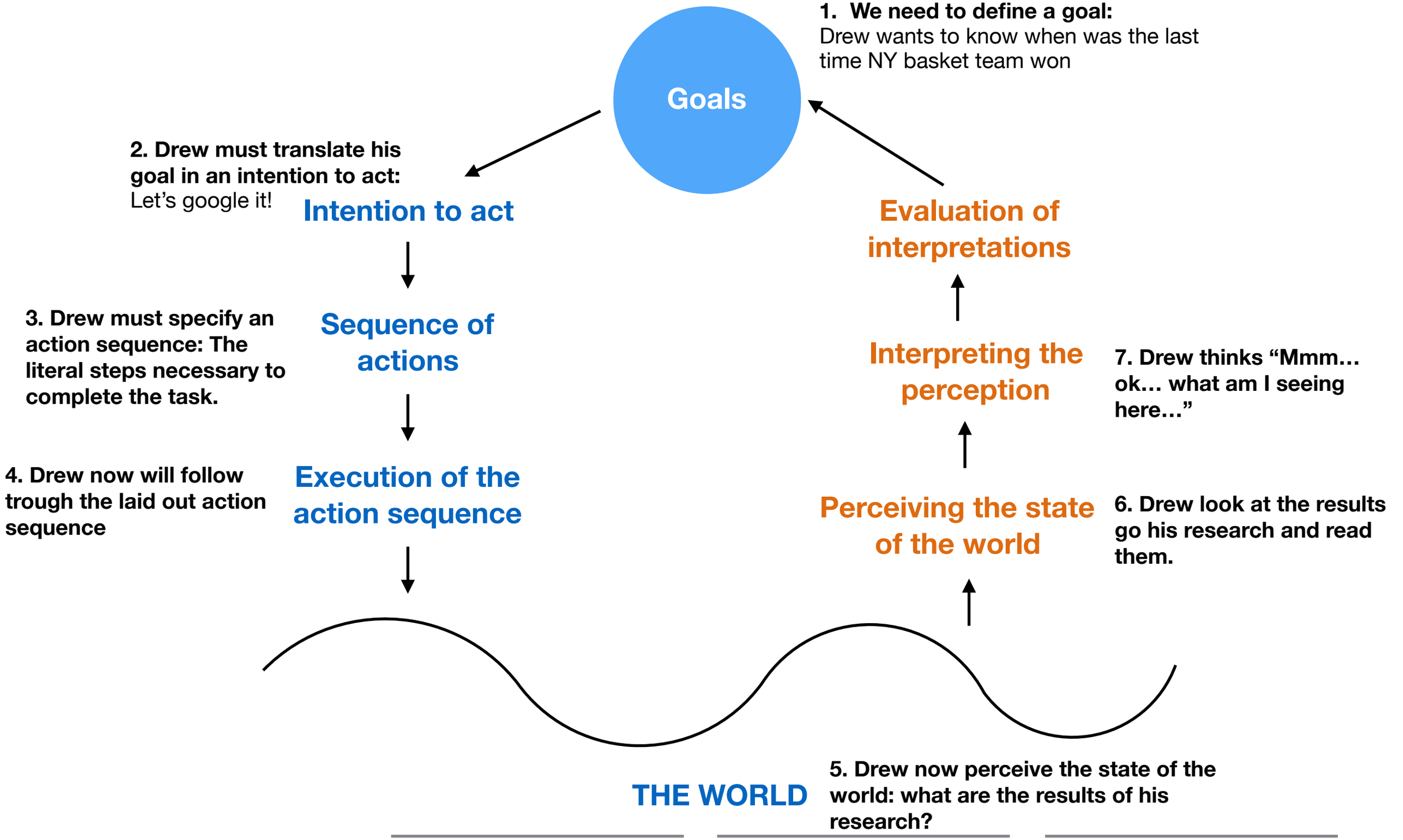
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7. Drew thinks "Mmm… ok… what am I seeing here…"
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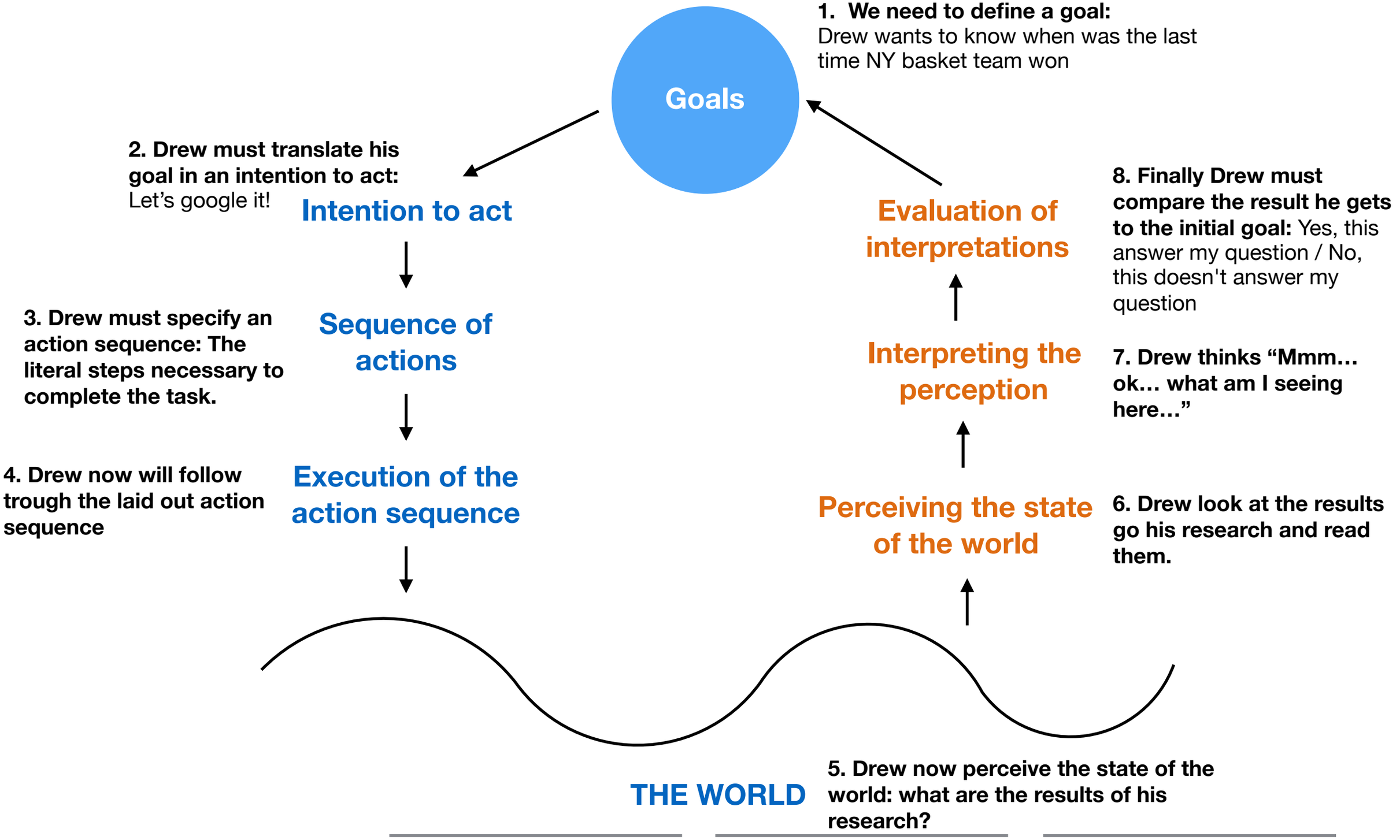
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Perceiving the state of the world
6. Drew look at the results go his research and read them.
Interpreting the perception
7. Drew thinks "Mmm… ok… what am I seeing here…"
Evaluation of interpretations
8. Finally Drew must compare the result he gets to the initial goal: Yes, this answer my question / No, this doesn't answer my question

How many users do I need to test with?

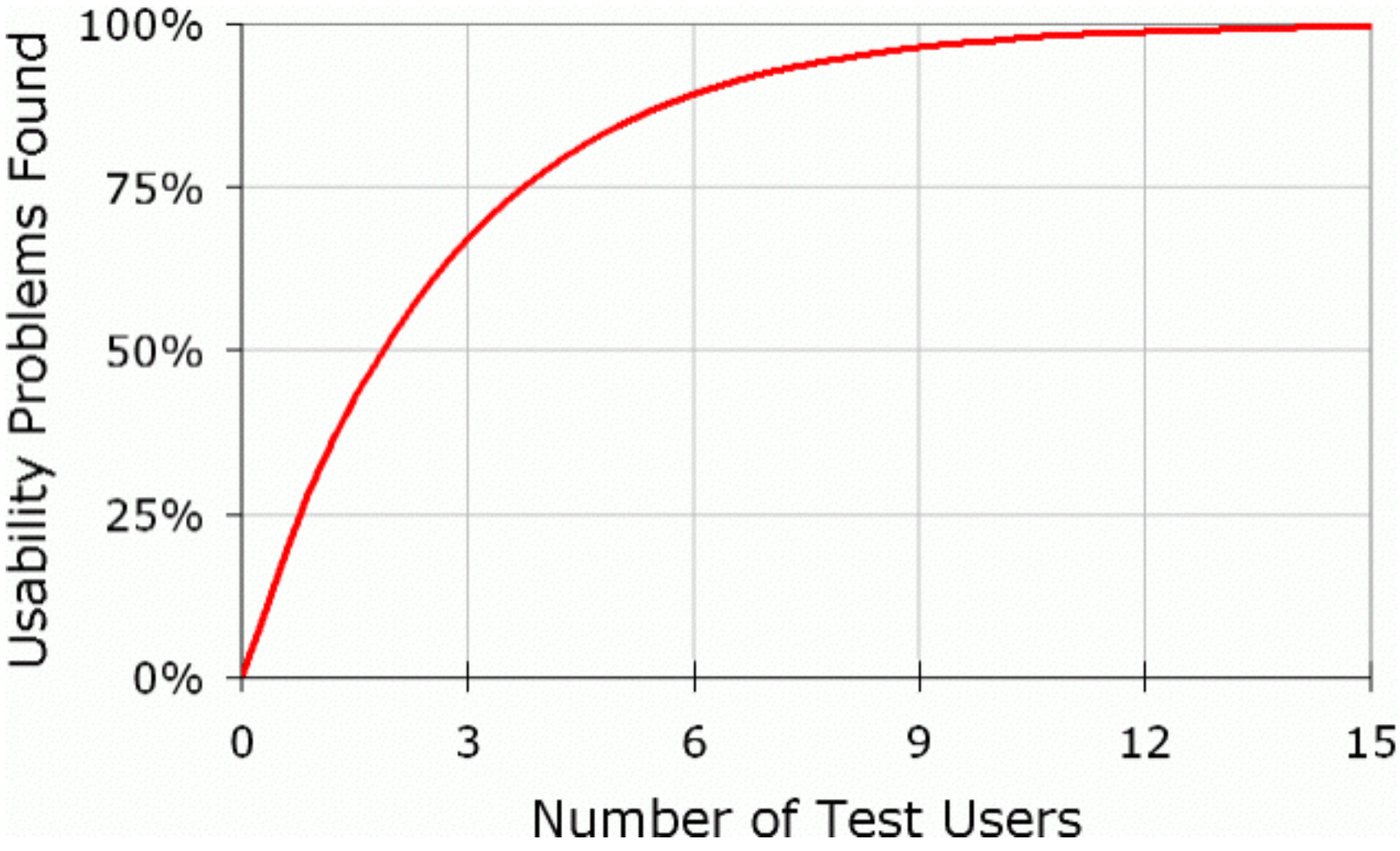
https://www.nngroup.com/

$N(1-(1-L)^n)$

N= total number of usability problems in the design
L= is the proportion of usability problems discovered while testing a single user

The typical value of L is 31%, averaged across a large number of projects we studied.

Plotting the curve for L =31% gives the following result:



Number of Users	Insights gathered
0	zero users give zero insights
1	Your insights shoot up and you have already **learned almost a third** of all there is to know about the usability of the design. **The difference** between zero and even a little bit of data **is astounding.**
2	This person does some of the same things as the first user, so there is some overlap in what you learn. People are definitely different, so **there will also be something new that the second user does** that you did not observe with the first user. So the second user **adds some amount of new insight, but not nearly as much as the first user did.**

Number of Users	Insights gathered
3	Third user will do many things that you already observed with the first user or with the second user and even some things that you have already seen twice. Plus, of course, **the third user will generate a small amount of new data, even if not as much as the first and the second user did.**
4 - 5 -	Add more and more users, you learn less and less because **you will keep seeing the same things again and again**. There is no real need to keep observing the same thing multiple times, and you will be very motivated to **go back to the drawing board and redesign the site to eliminate the usability problems.**

What do I do with the insights?

1. **Idea** Start from validate learning on your personas, problems, propositions

2. **Hypotesis** Usability hypotesis + user stories

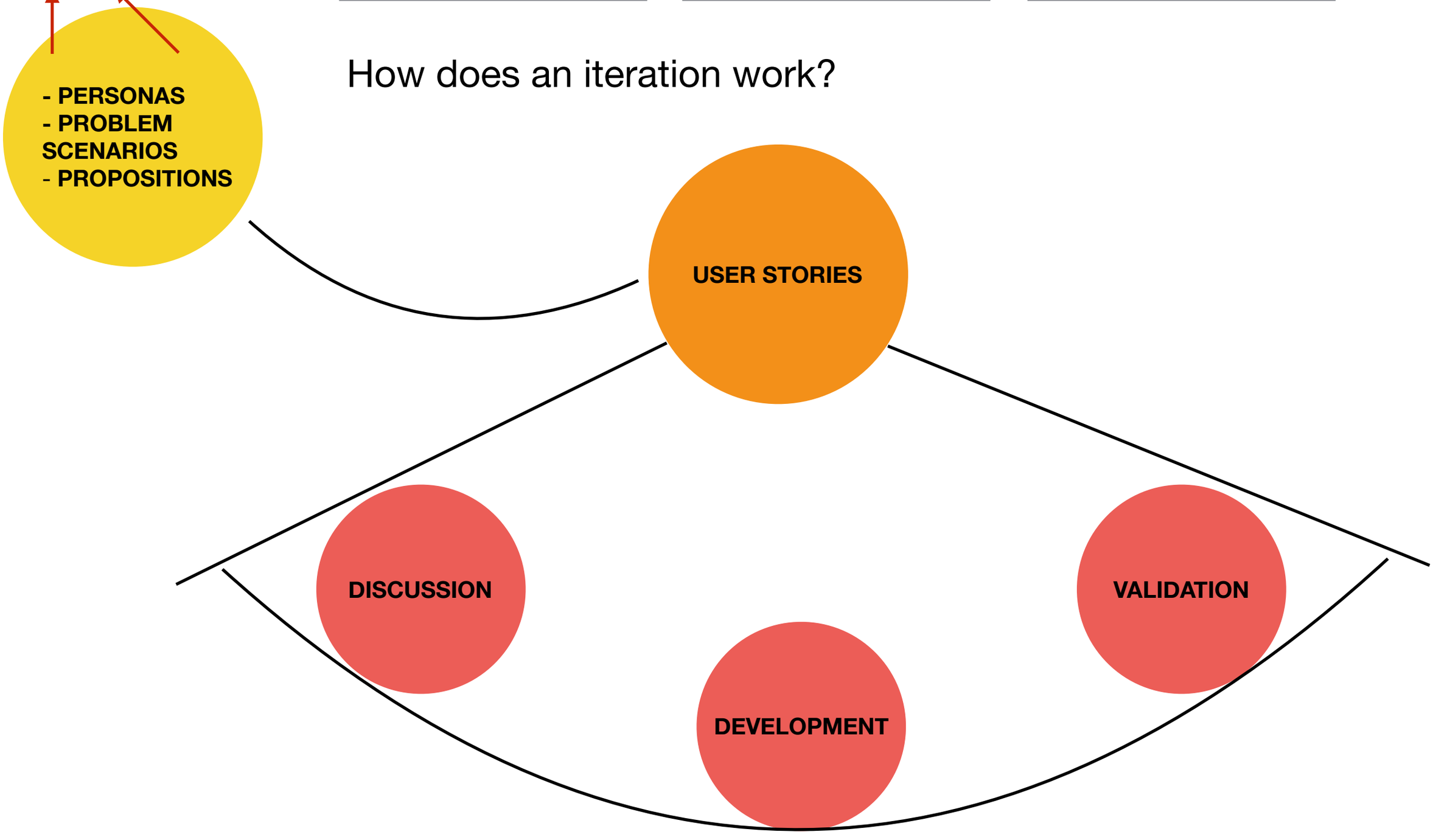
3. **Experimental design** Exploration, assessment, validations, test case

4. **Experimentation** Do the result validate or invalidate your hypothesis?

5. **Pivot or persevere?** **Yes = go to 6 | No= go to 1**

6. **Persevere** Experiment prove hypothesis

How does an iteration work?



Today:

Usability sprint
(summary version of day 1)

Work with your Agile team

	Time	Activity
Team	10 min	Vote on stories and discuss
Team	10 min	Serialise Epics
Alone	30 min	Draft Tests
	10 min	Break
Team	20 min	Team review on tests
Team	30 min	Pair drafts wireframes
Team	15 min	Team review on wireframes
	10 min	Break
Team	10 min	Plan work on prototypes of tests

	Time	Activity
Team	60 min	Prototypes
	10 min	Break
Team	30 min	Tests with other team (15 min each)
Team	20 min	Discuss how to implement feedback
Team	60 min	Implement feedbacks on prototypes