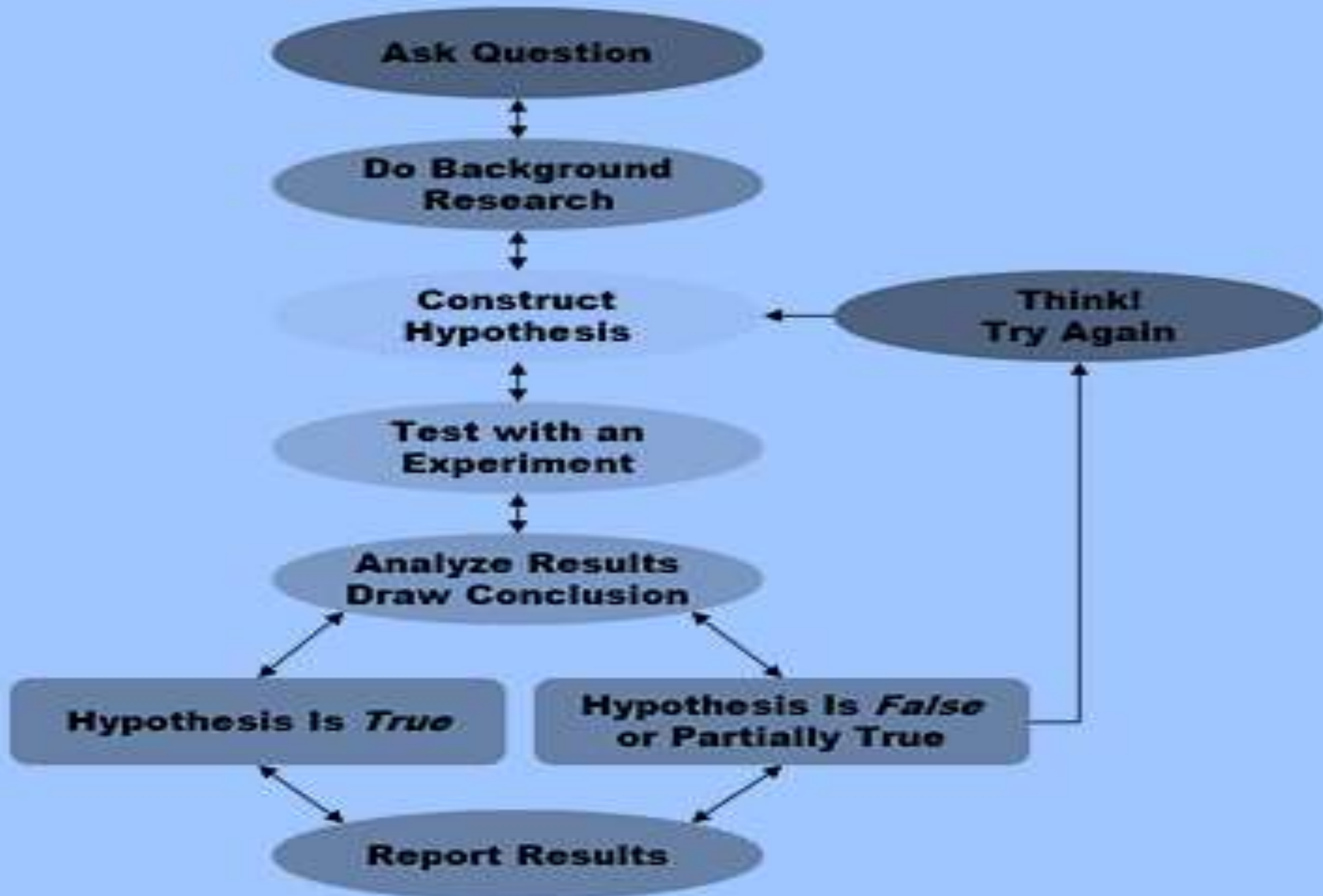


The steps for a scientific research



The Features of Human Language

(adapted from)

[Hockett, Charles. 1960. *The Origin of Speech*.](#)

The features of human language by Hockett is also known as 'design features of human language'.

These features help to understand the essential ingredients of human language.

The human language is complex phenomenon, especially when we try to explore the amazing similarities that the languages of the world display together.

The present class is an effort to try to understand the view-point of Hockett who called the following features as the features of human language.

Language is a system of sign. L-a-n-g-u-a-g-e

These signs are systematic . Every sign is a meaningful unit and we will have a full class on **'The Saussurean dichotomies'**.

But for now, let us understand 'Hockett's design features of human language':

1. Vocal-auditory channel -- This means that the standard human language occurs as a vocal (making sounds with the mouth) type of communication which is perceived by hearing it.

There are obvious exceptions: writing and sign language are examples of communication in the manual-visual channel.

However, the vast majority of human languages occur in the vocal-auditory channel as their basic mode of expression.

2. Broadcast transmission and directional reception

This means that the human language signal is sent out in all directions, while it is perceived in a limited direction.

For spoken language, the sound perpetuates as a waveform that expands from the point of origin (the mouth) in all directions.

This is why a person can stand in the middle of a room and be heard by everyone (assuming they are speaking loudly enough).

However, the listener hears the sound as coming from a particular direction and is notably better at hearing sound that comes from in front of them than from behind.

3. The rapid fading of the sound wave: --

This means that the human language signal does not persist over time.

Speech waveforms fade rapidly and cannot be heard or retrieved after they fade.

This is why it is not possible to simply say "hello" and have someone hear it even after an hour later.

Writing and audio-recordings can be used to record human language for a different purpose.

That is, once the language is written or recorded, it can be recreated/retrieved at a later time,

..either by reading the written form, or by playing the audio-record.

4. **Interchangeability in speech production:** --

This means that the speaker can both receive and broadcast the same signal.

In a simple way, this means that the speaker can be a listener and speaker in a turn taking situation.

This is a distinct feature of language by humans and differ from some animal communications.

The [stickle fish](#) and its communication is important to mention here.

The stickle fish make auditory signals based on gender (basically, the males say "I'm a boy" and the females say "I'm a girl").

However, male fish cannot say "I'm a girl," although they can perceive it. Thus, stickle fish signals are not interchangeable.

5. Total feedback in human communication:

This means that the speaker can hear themselves while producing the speech and thus can monitor their language performance as they proceed.

This differs from some other simple communication systems of bee, dolphin and traffic signals.

The bees have a very complex 'message-signaling system' but yet they can't monitor their own procedure of doing it.

Traffic signs are normally not capable of monitor their own functions either.

For example, a red light can't tell when the bulb is burned out and any such function.

6. Specialization:

This means that the organs used for producing speech are specially adapted to perform that task.

For example, if we make a closure of our lips and let the air burst after the closure of lips, the process will bring out a /p/ sound in any part of the world.

Therefore, the human lips, tongue, throat, etc. have been specialized as speech organs instead of being merely the eating organs as they are in case of many other animals.

Dogs, cats or any other animal for example, are not physically capable of producing all of the speech sounds that humans produce, because they lack the necessary specialized organs.

7. **Semanticity:**

This means that specific signals can be matched with specific meanings.

This is a fundamental aspect of all communication systems.

For example, in French, the word *sel* means a white, crystalline substance consisting of sodium and chlorine atoms.

The same substance is matched with the English word *salt*.

Anyone who is a speaker of these languages will recognize that the signal *sel* or *salt* refers to the substance sodium chloride.

8. **Arbitrariness** -- This means that there is no necessary connection between the form of the signal and the thing being referred to.

For example, something as large as a **whale** can be referred to by a very short word.

Similarly, there is no reason that a four-legged domestic canine should be called a *dog*, or *chien* or *perro* or *anjing* or kukkur, or kutta (all words for 'dog' in other languages).

Onomatopoeic words such as "meow" or "boo, boo" are often cited as counter-examples, based on the argument that they are pronounced like the sound they refer to.

However, the similarity is very loose (a dog that actually said "boo" would be very surprising) and does not always hold up across languages (Spanish dogs, for example, say "guau").

So, even onomatopoeic words are, to some extent, arbitrary.

9. Discreteness:

This means that the basic units of speech such as **sounds** can be categorized as belonging to distinct categories.

There is no gradual, continuous shading from one sound to another in the linguistics system, although there may be a continuum in the real physical world.

Thus speakers will perceive a sound as **either** a [p] **or** a [b], but not as blend, even if physiologically it falls somewhere between the two sounds.

10. Displacement:

This means that the speakers can talk about things which are not present, either spatially or temporally at the time of 'speech-event'.

For example, human language allows speakers to talk about the past and the future, as well as the present.

Speakers can also talk about things that are physically distant (such as other countries, the moon, etc.).

They can even refer to things and events that actually do not exist (at the time of speech-event situation) such as if I ask 'Mr. Raju Rastogi, how does an induction motor start?

And at least one of you say 'vvvrrrrrrrrrrrr' exemplifies the property of displacement in human language.

11. Productivity:

This means that human languages allow speakers to create novel, never-before-heard-utterances that others can understand.

For example, the sentence "The superman who live in Lalo's human-farm told me that Spiderman will come back from Mars on the 10th August and will set all the politicians of India right".. is a novel and never-heard-before sentence (at least, I hope it is!).

But any fluent speaker of English would be able to understand it (and realize that the speaker was not completely sane, at least for his noble wish).

12. Traditional Transmission:

This means that human language is not something that is a newly born.

Although humans are probably born with an ability to learn a language, they must learn or acquire their native language from other speakers.

Meaning the human language is transmitted from one generation to another.

This is different from many animal communication systems where the animal is born knowing their entire system...

e.g. bees are born knowing how to dance and some other birds are born knowing their species of bird-songs (this is not true of all birds) etc.

This point remains highly debatable...

13. **Duality of patterning:**

This means that the discrete parts of a language can be recombined in a systematic way to create new forms.

This idea is similar to Productivity (Feature 11).

However, Productivity refers to the ability to generate novel meanings, while **Duality of patterning** refers to the ability to recombine small units in different orders.

The sounds combining to sounds produce syllable, and some languages allow one sentence to be arranged in many ways.

Passive constructions are good example of 'duality of patterning'.

That's all 😊

