The
Speak Logic Project

We Promote Better Communication

Fundamental Of Communication

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Preface

From the *Understanding of Principle of Communication* book, we have learned how to separate our communications from our applications and make necessary corrections to prevent errors from getting to our applications. By using this technique, we were able to prevent problems from what we do. The correction process was realized by the help of our parents' principles. Without those principles, we would not have learned how to prevent problems from what we do. Although we were not concerning of why our parents have been able to correct us, but it would have been a good question to ask. Even though we did not ask that question, but from our mind, we may have thought that our parents know something that we did not know. While they did not tell us why they were able to do that, but we have learned many techniques from them that made us believe that they knew something that we did not know.

In this book, we are going to look at inside the Error Correction Function to determine what our parents knew we did not know that allows them to make corrections to our mistakes. In order to do that, we are going to introduce to many terms that will help us identify anything that we see or any word that we use in communication. We are going to define and identify problems, which is the reason of this book existence and the reason our parents have been corrected us. Finally, we are going to identify various principles.

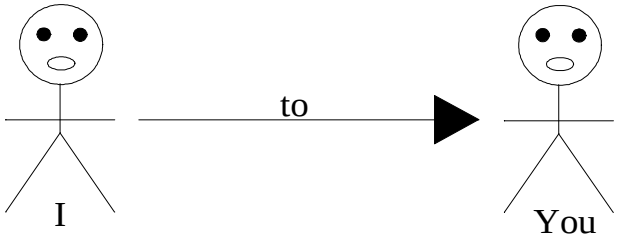
This book is organized into ten chapters. Chapter one is the problem statement. Basically this chapter leads us to a question of why our parents have been able to correct us and what they know and we don't know. The answer of the problem statement is what this book is about. In chapter two, we work out the prerequisite exercise. By provide a solution for this exercise, we are able to identify various terms that enable us to identify what we see in communication. Based on what we identify, we provide the information for them which we call characteristic. This is basically what chapter three is about; this chapter helps us describe the aspects of what we see. Given that the existence of problem is what this book is about, in chapter four we define and identify problems. Chapter four tells us how problems are developed and provide a possible solution for each case we identify. Since communication cannot exist without information, in chapter five we introduce to information and its importance in communication related to what we do. There is no such as learning without education. Whenever we use the word learning, we always think about education. For this reason, in chapter six we introduce to education, where we use the term *Theory of Education*. In chapter seven, we simply group and identify many of our parent's principles. By identifying and grouping those principles, we can work with them easily in our applications. Given that sometime we are not aware of those principles, by grouping them, we can identify them more easily, and use them in our applications. Since sometime it is easily for us to mistakenly identify our ideas as our parent principles, in chapter eight we look at the difference between our ideas and our parent's principles. By using what we have learned from all previous chapters, in chapter nine we answer the problem statement question. By looking at the basis of sentence analysis, in chapter nine we look at why our parents have been able to correct us and why they knew what we did not know. Finally, since there is no learning experience without

any practical application, in chapter ten we provide some exercises that can be used to enable the better understanding of the subject that is discussed in this book.

The prime exercises represent another way of looking at the same exercise. For instance, if we encounter exercise number 41 and 41′ (prime), exercise number 41′ simply represents another way of looking at exercise number 41 which may require the usage of algebra. The prime exercises are simply another representation of the same exercises. While some exercises require the usage of algebra, since the exercises are not being viewed on paper, they assume that the algebra is understood and it is not being viewed on paper. The exercises that require algebra assume a good understanding of algebra. There is no need to workout those exercise if the algebra is not understood or well understood. Without a good understanding of algebra, those exercises can simply disregarded.

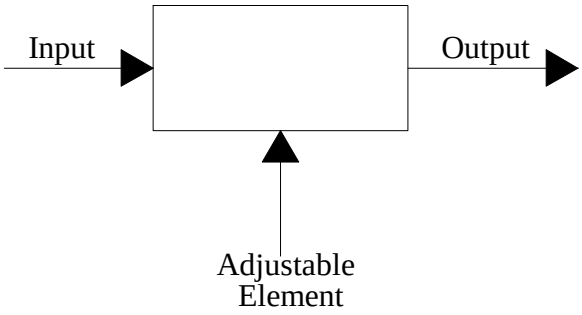
If this book is going to be used in a classroom, it is preferable and it is recommended not to grade the exercises. Since principles can be better learned and expandable through applications, it is better to let the understanding of the students as the grades rather than using numbers or letters. The way to look at it; when an exercise is understood practically by a student that is being viewed as the grade for that student.

To better understand this book, we use a lot of diagrams. Here are the ways to read those diagrams. Always star reading the diagrams where the arrow starts to the direction where it points to. For instance, if the arrow starts from "I" to "You" as shown below, then we read the diagram from "I" to "You". In this case, I refer to the reader.



To better understand the diagrams, words are attached to the arrow to denote the action of the arrows. As shown on the one below, read like "You communicate to me". Since we start reading where the arrow comes from, in this case we start reading from the right. The ways to look at it, all diagrams in this book are sentences flown. That means reading a diagram is the same as reading a typical sentence. Unless otherwise indicated, all diagrams are read from left to right.

Another type of diagram that we use in this book is like the one shows below. This diagram can be viewed as a water pipe, where water flows from one side to another side and the valve which is the adjustable element is used to control the amount of water flow from the input to the output.



To make it easier for us to communicate to each other, the following contact information are given. They can be used to contact us.

Contact Information	Email Addresses
Syntax Correction	syntax@speaklogic.org
Question about Translation	translation@speaklogic.org
All other Information	info@speaklogic.org

Some Reading Suggestions

It is preferable and it is recommended to start from the beginning while reading this book. If an exercise is referred to, we can go and look at that exercise or simply flag it. While we choose the exercises we want to do, it is better to work them out from top to bottom rather from the bottom to the top. In other words, it is better for us to use the knowledge we get from an exercise on the top to do one at the bottom, rather using the knowledge from one at the bottom to do one on the top. Nevertheless, as we gain more knowledge from learning the principles, we may find out that some exercises on the top should have been approached differently. This is normal; we can still go back and work them out the way we want. Since the exercises are given in an incremental basis in term of our understanding, it is recommended not to scan the book. Rather than scanning the book, it is always better to let our understanding take us to the next level.

Some Reading Recommendation

The following exercises can be disregarded. You don't have to work them out or worry about them. You probably don't need to work them out or worry about them in your life time. Those exercises are all the short exercises that ask you to show your understanding of one entity related to another entity in chapter 11 and chapter 12 and appendix C. While you are learning the principle or in the process of learning it, it is highly recommended for you to skip those exercises. Those exercises have no limit in term of understanding the principle and they require a higher level of understanding of the principle. As your understanding of the subject increases, the understanding of those

exercises and their workouts also increases accordingly. For now, there is no need to worry about them or work them out; you can simply skip them. While you may skip them, that always depends on you as well.

How to Handle It

How to I handle it? How do I view it? How to I handle the Book? How do I view the Book?

By understanding exercise number 416, we know that our utilization theory is not physically identified. In exercise number 532 and 565, we have learned that, since our utilization theory is not physically represented or represented by a physical entity, we have to handle it with care and we have to handle it differently. The way to look at it, while the book may help us in the learning of the principle, but it is not good for us to think that the principle itself is a book. By understanding that, it is not good for us to handle the principle as a book. Thus while using this book to help us learn the principle; it is not good for us to think that this book itself is the principle. Since the principle itself is not a book, we should not think it is a book or handle it as a book. Once we approach it as a book, we will not be able to learn it properly. To enable us to learn the principle properly, we should approach it as a principle, but not as a book.

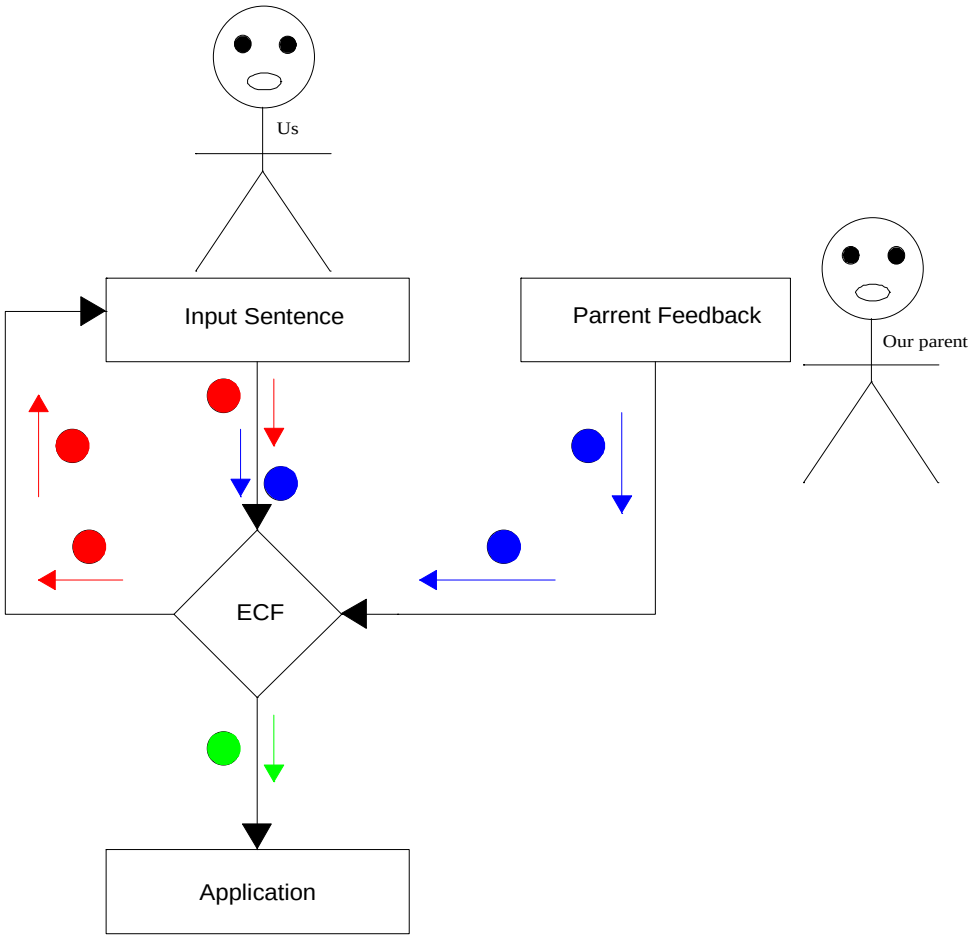
Chapter 1

Problem Statement

Problem Statement

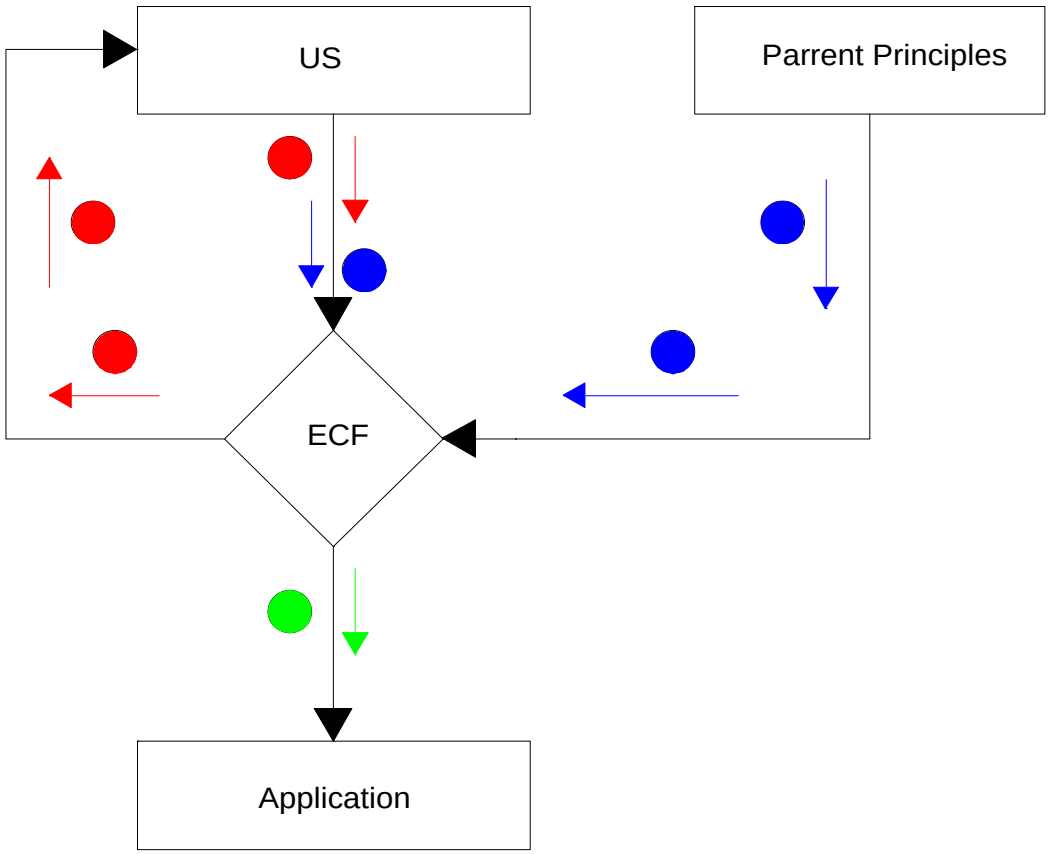
The separation of communication from our applications enables us to take communication as a separate entity from our applications. From this technique, we have been able to identify errors in communication and corrected them with the help of our parents' principles. Since our parents were able to correct us to help us communicate better, they must know something that we don't know. So how they have been able to do that? What do they know that we don't know?

Let's look at the parent feedback diagram again and do some analysis. First we talk, while we are talking, they are listening to us. While they are listening, if we say something that does not sound right, they feedback us with correction; how they have been able to do that? Looking at the diagram below, where we depicted the blue dots as our parents' corrections and the red dots as errors we made. Clearly, we can see that the blue dots are stronger than the red dots; and the blue dots are what we want to be fed to our applications, since they are error free.



Now, let's do some analysis with the Error Correction Function (ECF). The error correction function is a logical function that allows us to listen to our parents then compare our sentences to what they feedback us to produce a result to cancel or correct any error from our sides. The way to look at it, the error correction function is a logical function in all cases. We can say that this function is based on commonsense. Why logical is a good name to use for the function? The way to look at it, in this case, logical mean commonsense. From our mind, we believe that our sentence was good, but from our parent logic, it was not. So since there is only one logic in terms of commonsense, our parent's logic was the good one, so without any doubt, we can conclude that our parents logic were higher than what we thought. Since commonsense is unique, we can conclude that our parents have more commonsense. Let's ask the original question again that leads us to the problem; why our parents have been able to correct us? Although it has already been answered in the previous sentence, but let's answer it again. Our parents were able to correct us because they have more commonsense than us. We can also say that they think differently than us or see things differently. So what do we mean by commonsense? As shown from the diagram below, commonsense is a set of principles that we have or set of principles that we leaned that we use throughout our lives to enable us to live normally. What are those set of principles? It would have been

good to know them. Basically, this is what this book is about. The problem we try to solve here is what principles our parents know that we don't know that enables them to correct us? To conclude the problem statement, take a look of the text in the next page.



An Introduction to Sentence Analysis

While I was traveling with my parent in a shuttle, I saw someone who was sitting next to me who was looking at me. I told my parent, someone was looking at me. My parent asked me *how do you know she was looking at you*. At that time, I closed my mouth; I could not answer to my parent. At the same time, our conversation was ended. After many, many years, I have always thought about the question and have done some research about the answer. I have been to many places to investigate; I have never found an answer. To complete the research, I have concluded if the answer to the question is to be found, it will be unique. That means everywhere this question is asked, it would have the same answer.

Chapter 2

Words Classification And Identification

Introduction

The visual aspect of communication allows us to identify words visually in any sentence. The way to look at it, when we communicate we then repeat a sentence; there is a visual aspect of that sentence that comes to our mind. For instance, suppose we say, *While I step outside, I saw a car on the driveway*. Anybody who hears that sentence will see something come to his/her mind and can easily identify what come to mind when hearing the sentence. For instance, he or she might think about the driveway of a house, a car, step outside etc. The reason we see it that way, because we do have a sense to us that is adapted to communication. Whenever we hear or read a sentence or hear something else, we always try to create an image of what we hear or read through our mind. Suppose we hear or read a sentence that has many unknown words, the image formation of that sentence through our mind may not be the way we would like it to be. The way to look at it, with no unknown word, we have a better image come through our mind about a sentence. With many unknown words in a sentence, the image may not form properly trough our mind and that always leave us with questions. It is always good to have a proper image coming to our mind about a sentence.

In this chapter, we are going to analyze couple of words that makes up many sentences and look at their similarities. Given that the prerequisite of *Fundamental of Communication* exercise was require for this book, we are going to analyze the exercise to make sure we come with similar result from other people.

Prerequisite Exercise Workout

To start looking at word similarity, let's take this sentence and analyze it.

1. *Yesterday I drove to the grocery store; today I walked there just to get a gallon of milk.*

   To look at words similarity in the sentence, let's take the word **walk** and **drive.** We can **walk** to the grocery store, we can also **drive** to the grocery store; in terms of functions, there is a similarity between walk and drive, since both of them accomplish the same function; now it would have been nice if we can find a word to classify both walk and drive.

   For instance we can classify both **walk** and **drive** by a key word, and then we can point next to that keyword to find a word to show the difference, since both of them in many instances are similar and different

   If we choose to ride our bike to the grocery store, we also see a similarity in terms of functions like bike ride and walk.

   By doing some analysis and think about the two words above, we can see that both **drive** and **walk** are methods. We can classify walk as a natural method and drive as a non natural method; by doing so, we can fill the table below.

Words	Similarity	Difference
Walk	Method	Natural
Drive	Method	Non-natural

2. *I went to the fast-food restaurant yesterday. I got a small French fries; although I could have used a fork to eat it, but I used my fingers which are faster.*

   By looking at the sentence, we go to a fast food restaurant, we get a French fries, to eat that fries, we can use our fingers to eat it, we can also use a fork to eat it, in terms of function, we can see a similarity between the words **fork** and **finger**, now, it would have been nice to find a word to classified them or to show their similarity

   We can also use our hand to open a jar; we can also use a jar opener to do the same thing, so there is a similarity between our hand and the jar opener.

   Now, let's do some more analysis before we choose the right word.

   I went to see a nurse; she used her hand to monitor my pulse. I could also use a watch to monitor my pulse, hence there is a similarity between her hand and the watch in terms of functions, and she can also use something else to monitor my pulse

Starting couple of miles away, I am looking at the mountain with my eyes. Since the mountain is so far from me, I am not able to see it clearly. By using a binocular, I can see the mountain much closer. Clearly, we see there is a similarity between eyes and the binocular in terms of function.

The word above can be used for both of them to show the similarity.

Words	**Similarity**	**Difference**
Finger	Instrument	Natural
Fork	Instrument	Non-natural
Third Word		
Eyes	Instrument	Natural
Binocular	Instrument	Non-natural

3. *In a car manufacture plant, a robot is used to paint a car. In my local body shop, a mechanic paints a car manually.*

   We see there is a similarity between a robot and a mechanic in term of function, now we use a word to show the similarity. Since we know human is defined as a system, so we can say the "human system", there is no problem for this one. We can simply use the word system to complete the table.

   A computer can be used to perform a task, as well as a person can be used to do the same task, use a word to describe the similarity

Words	**Similarity**	**Difference**
Mechanic	System	Natural
Robot	System	Non-natural

4. In this one, we have to do some more analysis and ask some questions. What is the difference between the mechanic and the robot in terms of functions? Both of them can paint, however the robot must be programmed to paint, where the mechanic learn some set of principles that shows him how to paint. So by definition, we can see that the robot is a pre-programmable system, while the mechanic is a self programmable system. By using the word principle, we see clearly it match with the word theory.

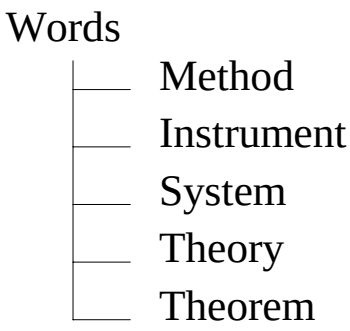
   We can also ask other questions, what shows the mechanic how to pain the car; he has learned how to pain the car. We can also see that the function of the mechanic cannot be predetermined or he is not predetermistic, therefore he is a self programmable system. A self programmable system must rely on its own way of doing things; therefore the word theory is well matched.

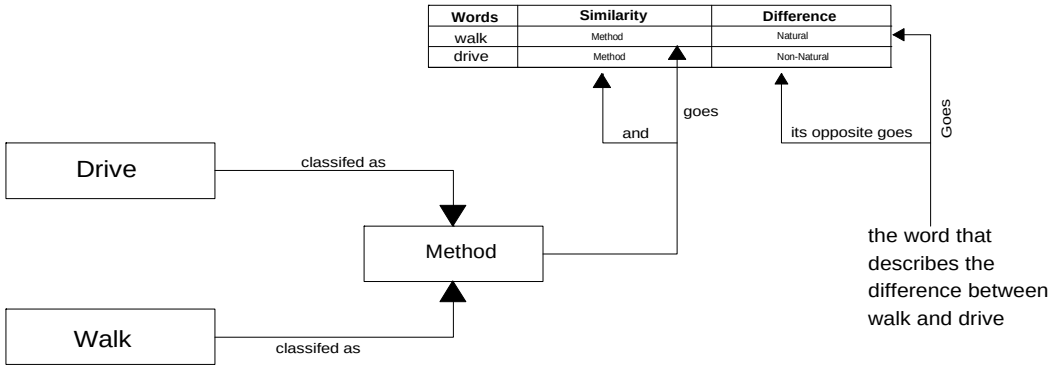
   Another way to look at it; compare to the robot, we can also define the mechanic as an intelligent-system where, intelligence is defined as a constant entity among us, human that enable us to learn and do things.

Word	Synonym
Theory	Theorem

5. If we find the word in step 4, there must be a synonym for that word. Therefore, the word theorem is the synonym of the word theory. We put theorem in the table above.

After completing the exercise for all of the 5 words, you should have gotten something like this, where the second diagram shows how the table should have been constructed.



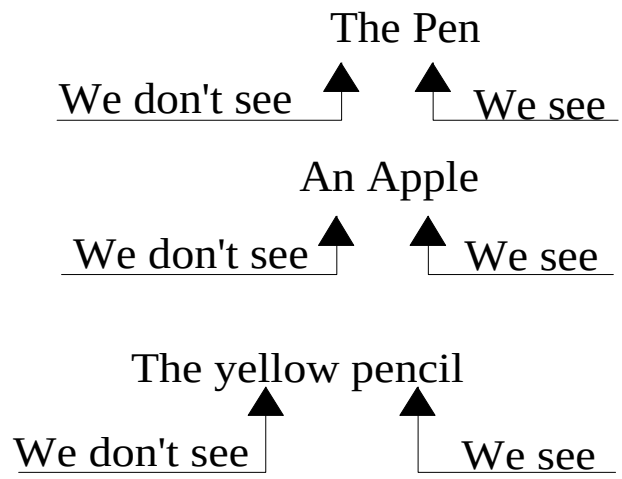


The Visual Aspect of Communication

The exercises we have done from the preceding section enabled us to identify any visual word in communication. Since practically a sentence is made of both visual and non visual words, we are not concerning about non visual words here, since we don't see them in communication. As we read in the introduction, when we hear a sentence, there is an image that comes to our mind about that sentence. That image is formed related to the words that are used in that sentence. That image always related to the words in that sentence that can be identified visually. For instance, let's take the sentence "Yesterday, I walked to the park". The non visual words on that sentence are "to" and "the", therefore any image formation of that sentence to our mind disregard both "to" and "the". See couple of diagrams below about words that we see in communication and words that we don't see. We mean the words that are related to image formations in our minds and words that are not.

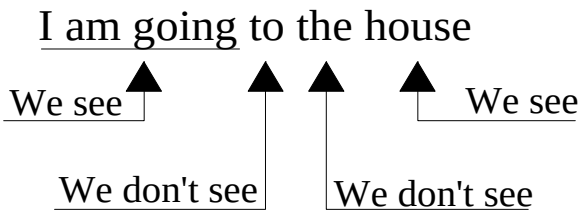
Let's look at the following phrases

- The pen
- An apple
- The yellow pencil



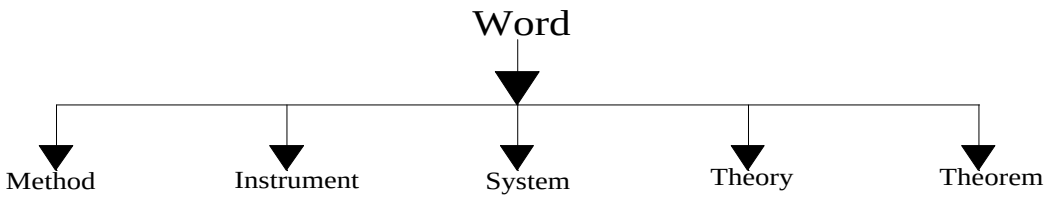
The way to look at it, in a sentence there are many words that we don't see visually, they are considered to be helper for that sentence. From the sentences above, for instance we don't see "an" by itself, but we see "apple"; in the last one, we don't see "yellow" by itself, but we see "yellow pencil".

Let's look at the following sentence as an example "I am going to the house". The figure shows the words in the sentence that we see and the words that we don't see. In terms of practical communication, since the words we see in the sentence are always the words that set our focus, it is always in our interest to focus more about those words, since those words are the ones that come to our mind when we hear a sentence. It would be easier to use the terms we have learned from the exercise to identify and classify the words.

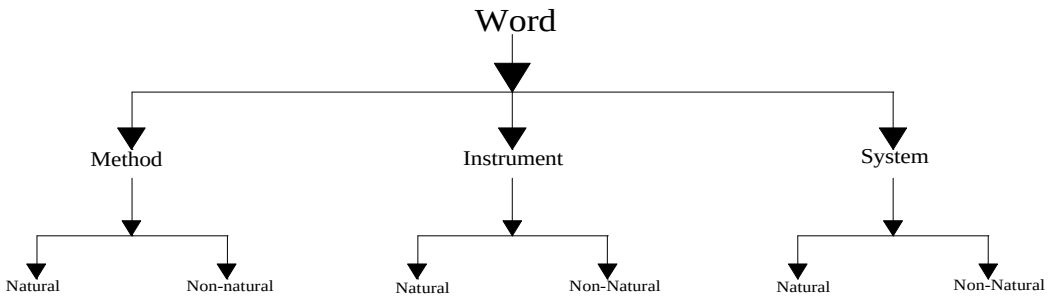


Identification of Words Practically

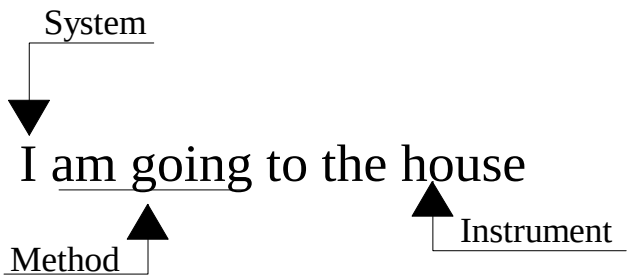
From the exercise, we have developed a method to allow us to identify words with little effort. We have learned that from the exercise, any visual word can be classified or identified as: theory, theorem, method, system an instrument. We have also learned that methods, instruments, and systems can also be classified as natural and non natural. The diagram below shows a better view of what we have learned from the exercise. The diagram simply groups the words so they can be identified easily.



Since we have identify method natural and non-natural, instrument natural and non-natural, system natural and non-natural, the diagram above can be expanded as the one show below to show both the similarity of the words we have identified from the exercise and their differences.



As an example, let's take the sentence we have worked above and identify words in that sentence. The sentence was: "I am going to the house".



For a better explanation, let's put the words we have identified from the sentence above and their identifiers in the table below.

Words	Identification	Explanation
I	System	This is a person; we can easily identify that as a system and we can see that is a natural system.
Am going	Method	This is a method, but since it is not specific we cannot state whether is natural or not. For instance, it could have bee drive or walk.
House	Instrument	This is an instrument,

Some More Techniques about Words Classification

Most of the time, it takes visual inspection to identify a word as method, instrument system, but theory and theorem sometime require us to ask question to find the classification of a word as one of them. Something to consider, any object can be identified as an instrument while person—human—can be classified as system. For instance, a cat is identified as a system as well as a dog, while a car is identified as an instrument. A computer is classified as an instrument as well, but it is also classified as a system, as well as a robot. We have seen that from the example.

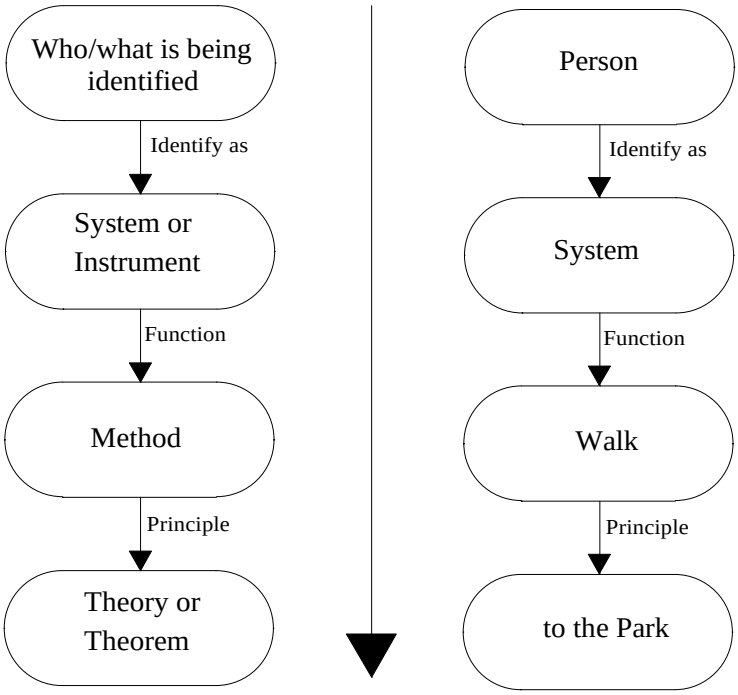
The best way to look at it, a system is collection of instruments or components; while each component in a system is identified as an instrument. Just think it this way; instruments are parts of a system. For example, the following are classified as instruments in our system.

- Hand
- Finger
- Foot
- Etc.

We can also say that a natural system is made of natural instruments, while a non natural system is made of non natural instrument. The flowchart depicted below can be used to help us identify words as instruments, methods, systems, theories and theorems. The best way to use the chart when we are working with a sentence, simply use the one in the left as from top to bottom and use the statement from the arrow to fill the oval. As an example, the one to the right was filled for the sentence "I walk to the park".

From the first top of the oval, we can ask this question, "Who is being identified", the answer, "a person", so a person is identified as a system. Second, we ask the question, what is the function of that system, what does that system do; or what that person was doing, the word that answer that question, is the method. So we can see that "walk" is the method. Now, we should be very comfortable with system instruments and method.

Let's now talk about theory and theorem. Since theories and theorems are the principles behind how functions work, for instance the principles behind the function the person accomplishes or the system does, since they tell us how methods work, they may not be explicitly identified until we ask questions. This is why this flowchart was given so we can easily identified theories and theorems with little effort.



Let's create a table and put the same sentence again and ask questions. The left column simply shows the words the sentence is made of.

Words	Identification	Questions
I	System	Who is being identified? Response a person; I is being identified as a system.
Walk	Method	What function was he/she doing? Response walk; walk is being identified as a method.
To the park	"To the park" is not theory/theorem, but what that person was walking to the park for is the theory/theorem.	What was the function used for? The function or the method was applied to go the park. The principle of that method is the theory.

The explanation from the table above should clarify everything. As it was said before, theories and theorems may require a little bit effort to identify since they may not show directly in a sentence or any other practical form of communication until proper question is asked about the method that was applied in that sentence. Nevertheless, the flowchart above can guide us to identify them without effort; just ask question: what principles this method was applied for; why this method was used? To better clarify the words again, let's provide a table with the words and some explanations.

Words Identification	Explanation
Instrument	A system is a collection of instrument or component. Each component or part in a system is identified as an instrument.
System	A system is a collection of instrument.
Method	Method is what systems do; what instruments do; the functions of systems and instruments.
Theory/Theorem	The principles behind how systems and instruments work; the instructions on how functions in systems and instruments work. Principles behind the functions performed by the system or the method applied by the system.

More about Theory and Theorem

Most of the time theories and theorems are hidden from view, however questions can be asked to identify them. Most of the time theories and theorems are hidden from view; but some extra efforts may require to identify them.

From the example above, we may need to ask questions to find the theory/theorem from that sentence. For instance, we may ask a question, what he/she was going to the park for. The answer might be he or she was going to the park to walk with the dog. We consider this information to be the theorem for the method that was applied in the sentence. We can also say that this information is considered as the theorem the system was used or the principles the system was used. We can see directly that information was not there; so as it was concluded in the first paragraph, sometime theories are hidden from view, but questions can be added to identify them.

Chapter 3

Characteristic Of Words

Introduction

From the previous chapter, we have learned how to identify and classify visual words in communication. We can interpret what we have learned as the foundation of communication or visual communication. What do we mean by visual communication, since we sense communication visually, we mean that an image that comes to our mind when we communicate. The ability to understand each other when we communicate is always depending on that image. If the image forms properly, the better we can understand each other. The two preceding sentences can be viewed or interpreted as the commonsense or logic behind communication. There is no difference, except that using the word image takes it deeper at a lower level, while the word commonsense or logic takes it at a higher level. Now that we have identified the terms as theory, theorem, method, system and instrument, it would have been nice to know more about them. The way to look at it, by identifying those words in communication, we can have an image about what being said, however these image would have form better if we know more about those terms.

This chapter will provide us with the characteristic of the terms we have identified earlier. We are going to start with characteristic of theory, since the word theory is more complicated than the other words we have identified. We are going to spend more time on theory. Since communication is a major part of our lives, to better understand each other, and to better understand our system, we will also include ourselves in the pictures when we talk about those terms characteristics. That means we will use ourselves in those characteristic as well. The way to look at it, since we are a system that interfaces through communication, to better understand word characteristic, we have to understand our system as well.

Characteristic Words an Introduction

When we talk about characteristic of a word, we mean important information about that word or important information that comes with that word. For instance, characteristic theory will include important information about theory. The way to look at it, characteristics of words includes important information about the terms we have identified. Characteristic of a word also means constant information or important aspect of that word—given aspect of a word, given information of a word; important information of a word.

Characteristic of Theory

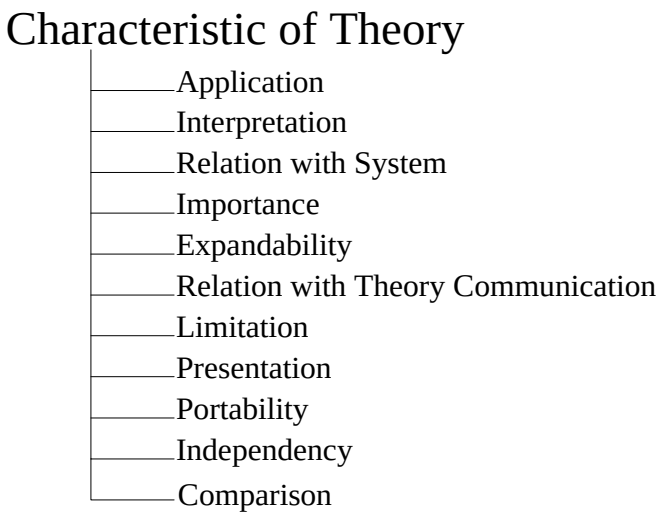
Theories are the principles behind how systems work or as we said before, the principles behind how methods or functions work. Theory tells us how functions work in a system. The overall system functionality depends on theory or the principles behind how the system works. Another way to look at it, assume that we go to the store and buy a computer. There is a set of manual that comes with that computer that tells us how to use it or how to set it up. By following this documentation, we can setup the computer. We call this set of manual the principles on how the system works. Since theory is important to a system to assure its functionality, some important information about theory, which we call characteristic theory should include:

- Application or Utilization
- Relation with system
- Interpretation
- Presentation
- Importance
- Expandability
- Relation with theory communication
- Limitation
- Portability
- Independency
- Comparison

The chart below shows the type of information that includes in characteristic of theory. This is the same we have listed above. We are going to look at each item that includes in the characteristic. Whenever we see or heard the word theory, we can think about the following phrases shown on this table.

Characteristic of Theory	Related Phrases
Application	Application of Theory
Relation with System	Relation of Theory and System
Interpretation	Interpretation of Theory
Presentation	Presentation of Theory
Importance	Importance of Theory

Expandability	Expandability of Theory
Relation with Theory of Communication	Relationship of Theory and Theory of Communication
Limitation	Limitation of Theory
Portability	Portability of Theory
Independency	Independency of Theory
Comparison	Comparison of Theory



Theory and System Relationship

Theory is the principles behind systems functionalities. A system presented with a set of principle that enables the functionality of that system and realized by some set of principles. We call the set of principles that the system is derived from the derivation theory of that system and the set of principles that must be used to ensure the functionality of that system, the utilization theory of that system. The word utilization is synonym to application. We can also say that the utilization theory of a system is equivalent to its application theory.

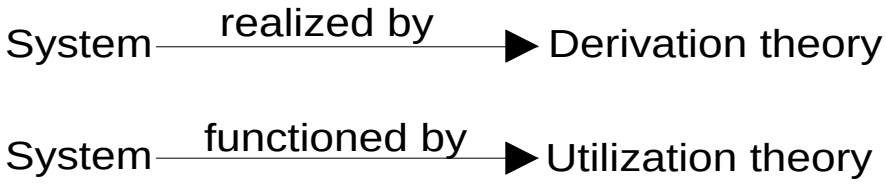
To better understand theory and system relationship in terms of both utilization and derivation principles, it makes sense to look at this example. This is a simple communication system example, an AM radio kit. Any example that includes both derivation principles and utilization principles are welcome. An AM radio kit is simply a radio that needs to be assembled.

Assume that we want to build an AM radio kit. In order to built that kit and understand both the derivation principles and the principles of its functionality. We will need to understand how to put it together and how it works. To know more about its derivation theory, we can either learn that from an instructor or from a book by ourselves. For example, to learn more about its derivation principles, we can get the following books.

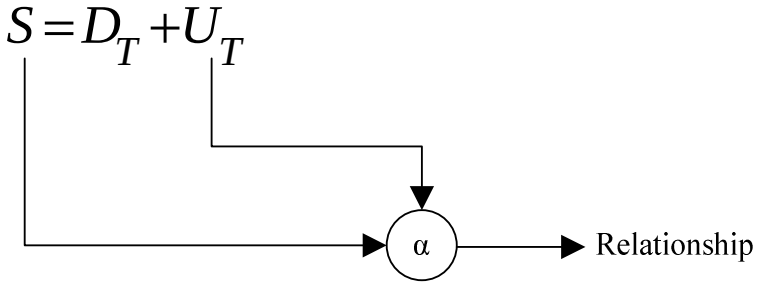
- Mathematical interpretation of electronic communication
- Principles of electronic communication circuitry

We can either go to the book and learned the theory by ourselves or rely on an instructor to help us learn the theory. Now we have learned the derivation principles about the kit, we are ready to put it together. We follow all the instructions and put the component together and test it and it works. Assume that we want to present the radio to someone who had never used it; we can work on a little documentation to show that person how to use it. This documentation can be very simple about the usage of the radio.

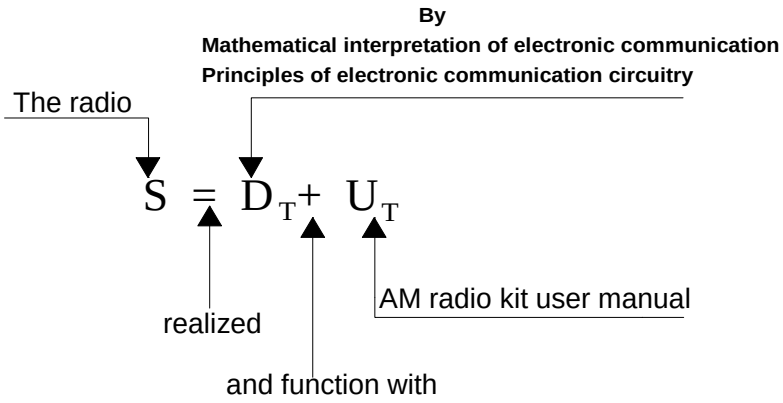
Now we have finished with our radio kit, we end up with two set of documentations: the documentation that includes the principles how the radio was realized and the documentation that includes the principles on how to use the radio. We call the documentation that includes the principles that realized the radio the derivation theory and the set of principles that show how to use the radio the utilization theory. To better understand theory and system relationship in terms of both derivation and utilization theory, see the diagram below; it shows that a system is realized by its derivation theory and function by its utilization theory.



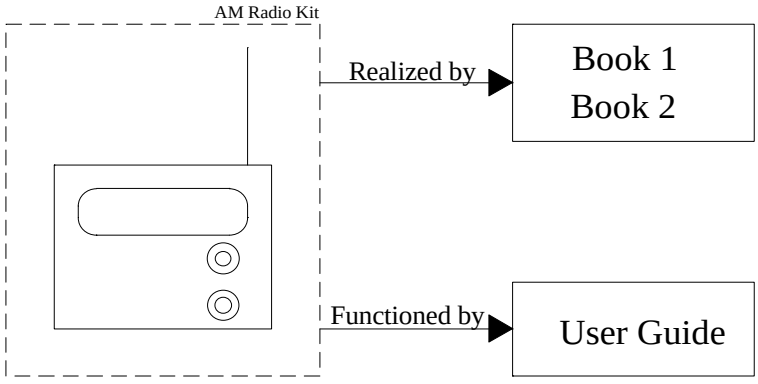
From the diagram above, we know that there is a relationship between a system utilization theory and the system by itself. For instance assume that we present the radio to someone who did not know anything bout the usage and put it under water, that will affect its functionality. In terms of theory and system relationship, the utilization theory of a system should always use to preserve the functionality of that system. See the diagram below given by the equation to learn more about that relationship. The diagram can be interpreted the same way as the one above. A system realized by its derivation theory and functioned by its utilization theory. The alpha (α) is used to show the relationship between the system and the utilization theory.



For the radio kit, we can say that it was realized by the two documentations above and functioned by the third one which includes its utilization principles. We only use the two documentations above as the derivation principles, just to keep it sample. With that in mind, we can have the following relationship as depicted below. The way to read the diagram below, we can say that our AM radio kit was realized by *Mathematical Interpretation of Electronic Communication* and *Principles of Electronic Communication Circuitry* and functioned by the *AM Radio Kit User Manual*.

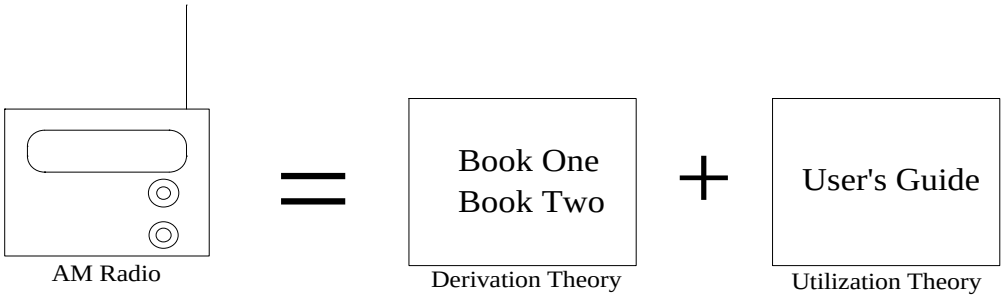


In terms of functionality of the AM radio kit, the derivation principles don't need to be known. The system can well function normally with its user's manual or utilization principles. By now, we should well understand the theory and system relationship in terms of theory of derivation and theory of utilization. All that need to be known is that utilization theory of a system can ensure its functionality even with the absence of its derivation theory. The diagram below shows a better view comparing to the one above.



The diagram below is the same as the one above. It simply shows another view of the radio and the principles that both derives it and enables it to function. We label each

items below so we can see clearly that a system is equal to its utilization theory plus its derivation theory.



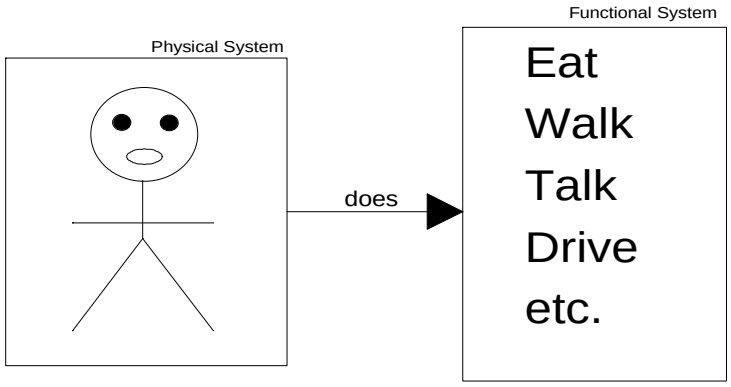
Theory and System Relationship Related to Our System

Since we are a system ourselves, to better understand theory and system relationship, we have to include ourselves in the analysis. From the prerequisite exercise, we have defined ourselves as a self programmable system. It makes sense for us to understand our system in relation with other system; by better understand our system, we can make progress in life. As it was said before, since we are a system that interface to each other through communication, in order to understand the fundamental of communication, we have to include ourselves in the analysis of the terms we have identified from the exercise.

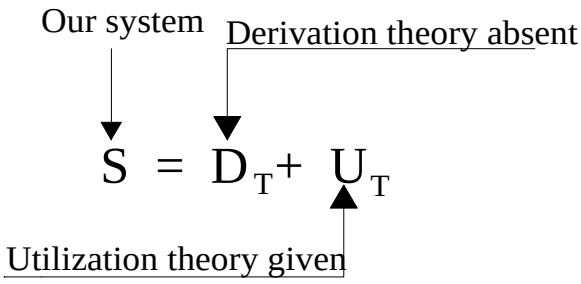
Now, let's look at theory and system relationship in terms of our functionality. From the beginning of communication or from the beginning of childhood communication, our parent's principles have provided us direction in order to avoid error in communication. With our parent's principles, we have been able to correct errors in communication to prevent them from going to our applications. If we look at inside our parents' principles and keep communications and our applications to a single entity without separating them, we will see that those principles always guide us to prevent us from making mistakes in what we do. Since those principles enable our functionality through what we are doing, we can group all those principles together and call them theory. There is no coincidence here, since theory is defined as set of principles that ensure system functionality and we are the system they ensure the functionality. With that in mind, we see there is a relationship between our parent principles and us. In that relationship, we are the physical system and the set of principles is the theory that ensures the physical system functionality.

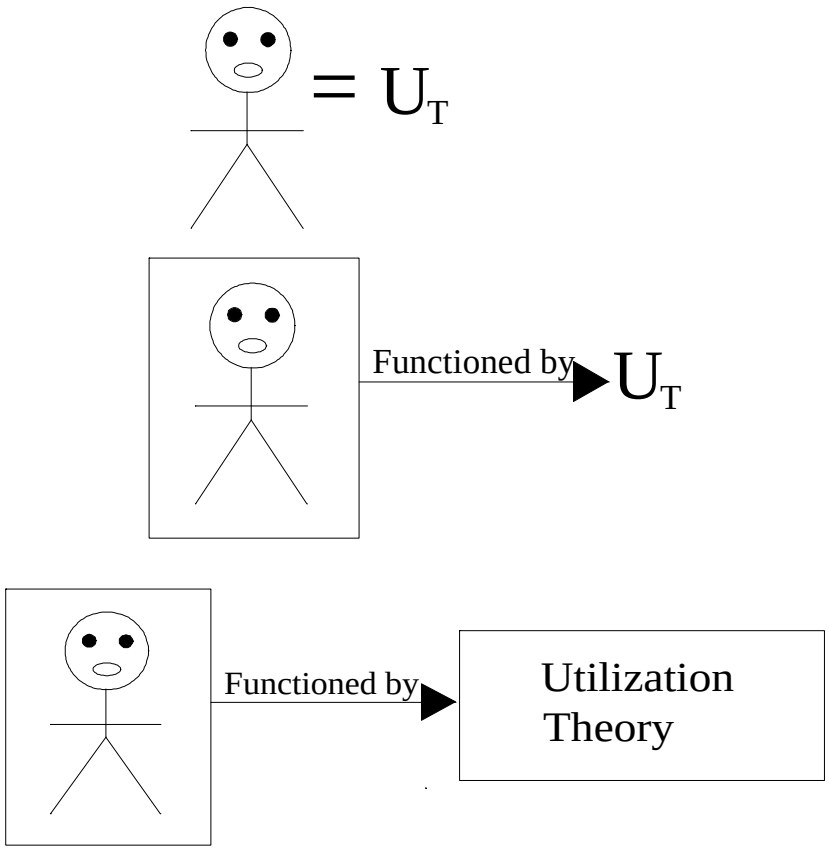
To better understand the relationship between the physical system and its utilization theory, let's look at what a theory is again. Theory tells us how function works in a system or how method work. Now, let's look at our function and the physical system by itself. The way to look at it, our function is to live. We perform a lot of functions that enable us to live. See the diagram below for more information. For instance we eat, we walk, we talk etc. We call those functions of life. For that reason, we can simply call us the physical system and life is the functional system. That means the functional system

includes functions that are accomplished by the physical system. The left side of the diagram shows the physical system and the right part of the diagram describes some functions accomplished by the physical system.



Now, let's analyze the physical system in terms of utilization theory and derivation theory. We know that a system is functioned by its utilization theory and derived by its derivation theory. With the absence of the derivation theory, we can say that the system is functioned only by its utilization theory. See the relationship below for our system in terms of derivation theory and utilization theory. It shows that our system realized by some set of principles which are unknown to us. With the absence of those set of principles, we simply let the derivation theory equal to zero since we don't know it. Since we know that our parents' principles enable our functionality, we let those set of principles as we said before equal to our utilization theory. The second diagram shows the physical system which is equal to its utilization theory. We can also interpret the equal sign as a functional sign. For instance we can say the system is functioned by its utilization theory as shown by the arrow in the other diagram.





From the above explanation, we now well understand the relationship between ourselves and our utilization theory. There maybe a relationship of a system with its derivation theory, in terms of our system, we don't need to know about that and it is not important. All we need to worry about is the relationship between ourselves and our derivation theory.

Lastly what we need to know about the relationship of theory and system compare to ourselves is that: theory that is related to a system must be applied by that system in order to ensure that system functionality. Compare to ourselves it is the same; we must utilize our parents' principles for our functionality; we must utilize our parents' principles in order to ensure the functionality of life.

Application of Theory

The term application of theory refers to the utilization of a theory in order to accomplish a function. For instance, some theory may apply to derive a system; some theory may also apply to ensure system functionality. For the AM radio kit example, we have used some set of principles to derive that radio. We call those set of principles the theory of derivation. To ensure that radio functionality, we have also derived some set of principles that can be used to ensure its functionality. The utilization theory of that radio

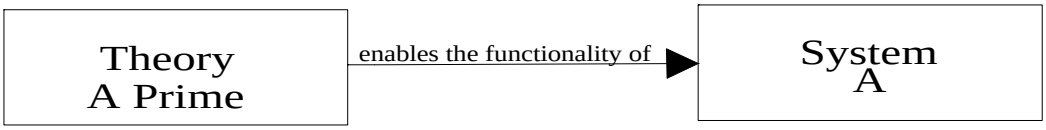
is completely different from its derivation theory. Someone with no understanding of the derivation theory of that radio can learn the utilization theory of that radio in order to utilize it. The life span of that radio also depends of its utilization theory.

Although we have an intelligence that enables us to learn how to do things, however the application of theory should not be taken for granted. With our intelligence, we can learn so quickly in term of system similarity and most of the time we disregard functional instructions of many systems, however when it comes to life it is completely different. We don't need to learn a user manual to use a television or radio; but life is completely different. The fact that we live, we should not take life for granted. A television set, a computer, and a radio are simple systems. Those systems are not complex. Any single function of life, not even the system itself is much, much more complex than all of the systems mentioned above combined including their derivation theory; see exercise number 66 and 66′ for more information to see how complex are function of live. Life is so complex; it requires some type of understanding in order to function normally. Keep in mind there is a big difference between the practical approach of life and the understanding of the theory. Some people with theoretical knowledge of life can fail to apply it badly, while other with limited knowledge of the theory can do very well in term of application. At the end the practical approach is what is important; see exercise number 51 and 51′ for more information. Since life is real-time, there are many, many functions that cannot be simulated, so theoretical knowledge without application will not serve any purpose. The term real-time system means here as we speak, many functions are executed in a natural basis. We must also know that a theory cannot be understood without application or utilization. To better understand a theory, it must be utilized or applied. To ensure the functionality of life or to ensure the functionality of many, many functions that makes up life, the practical approach of the theory is very important. What do we mean by practical approach, we mean the application of our parent principles?

This sentence need to be repeated again, life is too complex to be taken for granted. We must always learn and remember our parent's principles in order to ensure the functionality of the system. We must always apply our parents principles in order ensure the functionality of life. We know that life is a functional system and we are the physical system. We are the one who cause all the problems in life, in order to solve them and prevent them; we must always use our parent's principles which are the functional theory of life.

Importance of Theory

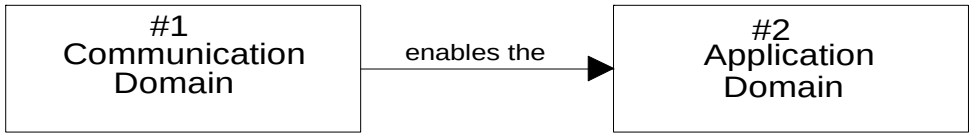
In order to ensure the functionality of the AM radio kit, its user's manual need to be used; also in order to derive that radio kit, the derivation theory must be applied. We can say that the derivation theory of the AM radio kit is important, since it makes it possible for the realization of that radio; we can also say that the utilization theory of that radio is important as well, since it enables the functionality of that radio. A theory that enables the functionality of a system is very important to that system. As shown by the figure below, theory A prime is very important to system A, since it ensure its functionality.



Compare to ourselves, we can say that our parents principles are very important to us since they enable our functionality. In order for the physical system to work properly, it must apply methods. Our parents' principles guide us on how those methods should be applied. We can conclude that our parent's principles are very important to us since they ensure our functionality. The fact that we have intelligence does not mean that we can do things in our own, we still depend on theory or our parent principles; see exercise 41, 41′ and 60 and 60′ for more information.

Relation with Theory Communication

In this characteristic, we are going to look at the relationship of theory with theory communication. Before we proceed, let's define the terms theory of communication. Previously, we have learned about the separation of communication from what we do. By separating communication from our application, we have resulted with two entities: one is communication by itself and the other one is the application by itself. We have learned that the communication entity is number one, while the application entity is number two. For a better insight, let's draw the figure again. Rather than using the word entity, we can also say we have two domains, the communication domain and the application domain.

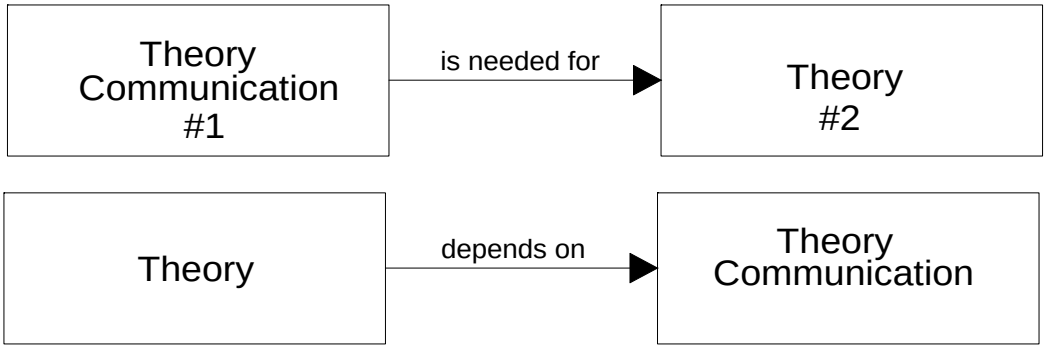


By separating communication from our application, we have been able to remove or correct error from the communication domain to enable us to produce an error free application. This process was done with the helps of our parent principles. From our understanding, we can say that our parents' principles allow us to correct errors in communication. Since we know that a theory is a set of principles that shows how methods work in a system or how a system must use its methods, since we are a communication enabled system, by grouping all of the principles our parents have given us about communication, we call the set theory communication, hence the term theory of communication. Theory communication is defined as a set of principles that is used for communication; theory communication is the set of principles that enables us to communicate better.

Now that we know what theory communication is, let's look at the relationship of theory communication and theory by itself. From our previous understanding of communication, we have also drawn the relationship of what we learn in school in connection with communication. We have said that we have use communication to learned languages; we also said that we have used communication to learn other subjects.

With that relationship, we can say that any subject we have learned in school is depending on communication. We can show this relationship from the diagram below, where it can be read as "communication enables the learning of subjects".

In school we learn different subjects; a single subject can be view as a theory, also many subjects can also be grouped as a theory as well. Since those subjects or theory depends on theory communication in order to be learned, we can say that any theory is also depending on theory communication. With that in mind, we can show the relationship from the figure below. From the diagram below, we can see how theory communication is needed in order to learn theory. The first one shows that theory communication is number one, while theory is number two. The second one shows that theory depends on theory communication. The way to look at it, theory communication is considered as a prerequisite for theory.

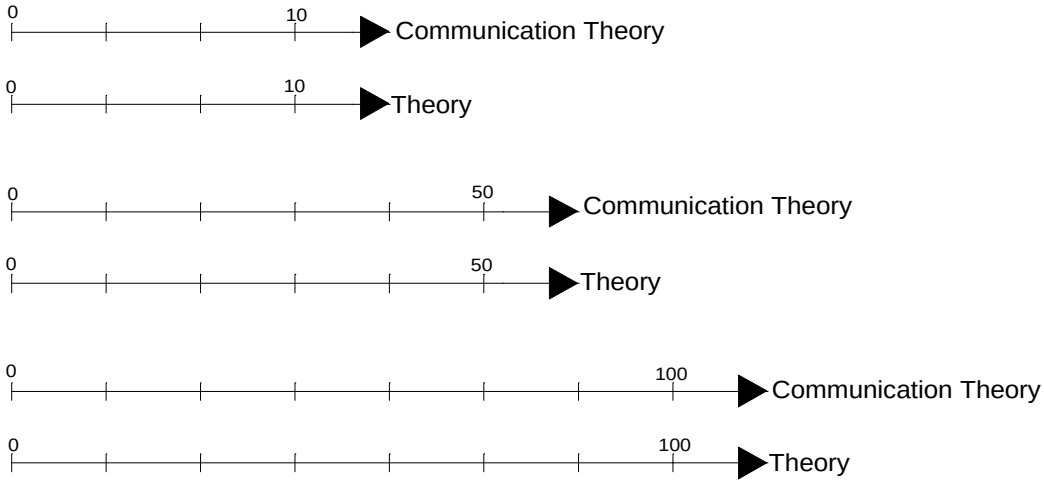


In terms of understanding, there is a similarity between theory and theory communication. A better understanding of theory communication may help understand theory. Progress cannot be made in a theory without a good understanding of theory communication. Another way to look at the relationship of theory with theory communication is as follow: a system may be presented in a form where the documentation of that system may be written or presented in any other form. In order to understand how to use that system, communication must be used to go inside that manual or any other form it was presented. While going inside that manual, without a good understanding of communication that documentation may consider being useless; for that reason, it is always good to understand theory communication in order to understand theory. Without the understanding of communication to help understand that documentation, the principles will not be interpreted correct; as a result the system will not perform the way it should be. It is always good to understand theory communication in order to help understand theory to ensure the functionality of the associated system.

Limitation of Theory

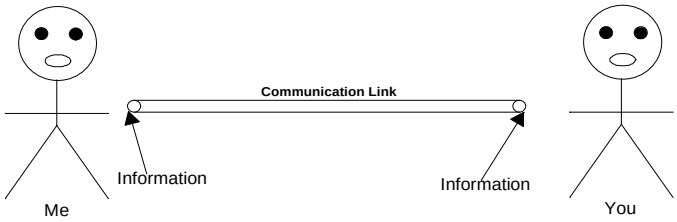
We have learned that theory communication is the basic requirement to understand theory. While a better understanding of communication will help understand theory, any misunderstanding of theory communication will also cause any theory to be misunderstood or misinterpreted. In order to understand a theory properly, it is worthwhile to understand theory communication first.

The way to look at it, any theory is limited by theory communication. A theory cannot go any farther than theory communication or cannot go any farther than where theory communication allows it, see exercise 50, 50′, 54, 54′, for more details. As shows by the diagram below, if theory communication goes to 10, theory can only go to 10; if theory communication goes to 50, theory can only go to 50; if theory communication goes to 100, theory communication can only go to 100. We simply use the scale below to denote the level of understanding to theory communication related to theory in terms of distance.



Presentation of Theory

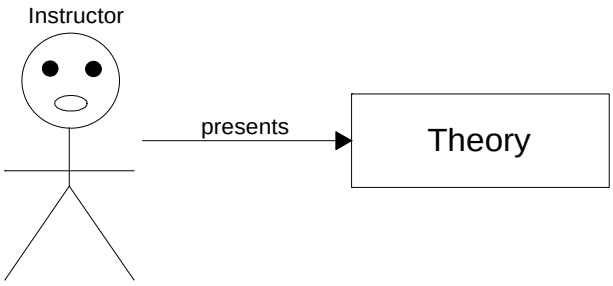
We know that we interface to each other through a communication link that carries information. To better understand the way we interface through communication, it is good took at the diagram depicted below. The diagram shows that one can communicate to each other and pass information through.



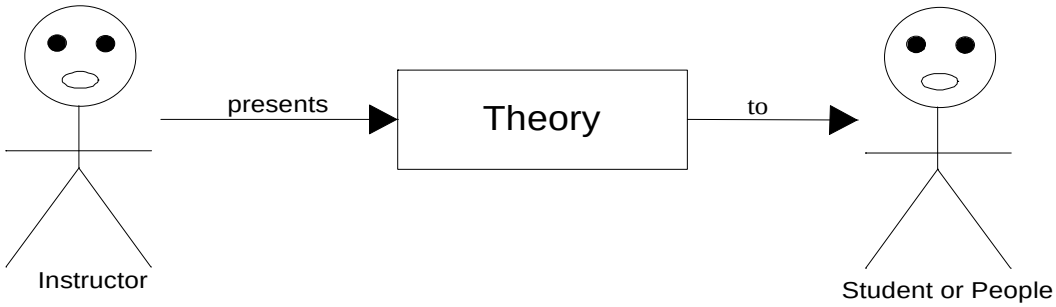
While the communication link above carries information, it also carries theory. The fact that we interface to each other enables us to present theories to other or pass theory from one to another. From the above diagram, we can remove the information tag and replace it with theory. By doing so, we can say that we interface to a communication link that enable us to learn theory from our parent to ensure our functionality. We can also say that communication link enable us to learn our parent principles to enable the functionality of life. The link we show above is a communication link that includes all form of communication. We can say that theory can be presented to us in all forms of communication includes:

- Oral
- Written
- Graphic
- Practical Observation
- Visual Observation
- And all other forms of communication

Disregard the way the theory is presented, the theory itself does not change; its fundamental does not change as well. From the AM radio kit example, in order to realize that radio, or in order to understand its derivation theory, we could have read the two books to learn the theory or we could have learned the theory from an instructor. When a theory is presented by an instructor, the instructor is not the focus of the theory, but the fundamental of that theory is the focus. That means, the theory does not point to the instructor, but points to its fundamental. See the diagram below for more information.



From the figure above, we can see clearly that the theory is completely a separate entity from the instructor. Therefore the instructor physically does not have any relation with the theory he/she presents whatsoever. Since the physical instructor does not point to the theory or does not have any connection to the presented theory, we should never look at that instructor in terms of applying the theory, see exercise 58, 58′ for more details. We should never follow the instructor, but follow the theory. By disregarding the theory and follow the instructor that will make the associated system function abnormally, since the associated system depends on applying the theory rather than the instructor. When a theory is presented by a person, it is always good to disregard that person in term of applying the theory. By doing so, the associated system can function properly; see exercise 58, 58′ to learn more about theory and fundamental of theory.



The figure above shows that there is no physical interface from the instructor to the people who receive the theory. As we can see, the only interface between the two is via the theory. As a result, the instructor is not the focus and will never be the focus of the theory.

Although a theory may be presented by an instructor, however the purpose of that instructor is to help understand that theory. The instructor is not the theory; the instructor is not present to apply the theory for the students or the people the theory is presented to. The purpose of the instructor is to help the students or people interpret the theory. The instructor is not present to interpret the theory for the people or the student. There is a difference between interpret for and help interpret. It will be too much responsibility for that instructor to interpret that theory for the students. The negative will be far outweighing the positive. It is not possible as well, since a theory need to be applied in order for it to be interpreted positively. The way to look at it while the theory is being applied by the people or the student, it will be well interpreted by them; the application of the theory is needed in order for it to be interpreted correctly. The presence of the instructor is simply to help. In other words, it is always better to say the instructor responsibility is to help understand the theory.

Now, let's look at our parent's principles related to life in term of presentation. In order for us to apply our parent's principles, we must have learned them. In order for us to learn them, they must have been presented to us. In order for life to function properly, it depends on the application of those principles. Do we have to follow what our parents do in order to apply those principles? The answer is no; we must always apply them disregard what our parents do; we must always apply them without our parents concern to ensure the functionality of life.

We are an intelligent system. We have an intelligence that enables us to learn and apply theories to ensure the functionality of life. By following another person rather than applying the theory makes our intelligence becomes useless. The purpose of our intelligence is to learn an apply theory to ensure our functionality. Following someone rather than applying the theory does not ensure our functionality. It is never good to follow someone; it is always good to follow the theory.

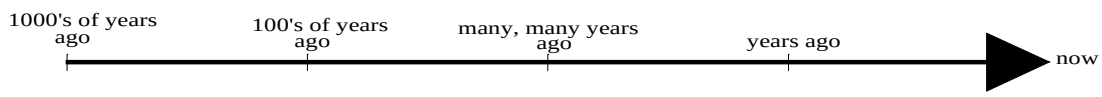
Interpretation of Theory

Interpretation of theory is probably by far the most important characteristic among characteristic of theory. Since theories are hidden from view and most of the time extra effort and logic are required to identify them. Since most of the time theorems are hidden inside theory, they might not be easily identified without effort; because of these two facts, many people tend to mistakenly identify theory and theorem. When that happens, that calls misinterpretation of theory.

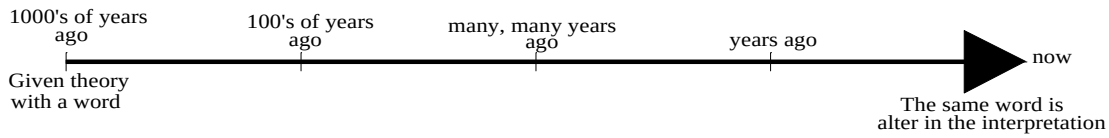
Interpretation of theory should always be taken into consideration. Since theories are given in many places at anytime, since theories are presented in many places at different times, it makes sense for a theory to be presented in a place that is related to the area it was presented or being presented. That theory should also be conformed to the area it was presented or being presented and the people who was living in that area and the way they live. For example, that theory can be associated with its own vocabulary. Disregard the way the theory is presented and the area it is presented, that does not change the theory. The theory still remains the same and its fundamental is still unique to it.

Even though a theorem may sound straight forward from a theory, however straight interpretation of that theorem can still be wrong; extra effort may still require in interpreting it properly. Since theories are mostly hidden from view, and theorems are hidden inside them, it is never a good approach most of the time to consider their straight interpretations as absolute. It is always good to take extra effort to interpret them. Since when a theory is presented in an area it has to take the area, the people, the vocabulary, the way they live into account, any interpretation related to those facts can be wrong. Since a theory is independent to a system, it is always good to look at them in a form that is not attached to any people or area. The way to look at it people depend on a theory, but the theory is not depend on the people; the theory is independent to the people; see independency of theory for more information.

Given that a theory can be presented an adapted with the vocabulary of the area it is or was presented; given that a theory can be presented with its own word—or vocabulary—given that that a direct interpretation of a theory or theorem can never be consider absolute, the actual usage of an original word, term of expression from a given theory should never be taken as the basis of that theory interpretation. That word could have been used only to present the theory, but should never be used in the interpretation of that theory. Let's say it again; a given theory may have been presented with a word that was only used once to present the theory, that word should never be used in the interpretation of the theory. After the presentation of the theory, the word is obsolete and will never be used again. Let's look at the chart below for instance, assume that a theory was presented couple of thousands or hundreds years ago, that theory probably was presented with words that were only used to present the theory, and should never be used today in our interpretation.



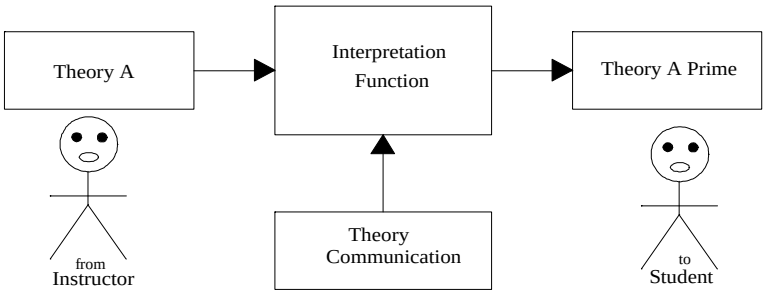
There are two ways to look at the note above related to the chart. First, the application of that word may never exist at our present time. Our vocabulary may not contain that word as well. Second, a theory is an independent entity. Given that we are a theory dependable system and there is no way we can function without our utilization theory, it is very important for us to understand theory. To better understand the note above, another chart is presented below with more information. We must be very careful when interpreting a theory. Sometime a word may have been only used once to present a theory, but should never be used again or should never be used in the interpretation of that theory. After the word was used to present the theory, that was the end of it. We will never use it or see it again.



Sometime theories are given in a form that may never be repeated. The way to look at it, given that the principles given to us at the time they were given may have targeted a specific application, that presentation may have been associated to that application. For that reason, that form of presentation might never been seen again. It is very important to understand that. It is very important as well not to misinterpret that.

It is always good to interpret theories correctly, because when they are misinterpreted, that creates problems. Interpretation of theory sometime related to the person who tries to interpret the theory. A person with a positive point of view about a theory may try to interpret it positively, while a person with a negative point of view about a theory may try to interpret it negatively; so interpretation of theory sometime related to the sense of the person. Since theory communication is the basis for understanding theory, a given theory cannot be interpreted or well interpreted without the understanding of theory communication.

Since a theory can be presented in written form of communication or any other form, since a theorem in a theory can be misinterpreted, there maybe a time when a theorem can be changed to reflect an interpretation to accommodate a presentation. This is never a good approach; it can cause problems. If a theorem is not capable to be interpreted by someone from documentation, it is always good to leave that theorem unchanged. Keep in mind that misinterpretation of a theory does not change that theory. The theory still remains the same after it is being misinterpreted; see exercise 70, 70′ for more details. From the figure below, we can see that a theory is being presented by an instructor to students or people; after the presentation, the theory still remains the same. Disregard the way the theory is interpreted, that does not affect the original theory. Since understanding of theory communication is what enables a theory to be interpreted correctly, we can see that from the diagram. The result of the interpretation is all depends on theory of communication. A good understanding of theory of communication will provide a positive interpretation, while any misunderstanding of theory communication will provide a negative interpretation; see exercise 48, 48′ for more information.



We have stated before that life is a complex system. We have also said that a complex system is a system that works with a complex theory. We have defined a complex theory as a theory with much, much more observations, while a non-complex theory has much, much fewer observations. We have also say that life is so complex, there are many, many functions that cannot be simulated; and any practically approach for those functions can only be done in real-time. Here, the terms real-time means at the time we are speaking. We mean that, many problems in life cannot be solved on paper, but practically. The way to look at it, a complex theory cannot be interpreted or well interpreted by reading only; a complex theory can only be interpreted or well interpreted practically. The process of interpreted or well interpreted a theory including the following.

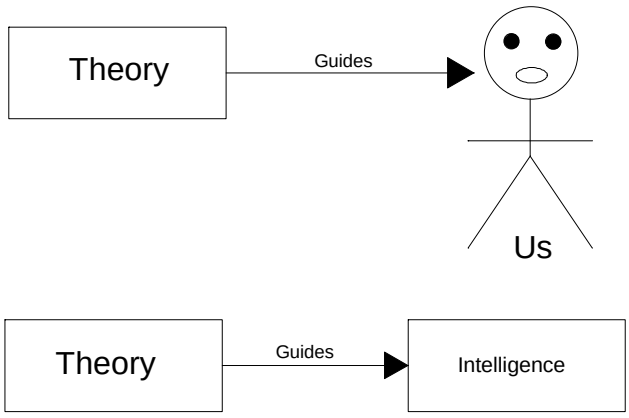
- First, the theory is presented to us
- Second, we must learn how to communicate in order to learn and use the theory; so theory of communication is the prerequisite of learning a theory; we must learn how to communicate in order to interpret the theory properly
- Third, we must interpret the theory properly
- We must use the theory in what we do which is applying the theory
- The application of the theory providing more knowledge about the theory to further the interpretation

Disregard how a theory has been interpreted, the theory itself does not change. For example, if we throw the radio away, we put it under water, does that change the documentation it comes with; does that change what is inside that documentation or book; disregard what we do with the system and its theory, the fundamental of that theory and that theory still remain the same and unchanged.

We know that theories and theorems are hidden elements of communication, and most of the time analyses are required to identify them. In communication, the process of analysis allows us to get more information from a source or text when we don't understand. For example, we can perform a sentence analysis from someone who repeats a sentence while we are communicating with that person. This type of analysis may require us to get more information from that person or to help us understand better what he/she is talking about. This type of process can help us in interpreting theory properly.

In terms of our parent's principles related to our system functionality, it is very important for us to interpret theory properly. When we misinterpret a theory, we tend to do things in our own. We are a theory dependable system, and we must use theory to ensure the

functionality of life. We have an intelligence that depends on theory to do things properly. Any misinterpretation of a theory will lead us to do things differently. A better way to look at our system related to theory interpretation is to use the representation shown by the diagram below. Both diagrams portrait us as a theory guided model; we can say we are a theory guided system. From the diagram below, we see any misinterpretation of a theory will lead the intelligence to react differently. The fact that the system is guided by a theory, any absence of that theory or error in that theory will lead the intelligence to be guideless. The result always produces problems; for this reason, it is always good for theory to be interpreted properly to prevent the intelligence from being guideless. It is always good to interpret theory properly to prevent the intelligence from making errors or create problems.

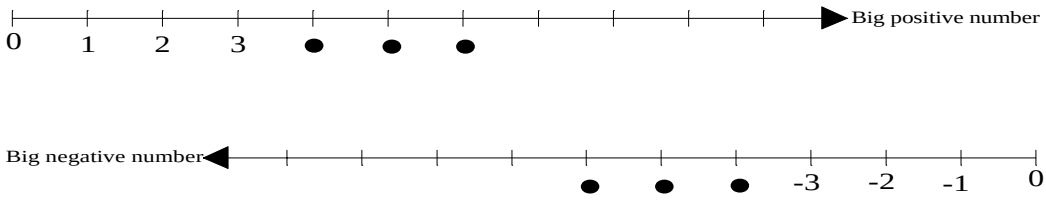


Expandability of Theory

Expandability of theory refers to the knowledge acquired from applying a theory. From our AM radio kit example, by keeping using the derivation theory as time goes, we can fairly expand the functionality of that radio if we want to. This process is realized due to the fact that theories are expandable. The more a theory is applied, the more knowledge that can be derived from that theory. The more a theory is applied, the more theorems that can be derived from that theory. The more a theorem is applied, the more methods that can be derived from that theorem.

The way to look at it, a theory gives us ideas on how to do things. From a simple idea we get from a theory, if we continue using it, we can get much, more from it. The fact that we are a theory dependable system and we do have an intelligence that is associated with our system, enable us to expand any initial idea or theorem we get from a theory. Expandability of theory works this way, if we get an idea of doing something good, we can easily use that idea as a baseline to continue doing something good relate to it. At the same time, people who do one thing negatively can continue using that as a baseline to do other things related to the first one.

There is no limit on how much knowledge that can be acquired from a theory while applying the theory. From the diagram below, it is very easy to see that any initial theorem from a theory, can lead to get more theorems out of that theory. This process can very well expand to produce a big quantity of theorem. While theories and theorems can be expanded when we apply them, negative philosophies in the other hand can also be expanded when we apply them as well; any negative philosophy can also be expanded to produce more negative philosophies that may seem worse than the previous. This make a lot of sense, since initially, a philosophy guided person thinks he or she is doing something that is good; learning from the initial philosophy, if it is not replaced or dropped, that person will continue doing things similar from the previous. This process does not have any limit; it can be expanded negatively as shown by the second figure. To learn more about expandability of negative philosophy, see exercise 90, 90′.

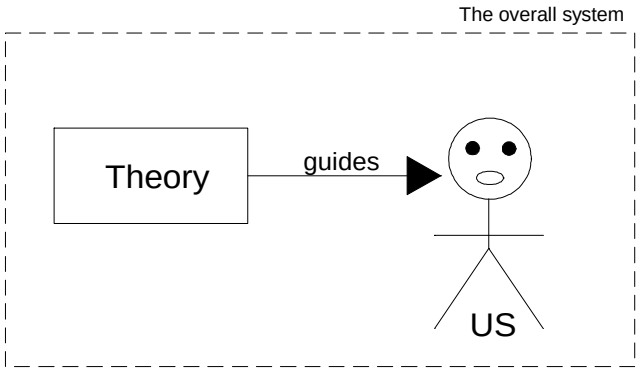


Portability of Theory

When we talk about portability of a theory, we mean that how easily a theory can be carry from one place to another. If the system is mobile, shouldn't its theory be mobile as well? Of course it makes a lot of sense. From our AM radio kit example, disregarded where we take the radio to, we still need to use it by following proper instruction. That

means when we move from one place to another with that radio, its functional principles always applied.

Let's look at portability of theory related to our system. We know that we function according to our parents' principles. We know that we live everywhere around the world. We know that we move from places to places. We know that we are a theory dependable system. We know that we have an intelligence combined with memory that enables us to apply our functional theory in order to ensure the functionality of life. We know that we are a theory guided system. It makes sense everywhere we go, we should always remember and continue applying our parent's principles in order to ensure our functionality. That makes a lot of sense, since life does not exist only locally, but globally; for that reason wherever we go, life still exists and our lives still function. Wherever we go, our parents' principles go with us. To better understand portability of theory, let's look at this model. It shows that the theory is attached to the system and goes with the system wherever the system goes. The way to look at it, just take the box as the system. A given theory is very portable to that system since that system must apply it everywhere it presents to ensure its functionality.

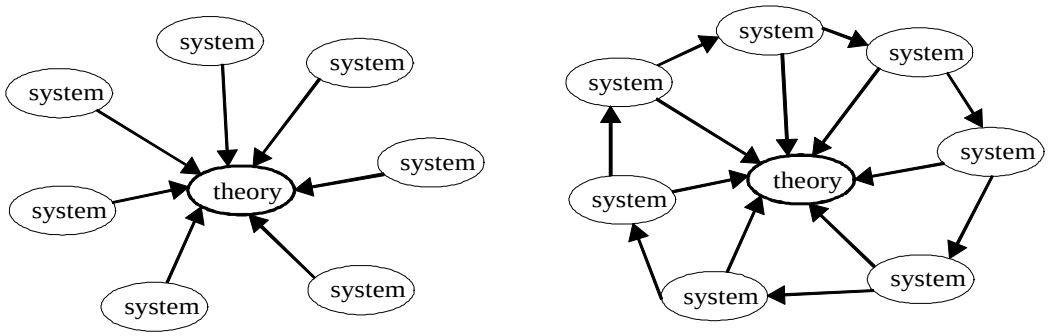


Independency of Theory

Recall our AM radio kit example, while we have used the derivation theory to realize that radio, now let's forget about the derivation theory and concentrate more in the user's manual which is the utilization theory. Assume that we present ten radios to ten people, each one of them must utilize the radio documentation independently to ensure the functionality of each given radio. Suppose that we give one radio kit to ten people with ten single user's manual—or one it does not matter—each of them must use the instruction from the user manual independently to ensure the functionality of this simple communication system. From this approach, we can see that the functional principles of the radio is completely independent to the people; while the people need the user's manual to ensure the functionality of the system, the user's manual does not have any connection to them in terms of need. In other words, the principle of operation of that radio does not need the people.

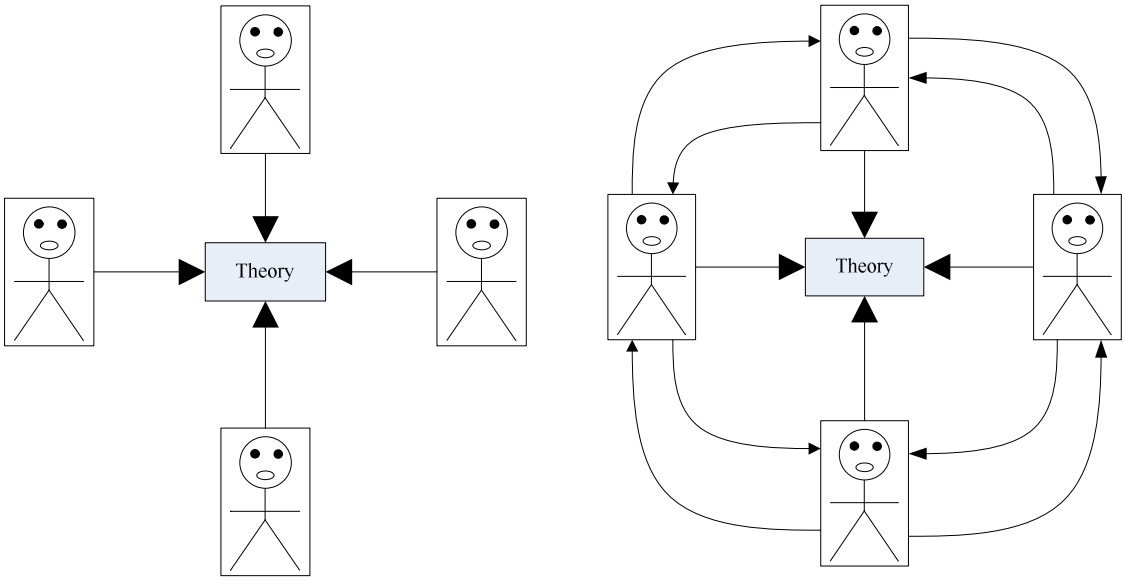
When we are talking about independency of theory in a complex system like life, we mean the functionality of that system related to the utilization theory. For instance, we know in order for life to function normally, we must constantly utilize our parent's principles. Since life is depending on our parent principles, each of us must apply those principles independently. Application of those principles from one to another cannot be taken into account someone application. Let's reword that again, life depends on all of us, me, you and him/her. In order for the system to function, all of us need to utilize our parents' principles. One cannot look at each other or what each other does in order to utilize those principles. Since everything that we do depend on those principles, we can say that we are very dependent of those principles. Since we are the ones who need the principles to function and those principles are given at all times to us, we can say that those principles are independent to us.

To better understand independency of theory, let's look at the two diagrams below. The one on the left shows that the theory is at the middle and the systems surround the theory; we use arrows to denote dependency. For instance in the diagram to the left, the systems depend on the theory, while the theory is independent to the system. It can be viewed as our system where we all depend on our utilization theory, while our utilization theory is independent to us. From the diagram to the right, it shows that although the systems depend on each other, but the theory is still independent to them. This can be viewed as our system as well, although we depend on each other for our functionality, although we all depend on our parents' principles for our functionality; however the theory is completely independent.



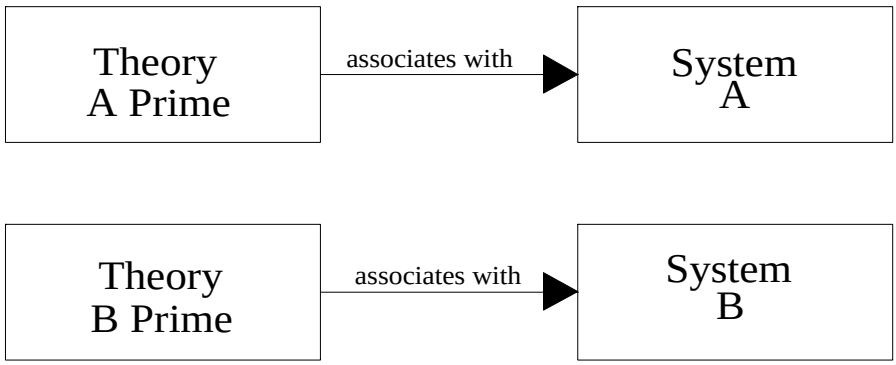
There are two ways to look at the independency of theory as shown by the above diagram. A theory is independent to a system, but the system is depending on the theory. In an associative system, the system depends on each other, but they also depend on the theory and the theory is still independent to the system. The above diagrams can be read as follow, the system depends on each other, but they also need to apply the theory.

The diagrams below are the same as the ones above. The way to look at it, the system depends on each other, but the theory is still an independent entity and the systems depend on it. It does not matter the way the arrows point to, the theory still an independent entity and everybody depends on it.



Comparison of Theory

With the misinterpretation of theory, some people may think that another system theory can be used to enable the functionality of another system; that is not possible. A given system theory can only work to ensure that system functionality, rather than another theory. As shown by the figure below, only theory A prime can ensure the functionality of system A, not B prime.



In order for two theories to be compared, at least one of them must be well understood. Currently, we do not understand theory adequately; therefore most of this topic should be left for people of 500+ years from now; assume that we are heading into the right direction; see exercise 108, 108′, 112, 112′ and 118 for more information.

In order for two theories to be compared, they must be well understood. Currently, our understanding of theory is not adequate; therefore the overall topic of comparison of theory should be left for people 500+ years from now; assume that we are heading into the right direction; see exercise 108, 108′, 112, 112′ and 118 for more information.

A given system theory may well be able to work independently for that system without the need of other theories. Don't worry about that; disregard it. Leave it for people 600+, 700+, to 800+ years from now; assume that we are heading into the right direction; see exercise 90, 90′ and 93, 93′ for more information.

More about Characteristic of Theory

We may find out that the words similarity and fundamental should have been included in characteristic of theory, however they were left as an exercise; see exercise number 49, 49′ for more information about fundamental and similarity of theory.

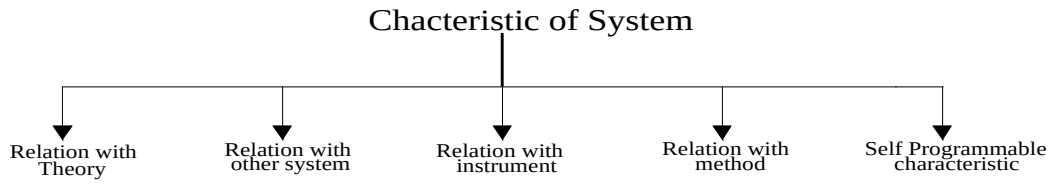
Characteristic of System

From the prerequisite exercise, we have identified two different systems: a natural system and a non natural system. We have learned that the self programmable system is associated with an intelligence that enables it to learn an apply theory for functionality, while the pre-programmable system is very limited and it can be viewed as a non-intelligent system.

In communication, the word system is used to identify physical and non physical entities. When it is used to identify a physical entity, we define it as a collection of instruments. For instance, we are a physical system and we have instruments include in us. We call life a functional system, because it includes a lot of functions. When the word system is used here, is either referring to the physical system or the functional system. The physical system is us human, and the functional system is life, which is the function of the physical system. When the word system is used, it is always referred to a collection. To better understand the word system, let's look at its characteristic. The characteristic of system includes:

- Relation with theory
- Relation with other systems
- Relation with instruments
- Relation with methods or functions
- Characteristic of the self programmable system

The chart below represents the characteristics described above. The explanation for each characteristic will be provided in a step by step approach. When we refer to system characteristic, we refer to ourselves related to life. The way to look at it, we and life together form a system.



Relation with Theory

Whenever the word system is used, or whenever a system is identified, the word theory always comes to mind. We know systems are realized by theories. It makes sense now to worry about systems functionality rather than systems derivations. We already know that in order for a system to function, its utilization theory must be applied. We can recall our radio kit example, without utilization of its user's manual; its life expectancy can be very short. With that, we can say the relationship of theory and system is very important, since the theory of a system must be used in order to ensure that system functionality.

In life, we have the physical system and the functional system. The physical system is the system that has the ability to apply its parents' principles to make sure the functional system works properly. Since life is a functional system that includes the physical system, there are several ways our parents' principles can be applied. When we talk about application of theory to enable the functionality of life, we talk about the following: application of the theory in the system and application of the theory by the physical system.

Relation with other Systems

Since life is an associative system, in order to ensure its functionality, the other system must continue applying the functional theory as well. For instance, since the physical system is made of "me, you, and him/her", all of us must apply our parents' principles in order to ensure the functionality of life. Since the system is associative, partial utilization does not work. In order for the overall system to work properly, all members must apply its utilization theory; see independency theory for more information. Recall our grocery store example; we see that the functionality of one depends on others, so the functionality of the system cannot be assured without our overall participation.

Relation with Instruments

We know the physical system including many instruments. The functions of those instruments are to ensure the functionality of the physical system; when we talk about instruments, we mean for example, hand, finger, foot etc. Sine the overall system is associative, the functionality of those instruments is to ensure the functionality of the overall system; see application of instrument in characteristic instruments for more information.

Relation with Methods

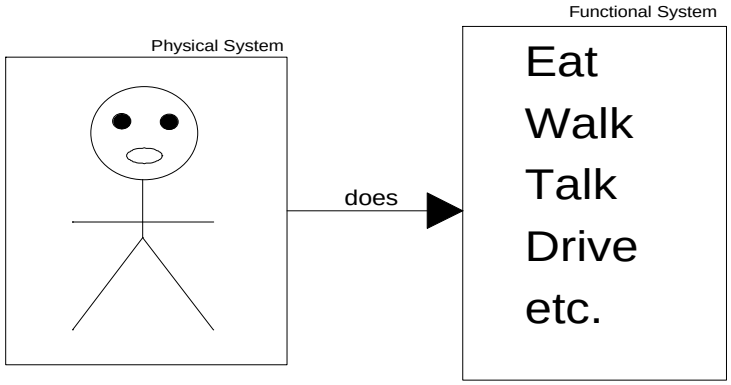
Rather than saying relation of method and system, it is better to say relation function and system since methods are functions themselves; so let's call it

- Function and system relationship

The function of the physical system is to ensure its functionality, see the diagram below. The physical system uses its instruments to apply methods to enable its functionality. Disregard if those functions are existed or added—see exercise 51, 51'—it does not matter; the overall function of the system is to apply methods to ensure its functionality. Since the system is associative, in terms of functionality of life, any function of a member carries the same weight related to others. In other words, since life is associative, in order for it to function properly, all of us need to continue applying our parents' principles to ensure that functionality. Disregard what function each of us performs does not matter, what matter is for all of us to apply methods to enable the functionality of life.

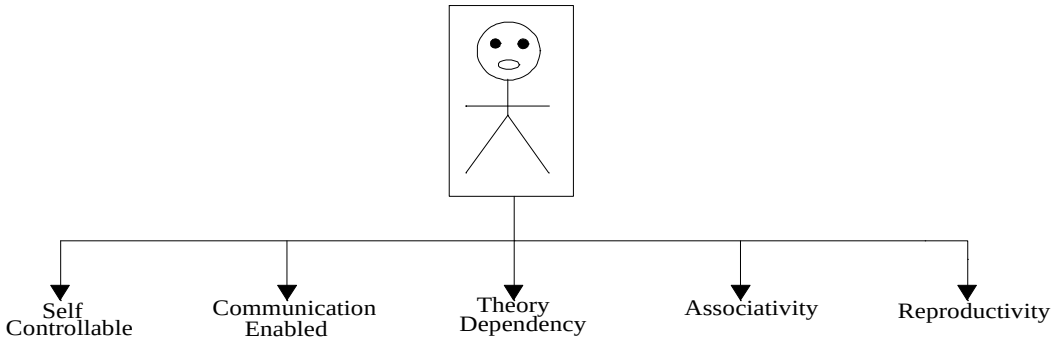
Recall our grocery store example; we see that different functions are performed by many people to enable life.

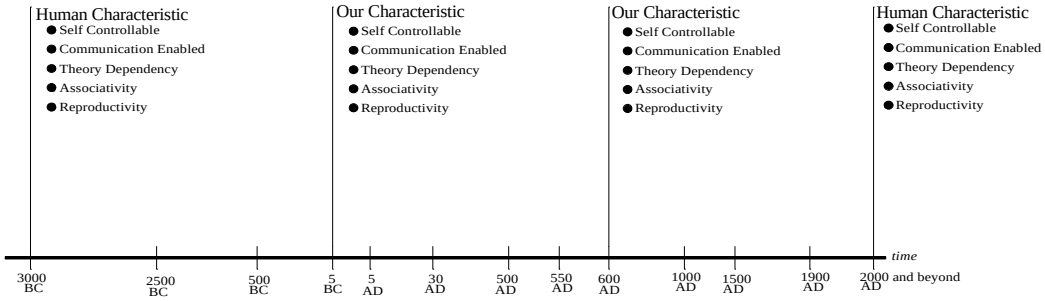
In an associative system as well, any function added to the system is used to enable the functionality of that system, see exercise 51, 51′, 72, 72′ for more information. The function of the physical system is to apply methods to enable its functionality. In order for the physical system to apply methods to enable its functionality, it must interact with the system's instruments; see in characteristic instruments—application of instruments for more information.



Characteristic of the Self Programmable System

When we use the term self programmable system, we refer to our physical system, human. Those characteristics are constant, since they cannot be changed. The figure below shows our constant characteristic. Since those characteristics are constant, it makes sense sometime to list them related to time. The second figure shows the physical system characteristic related to time. Those dates were chosen randomly. Any date can be added to the chart. Refer to exercise 45 for more information about the characteristic of the self programmable system.





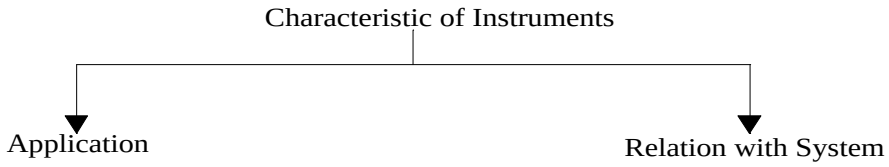
Characteristic of Instruments

Instruments are considered to be parts of systems. For instance, hands, fingers, feet are considered to be parts of our physical system. We can also identify other instruments like the knobs in a radio, the keyboard of a computer, the screen of a laptop, the door of a car, the window of a house; all of them are classifies as non natural instruments. For instance, the knob of a radio is considered to be an instrument for that radio; the screen of a laptop is classified as an instrument for that laptop; the door of a car is considered to be an instrument for that car etc. We can also classify any object as non natural instruments.

Since instruments are part of a system, they must work accordingly to that system. Their principles of functionality should be similar to the system they belong to. For this reason, they also have some characteristics. The following are considered to be characteristics of instruments.

- Relation with system
- Application or utilization

The chart below is a typical chart that shows the characteristic of instrument in the same manner that we have done for system and theory. It shows the same information we have listed above.



Relation with System

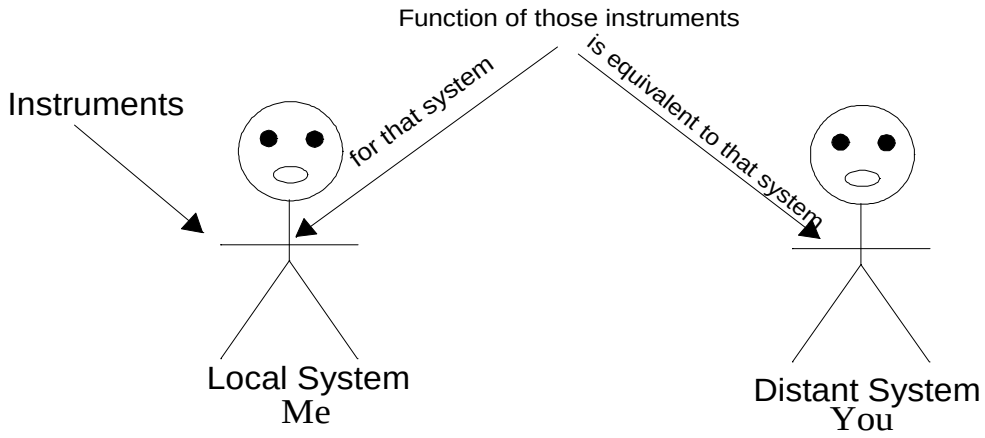
Instrument and system relationship focus on the functionality of an instrument related to the system it belongs to. We have seen before that the knob of a radio is an instrument for that radio, as well as the door of a car, and the keyboard of a laptop. Now, let's focus on the function of those instruments related to their respective systems. The knob of a radio functions accordingly to enable the functionality of that radio; as well as the door of a car functions accordingly with the car. The keyboard of a laptop functions to ensure the functionality of that laptop. Disregard what system the instrument belongs to, its function always to ensure the functionality of that system. Since instruments can be part of other instruments, it does not matter. The function of an instrument is always to ensure the functionality of where it is a part of.

From the above paragraph, we have seen the function of non natural instruments related to the systems they belong to, it makes sense for us to look at the functions of our instruments related to their respective systems. Since we have classified our hands,

fingers, feet etc. as instruments, right now, let's look at their functions related to our systems.

The function of an instrument is to ensure the functionality of the system it belongs to, for example our hands function is to enable our functionality, as well as our fingers, our feet, etc. That makes a lot of sense, since those instruments are part of our systems, their functions should always ensure the functionality of the system. What we mean by ensuring the functionality of the system, we mean both the physical system and the functional system. Keep in mind that ensuring the functionality of the physical system is the same as ensuring the functional system.

Since our system is an associative system, now let's look at the functionality of our instruments related to other systems where they don't belong to. For instance the functionality of instruments in "my" system, related to "yours and his/her". Recall our grocery store example, we see that the functionality of instruments from different people work associatively to ensure all other people functionality. From that, we can say that in an associative system, the functionality of instruments in the local system is equivalent to the functionality of instruments in the distant system. The way to interpret it, the function of "my" hands and fingers for example are to ensure "my" functionality; as well as to ensure "yours and his/her" functionality. The diagram below shows a better representation. It shows that the function of instruments in the system to the left is equivalent to the function of instruments in the system to the right.



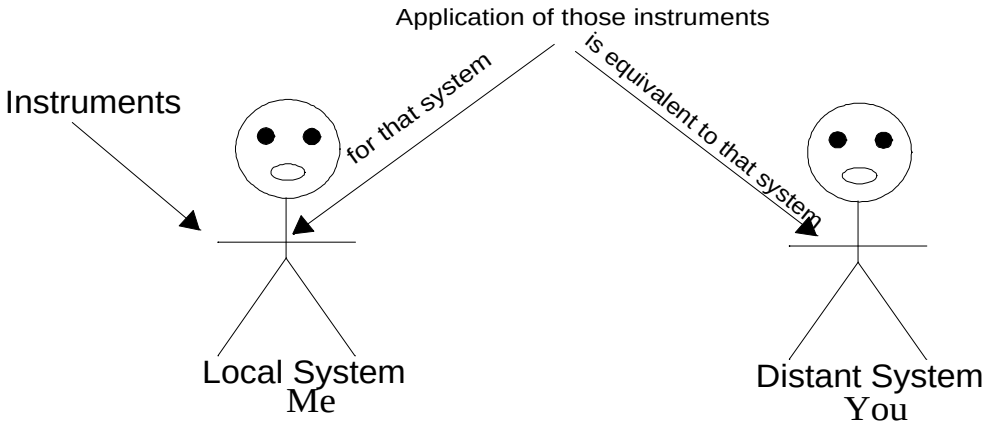
Given that the attached instruments functions are to ensure the functionality of the system they belong to including the distant system, any other instruments that function with them also have the same function. From our grocery store example, we see how attached instruments worked associatively with external instruments to ensure the overall systems stability. The way to look at it, in terms of system functionality, the attached and the external instruments have the same function or serve for the same purpose.

Application of Instrument

Let's look at application of instruments. When we say application of instruments, we mean the utilization of instruments. We have discussed before the functionality of instruments to the systems they belong to, here we are going to look at the utilization of those instruments related to their respective systems. There is a similarity between application of instruments and systems and instruments relationship.

From systems and instruments relationship, we have seen that the function of instruments in a system is to ensure the functionality of that system. The utilization of an instrument is to ensure functionality as well. We can say instruments are used to ensure the functionality of the systems they belong to. For instance the door of a car is used for the functionality of that car, as well as the keyboard in a computer is used to ensure the functionality of that computer.

Now, let's look at the utilization of our instruments related to our system. We use our instruments to enable the functionality of our system. For instance we use our hand to feed ourselves. This is an example, but we can add many examples on how we have used our fingers, hands, feet etc. to ensure the functionality of our systems. Since we are an associative system where functionality of one depends on others, using our hands for our functionalities is the same as using our hands for others functionality; see the diagram below for better explanation. The way to look at it, in an associative system, the usage of instruments for the local—or attached—system is equivalent to the usage of instruments in the distant system. We can refer to the grocery store example for more information and the step by step procedure. Local system means "me", and the distant system means "you and him/her".

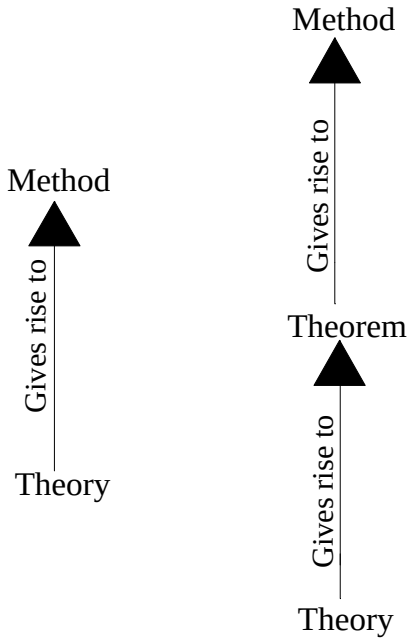


Since the instruments in the local system are used to ensure the overall functionality of the system, any external instruments used associatively with the attached instruments must be used to ensure the functionality of that system as well. Since the system is associative, that is also applied to the distant system. Refer to the grocery store example for more information. The way to look at it for example, since our hands are used to ensure our functionalities, any other instruments that we use with our hands, are also used to ensure our functionalities. Since the system is associative, using our hands to ensure our functionalities is equivalent to use them to ensure others functionalities.

Characteristic of Method

Methods are what instruments and systems do. We can say methods are functions accomplished by instruments and systems. Below shown the relationship between theory, theorem, and method; we can roughly say that theorems are derived from theories while methods are derived from theorems. From the left we show methods are derived from theory, we used the term "gives rise to" which is the same as derived from. The way to look at it, since theorems are derived from theories and methods are derived from theorems; we can say that methods are also derived from theories, as shown to the left of the diagram.

Characteristic of methods includes application of methods. Since methods are functions by themselves, they follow function and system relationship. For application of method, see function an system relationship.

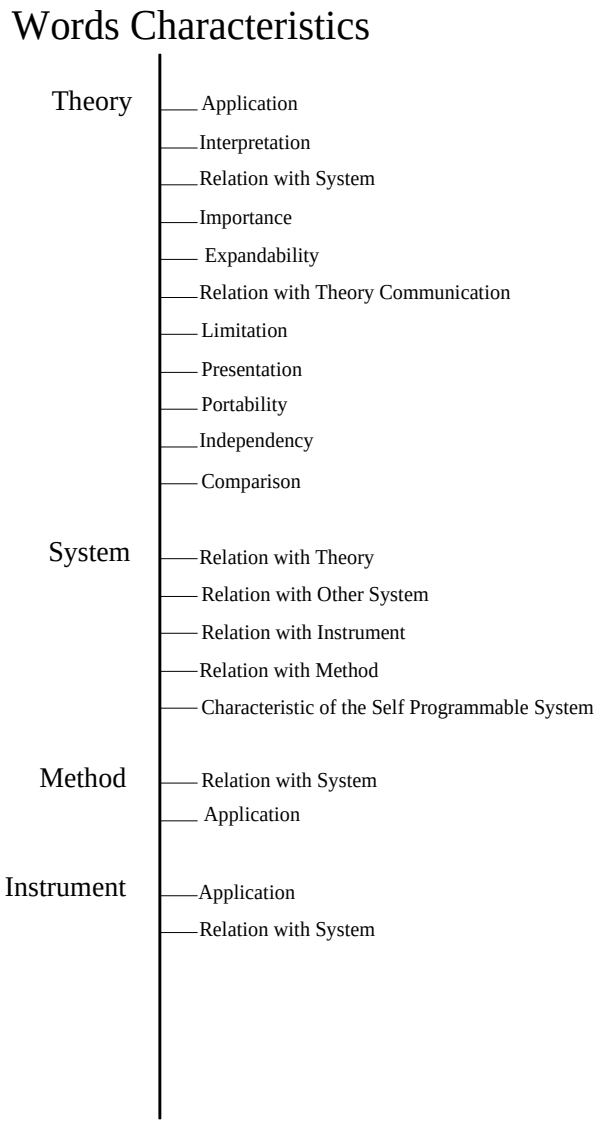


Some Information about Theorem

There is no much difference between theory and theorem. A theorem is an observation from a theory. A theorem can be viewed as a unique observation from a theory. We can also say that a theorem is a lesson from a theory.

Conclusion

To better understand his chapter, let's review quickly what we have learned in an outlined format about words characteristics. Before we do that, it makes sense to show all the characteristics of the words, which displays on the chart below.



Application of Theory

- Theories are used to enable the functionality of systems
- Progress cannot be made in a theory without utilization
- A theory cannot do anything for us without utilization

Theory and System Relationship

- A given system functions according to its utilization theory
- A system cannot works properly without the use of its utilization theory
- A system cannot be understood outside its functional principles

Importance of Theory

- Theories are useful, since they must be used to enable the functionality of the associated system
- Most of the time, theories are learned consecutively, where understanding of one lead to understand another
- Sometime a theory does not seem to be interested of learning, however it is needed as an introduction to advanced theory

Limitation of Theory

- Theories are limited by theory of communication
- A theory cannot be used to do anything without utilization
- A theory cannot be used to do anything more advanced than that theory itself.
- A system cannot be modified or changed without its derivation theory

Presentation of Theory

- Theories are presented to all forms of communication
- The instructor who presents a theory is not considered to be that theory
- The instructor who presents a theory is different from that theory

Relation of Theory and Theory Communication

- Theory limited by theory of communication
- Understand of theory communication can help understand theory

Interpretation of Theory

- A theory cannot be interpreted or well interpreted without utilization
- A theory cannot be interpreted or well interpreted by reading only
- A theory cannot be interpreted or well interpreted without the understanding of theory communication
- Only the application of a theory determines the interpretation of that theory
- Only the application of a theory enables the interpretation of that theory

Independency of Theory

- A theory must be applied individually to enable the associated system to function properly
- Someone application should not be considered as a mean for another to apply a theory

Expandability of Theory

- A lot of theorems can be derived from a theory
- A lot of methods can be derived from a theorem or theory
- Progress can be made positively with proper interpretation of a theory

- An initial misinterpretation of a theory can lead to more misinterpretation

Function and System Relationship

- The function of a system is to enable its functionality
- In an associative system, the function of an individual system is equivalent to the function of the associated system

Application of Instrument

- Instruments that are part of a system utilize to enable the functionality of that system
- In an associative system, the use of instruments in the attached system is equivalent to the distant system

Chapter 4

Understanding Problem Development

Introduction

Without problems, the existence of this book would not have been possible. The book simply exists due to the fact that there are problems to solve. Everybody knows what a problem is, however the fundamental identification of a problem is very challenging for everybody to identify without a good understanding of problem characteristics and further problem analysis itself. Without proper analysis, problems can be very difficult to define, even to identify. For that reason, it makes a lot of sense for us to devote a whole chapter to analyze problems and provide possible solutions for many cases.

We have been exposed to problem analysis before from error in communication, where the error process has been used to identify problems. In this case, we were working in the communication domain. In this chapter, we are going to work in a higher level by targeting problem in the application domain. Remember from our previous analysis that we have defined two domains: the application domain and the communication domain. From the application domain, we were concentrating mainly to the cause of problems by communications. Even when we say we are going higher at the application level, the way to look at it is to think that we are inside the ECF (Error Correction Function). Keep in mind that the aim of this book was to go inside the ECF to figure out why our parents have been able to feedback us. This was pointed out in the problem statement.

In this chapter, we are going to look at the characteristic of problem. We are going to analyze problems in all segments that are related to the previous chapter. Possible solution for every case will be provided as well. At the end of the chapter, we should have a good understanding of what a problem is and the possible solution for that problem. In order to start this chapter, let's look at the text on the next page. We simply name this text *The Power Definition*.

Understanding Power and Its Application

Home, I grew up in a society where most people were concentrating in agriculture only. After distribution many theories and philosophies in that area, a lot of people had left the town to experience other societies.

One day while I was walking with my parent, we had met a friend who was telling us his experience in another society. He told us, while he was working with an owner of two bakery stores; that owner had hired two managers to manage both stores. He had given them responsibility to hire employees, he also give them the responsibility to terminate employees as well. After couple of months, in one of the bakery store one of the managers had problem with an employee, because he did not do his job well. That manager had terminated that employee and replaced him by another one. At the same time, in the other bakery store, everything was functioning normally. One day, an employee became sick; he told the manager that he was no longer going to continue working there; because he wanted to go back home to get treatment. He also told the manager that he was not going to come back. With that statement, the manager had employed another person to do the work. After a while, the manager had problem with this employee, because he did not do the job properly. That manager had helped that employee, until he was able to do his job properly. That was how the problem got solved. After some time, the owner of the bakery store came to the store and met that employee as one of his experienced employee. He was also pleased with the manager.

The Power Theorem

We are defined as a system that communicates and uses theory to function.
The ability to apply theory to enable the functionality of life is power.

Problem Definition

To better understand what a problem is, let's do some analysis.

As a result of a broken box, life becomes difficult or abnormal for one or many people. The result of that broken box also enables many entities life depends on to function abnormal.

We assume that the broken box is a problem and we define problem as follow.

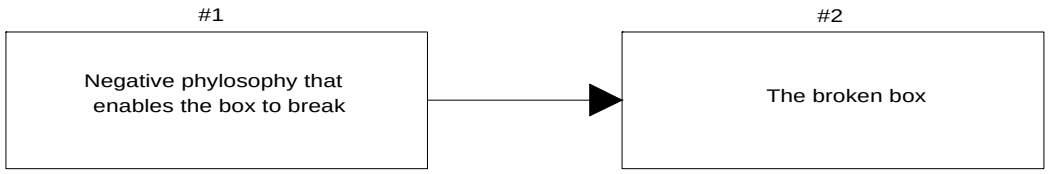
1. A negative philosophy that enables the box to break; a negative philosophy that triggers or causes the box to break
2. The broken box is also defined as a problem

To better understand the above definition, let's add more explanation. The outline below is considered to be the general definition of problem.

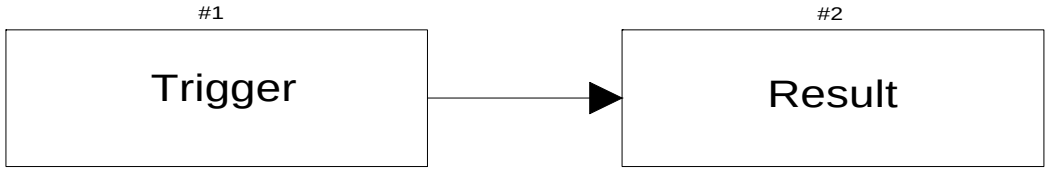
1. In general we define a problem as follow, any negative philosophy that enables life to function abnormal is a problem.
2. The result of a negative philosophy or the result of a negative philosophy that causes life to function abnormal

While, the effect of a problem may produce a physical entity; however the basis of the problem is never a physical entity; that means it is not physically defined. Sometime we are able to identify the effect of the problem instead of the problem by itself; off course the effect of the problem is a problem by itself, however when it comes to solution it is always better to look at things in a fundamental approach; when it comes to solution, the effect will not be enough to solve the problem; what we mean by effect, we mean the event, not what trigger the event

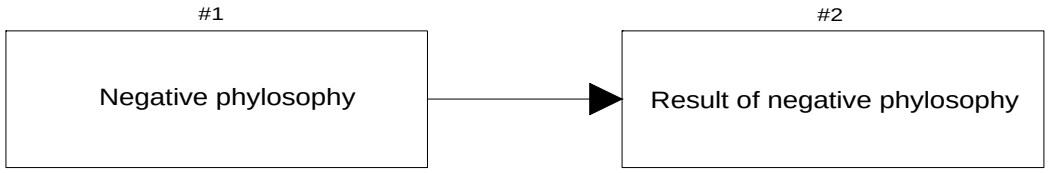
The way to look at it, a problem can be seen as follow; the result always follows the negative philosophy, therefore the negative philosophy is always number one or the focus of a problem.



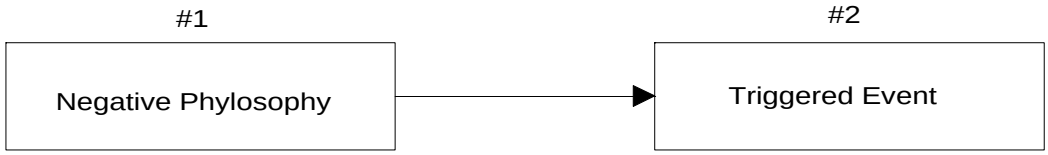
Since the negative philosophy is the one that causes the problem, we can say that, it triggers the result, so the result has been triggered by the negative philosophy, so we can put the trigger first and the result second



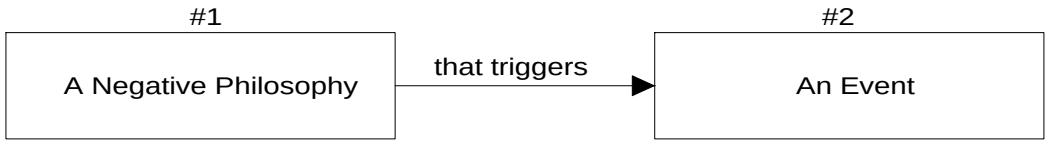
Generally, this is the best way to look at it; the negative philosophy is always the focus, so it comes first. The result of the negative philosophy always comes second.



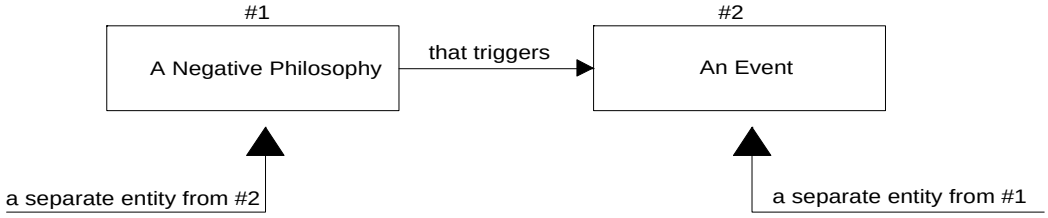
To better understand a problem, it is good to interpret the definition or redefine it this way. A problem is a negative philosophy that triggers an event. By taking it this way, we can separate the negative philosophy and the event as two different entities. The diagram below has a better view



By separating the negative philosophy from the event, it makes sense for us to focus on the philosophy; by doing so, we can concentrate in the area where the problem is, which is the source of the event.



Two separate entities as show here, where number one is different than number two



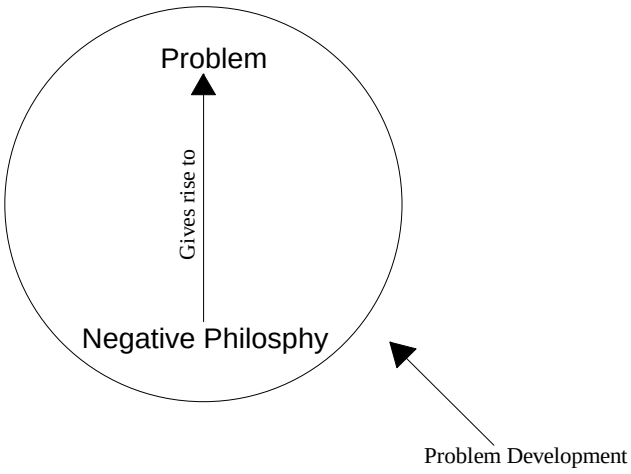
The diagrams we showed above are sufficient for us to understand what a problem is separate from an event. Although most people would disregard the negative philosophy as the problem and concentrate only on the event, however by disregarding the source of the event, it is equivalent by disregarding the event at all. For this reason, it is very important to define problem as two entities and considered the entity number one which is the negative philosophy as the most important.

In addition to what we have said above about problem, we also add the following to the definition.

- Problem, an internal event that enables life to function abnormal
- Problem, an external event that enables life to function abnormal

Development of Problem

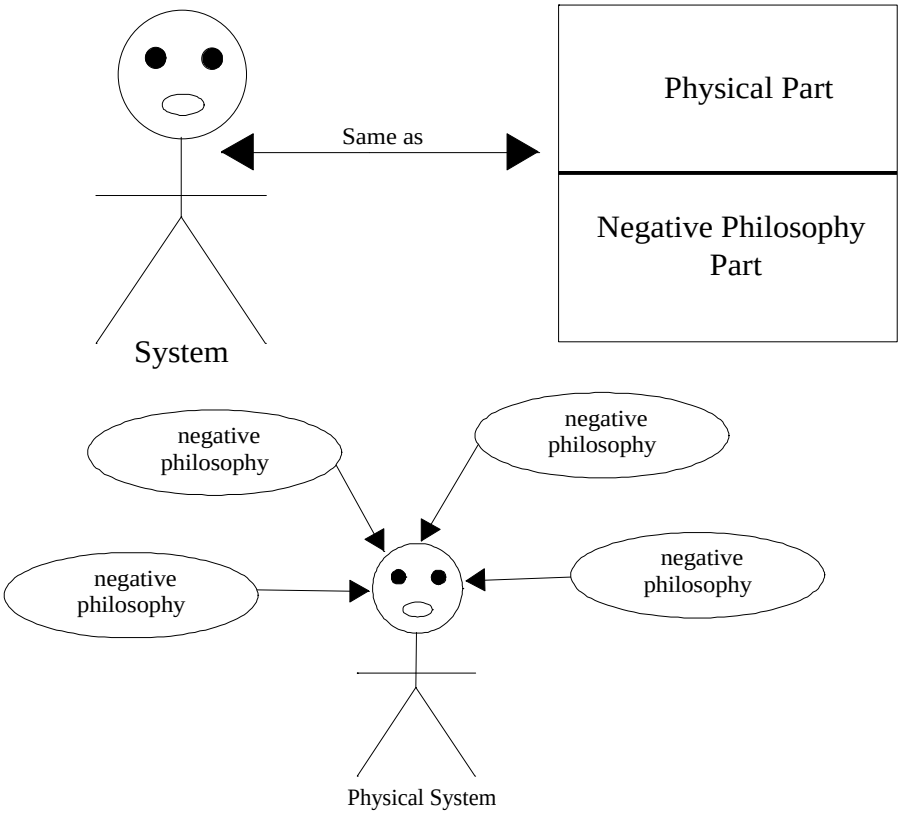
As we have learned from the previous section, problems are developed as a result of negative philosophies. It is always good to consider the negative philosophy as the problem itself. The figure below shows how a problem is developed. We can just call it the development of problem. This figure simply shows how problems are developed and it shows that there are developed from negative philosophies.



To better understand problems, it makes sense to look at the diagram related to the physical system. Keep in mind that we are the physical system and the negative philosophies that triggered problems are from us. So it is always good to show problems related to us physically with the negative philosophy. The figure below shows us, the physical system from the left and from the right it shows the model, where it shows the physical part of us and the negative philosophy part that cause the problem to the right.

It is always good to look at it this way, where the physical system is a separate entity from the negative philosophy part. As we have said before, by doing so, we can fairly concentrate in the area where the problem is, which is the most important for us. From the diagram below, we can see that there is no problem in the physical part. We can say that the physical part is problem free and the negative philosophy part is where the problem is.

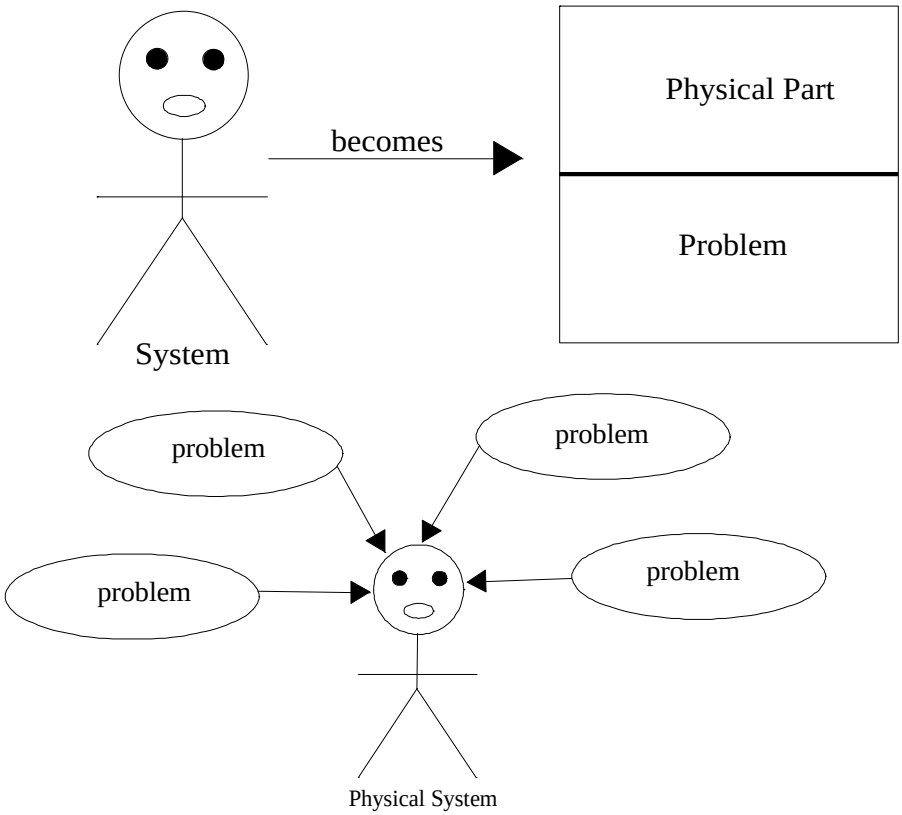
By looking at the diagram from the top right and the one at the bottom, we can see that there are very similar. From the one at the bottom, we see that the physical system is equivalent to its physical representation where the negative philosophies that are separate from the system are not attached from the system at all. That provides us a better way to understand problem related to the physical system.



Now that we know the physical system is problem free and the negative philosophy is where the problem is, and we know the negative philosophy is the problem itself, from the diagram above, we can simply replace the negative philosophy term by its proper name problem. The diagram below shows how we make the transition from the one above. The one at the bottom shows that problem is completely a separate entity from the physical system.

Keep in mind the physical system is ok and it does not have any problem at all, only the negative philosophy part of the system that is not working properly. Problems are

nobody friend; no one like them, however it is always good for us to look at ourselves and think that we are separate entities from problems. We will never be able to solve any problem if we think it differently; see exercise 56, 56′, 64, 64′ for more information about problem and separation from the physical system.



Characteristic of Problem

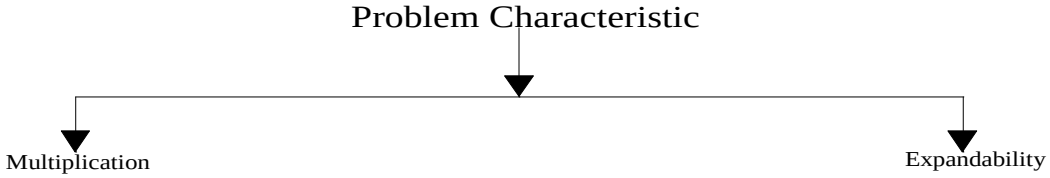
From the previous section we have learned that a problem is not a physical entity but rather a philosophical entity. What we mean by a philosophical entity, we mean a non physical entity that is completely separate from the physical system; it is also different as well. Since the negative philosophy is not a physical entity, it can be very challenging to deal with, see exercise number 41, 41′, 86, 86′ for more information. For this reason, we can see that problems we have been dealing with long, long time ago are still around. The reason for that, because they are not physical and there is only one way to deal with them and that way is very unique. Since a negative philosophy is not a physical entity, it does not change related to time. Disregard time and places, negative philosophies remain the same, see exercise 41, 41′.

Since the negative philosophy is not a physical entity by itself, it must have a characteristic. Determine the characteristic of problem is very easy, from the above paragraph, we stated that problems that have been around long, long times ago are still around. In order for those problems to be still around, they must have been carried from generation to generation, see exercise 90, 90′, 96, 96′ for more details. In order for those problems to be still around, they must have expanded from generations to generations and from places to places or nations to nations. From that statement, we can see that problems are very expandable, since they can spread very quickly from places to places. With that, we can say expandability is one of problem characteristic.

Now, let's see if we can find another characteristic for problem. Since a negative philosophy is not a physical entity, and it can be carry from nations to nations, which is the same as from one to another, it looks like people can learned from them very quickly. That causes any initial problem at a location can very well be spread from people to people, for this reason, we can say that problem can multiply from people to people. This is very easy to see that multiplication is another characteristic of problem.

Now that we have identified the characteristics of problems, it is worthwhile to list them below and present those characteristics to a chart as we did for the other words. Below is the listing of problem characteristics. The figure below shows the diagram of problem characteristic, which includes multiplication of problem and expandability of problem.

- Multiplication
- Expandability

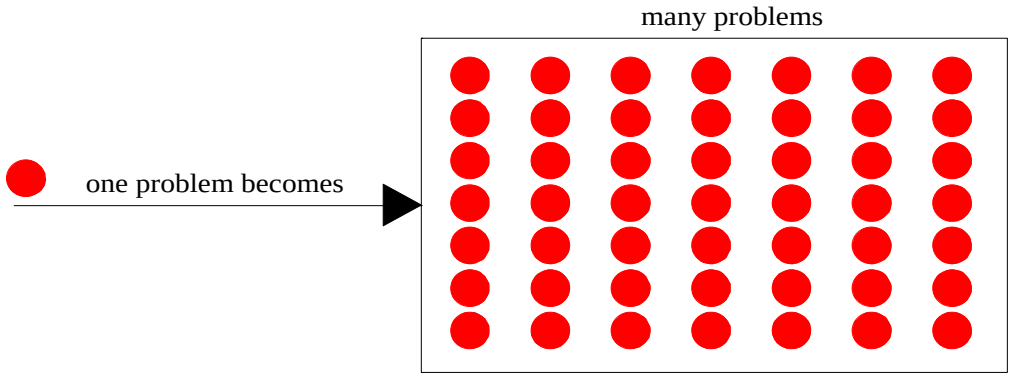


Multiplication of Problem

When we talk about problem multiplication, we talk about how a problem can become multiple problems very quickly. Now that we understand that a problem is not a physical entity, it makes sense for us to look at how that negative philosophy can get from one to another.

In order to understand problem multiplication, let's look at our constant characteristic. We the physical system is defined as a system that communicates and that depends on theory to function. From the constant characteristic chart, we have seen that communication enabled and theory dependability are two of our characteristic. Since we are a communication enabled system, we interface from one to another through communication. Disregard what method of communication we use to interface from one to another is does not matter, what matters is that we communicate from one to another. With the communication characteristic, we also depend on theory to function. Dependency on theory means that, we do things according to some set of principles. With understanding theory and system relationship, we know that those set of principles must come from our parents. When those set of principles are disregarded, we do things by relying on our own ideas or philosophies, since our own ideas or philosophies are not related to our systems, they become problems very quickly. Since we are able to communicate from one to another, and we are not relying on our parents' principles, but our own ideas, so those negative philosophies pass very quickly from one to another. Rather than relying on our parent's principles, we simply rely on negative philosophies from us and other people. When that happens, we call that problem multiplication.

To better understand problem multiplication, let's reinterpret quickly the above paragraph. Problem multiplication is a process when a problem spread from people to people. The diagram below shows the process of problem multiplication, where the red dot is the initial problem. From let to right, we see that the red dot becomes multiple dots. This is how problem multiplication works. See exercise 41, 41′, 90, 90′, 96 and 96′ to learn more about problem multiplication.

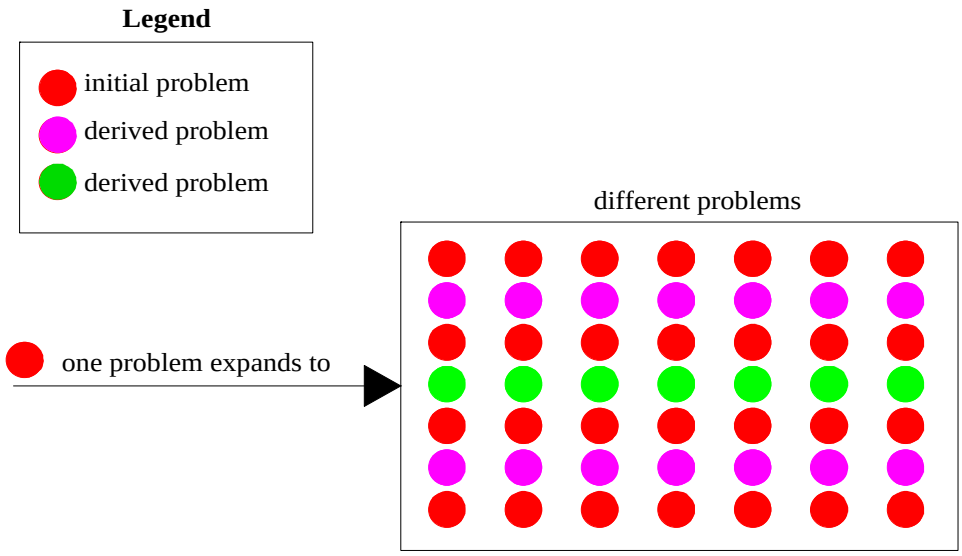


Expandability of Problem

When we talk about problem expandability, we mean not only the problem multiplies, but different types of other problems are derived from the basis problem. This process does not stop, as times go, the derived problems from the basis problem can also produce other problems, which can be different from the second derived problems.

Now, let's look at how that works from our system stand point. Since we both communicate and depend on our utilization theory to function. When we disregard our utilization theory, we simply rely on our own philosophies. Since we don't have a set of principles to rely on, we rely on our own philosophies and from each other. Now that we don't have our parents to guide us, we do everything according to our negative philosophies. From theory expandability, we know that a negative philosophy can be expanded to create other negative philosophies. By doing things with the first negative philosophy, we think we do it right and we continue to do it again, since we are not guided by our parent's principles. From the fist one, we keep learning more negative philosophies to do other things. This process does not stop, not only we are learning from the fist, we are also learning from the second to do other things as well. Since many of us are not guided by any principle, we rely on negative philosophies from each other to do things. This is the process of problem expandability.

To better understand expandability of problem, let's look at the diagram below. It shows that the initial problem creates other problems. The initial problem is the red dot which expands to multiple red dots to the right. That red dot which is the initial problem also creates other problems. The purple dots are derived from the red dots. The purple dots are derived problems. The green dots are derived problems from the purple dots. We can see that to the right, we have a lot of green dots derived from the purple dots. The ways to look at it, all those problems are the derivatives of the initial problem; see exercise 41, 41′, 82, 90, 90′, and 96 and 96′ to learn more about problem expandability.



More about Problem Characteristic

Problem is nobody's friend and nobody wants to have them. With problems multiplication and expandability, they can spread very quickly if they are not solved on time. For this reason, it is always good to take necessary precautions with them. To prevent problem multiplication and expandability, it is always good for problem to be solved as quick as possible when there are presented; it is always good not to cause any problem at all; once a problem is initiated, there is no limit on how many problems that can be derived from it and how many other different problems that can be created from it.

Development of Problems Part 2

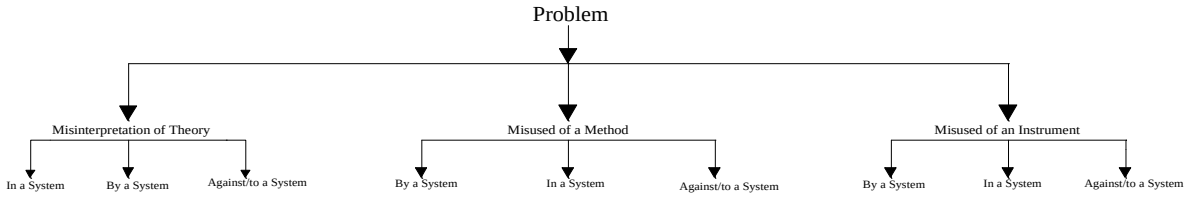
After problem definition, we have talked very briefly about problem development. We did not say much about problem development, we simply showed how the process happened. Now that we have learned more about problem characteristic which includes problem multiplication and expandability, we can see how complex problems are. It makes a lot of sense for us to talk more now about problem development. In this section, we are going to look at how problems are developed in every segment. We are going to look at different ways problem are developed related to both the physical system and the functional system. Remember we have defined the physical system which is us and the function system which is life. Since the physical system is the one that create the problems and the problems affect the functional system, it makes sense for any problem development analysis to look at both the physical system and the functional system.

When we talk about problem development, it can also be viewed as problem identification. Of course we know the negative philosophy is the problem itself; however we want to know how that negative philosophy gets developed or generated. Once we identify how that negative philosophy gets developed, we can identify the development

of that negative philosophy as a problem itself. The way to look at it, each type of negative philosophy that is developed can be considered as a type of problem. Different types of negative philosophies developed, different types of problem created. This is basically how to look at it.

In this section, we are going to use title like *Problem Development Related to Type* for instance; we can have a title *Problem Development Related to Disregard application of Theory*. Since we are going to use *Problem Development* all the time, it makes sense for us to replace it with abbreviation *PD* which stands for *Problem Development*. For example, *Problem Development Related to Disregard Application of Theory* will be *PD Related to Disregard Application of Theory*. We simply do that in order to keep the title shorter.

In this section, we are going to use terms like *In a System* as shown on the table below. For instance after we use the above title *PD Related to Disregard Application of Theory*, we can have subtitle like, *Disregard Application of Theory in a System*. We can also have subtitle *Disregard Application of Theory by a System*. The table below shows a summary of the meaning for each term. For instance *Disregard application of Theory in a System* means non application of theory in life, while *Disregard application of Theory by a System* means disregard application of theory by us which is the physical system. See the table below for more information. The problem chart bellow shows the development of problem related to misinterpretation of theory, misused of a method and misused of an instrument. It can be better viewed in a landscape form.

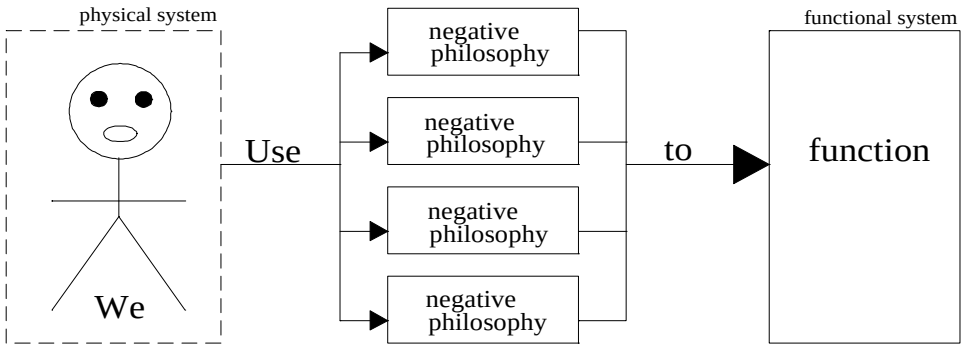


Terms	Meaning
In a system	In life
By a system	By us (me, you, him/her)
Against a system	Against us or against life
To a system	To us or to life

PD Related to Disregard application of Theory

From the AM radio kit example, we know that in order for a system to function properly, its utilization principles must apply to it. When those principles do not apply or do not apply properly, the system will not function properly. This method also applies for life. Life is a functional system and we are the physical system. In order for our lives to function properly, we must apply our parents' principles, when we don't apply them that cause problems. When we don't apply our parent's principles in life, we simply rely on

our own philosophies to do things. Since the system functionality is not related to our philosophies, which cause problems in life. To better understand this process, let's look at the diagram below. Since we should use theory to enable the functionality of life, when the utilization theory is replaced by philosophies as shown below, we call that problem. The diagram below shows a process of problem development by disregard application of theory to enable the functionality of life.



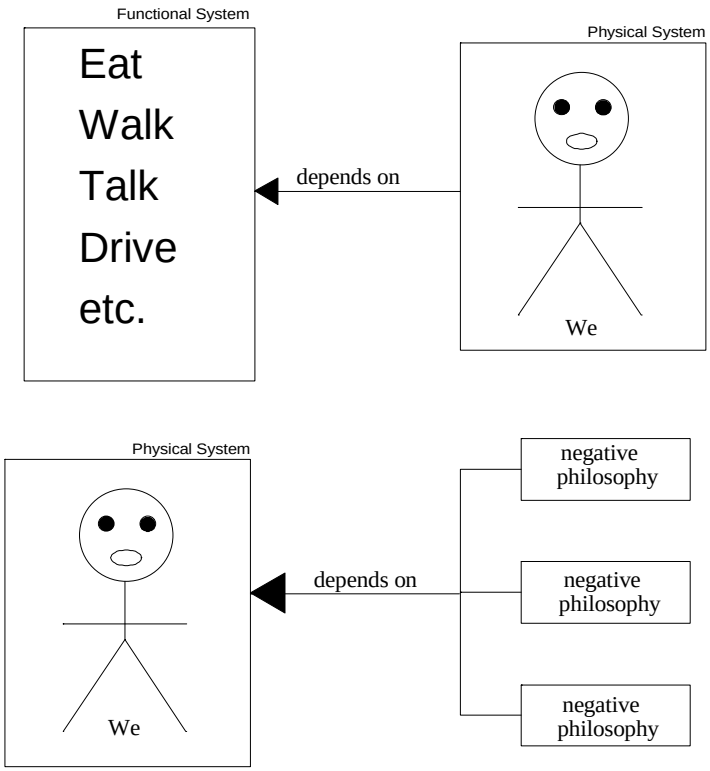
Causes	Explanation
Disregard application of Theory in A system	Disregard application of theory in a system means non application of theory in life. Since life is a functional system and we are the physical system. We must apply our parents' principles in order to ensure the functionality of our system. What do we mean by functionality of our system, we mean both the physical system and the functional system? When we don't apply our parents' principles in life that is a problem.
Disregard application of Theory by a System	Disregard application of theory by a system means that we the physical system disregard the utilization theory of the system and rely on our philosophies, when we do that, that is a problem.
Disregard application of Theory to a System	Disregard application of theory to a system is the same as non application of theory to life. Whenever we don't apply our parents' principles to life, that is a problem by itself.

PD Related to Disregarding Theory and System Relationship

We know that there is a relationship between a system and its utilization theory. For instance, from the AM radio kit, we know that if the user guide is not used as it should be or is not used at all, that will affect the radio. We also know that the life expectancy of that radio depends on that user manual. We can roughly say that system documentation is very important to that system and without it, that system functionality should be very abnormal. Related to life, there is no difference. There is a similarity between our

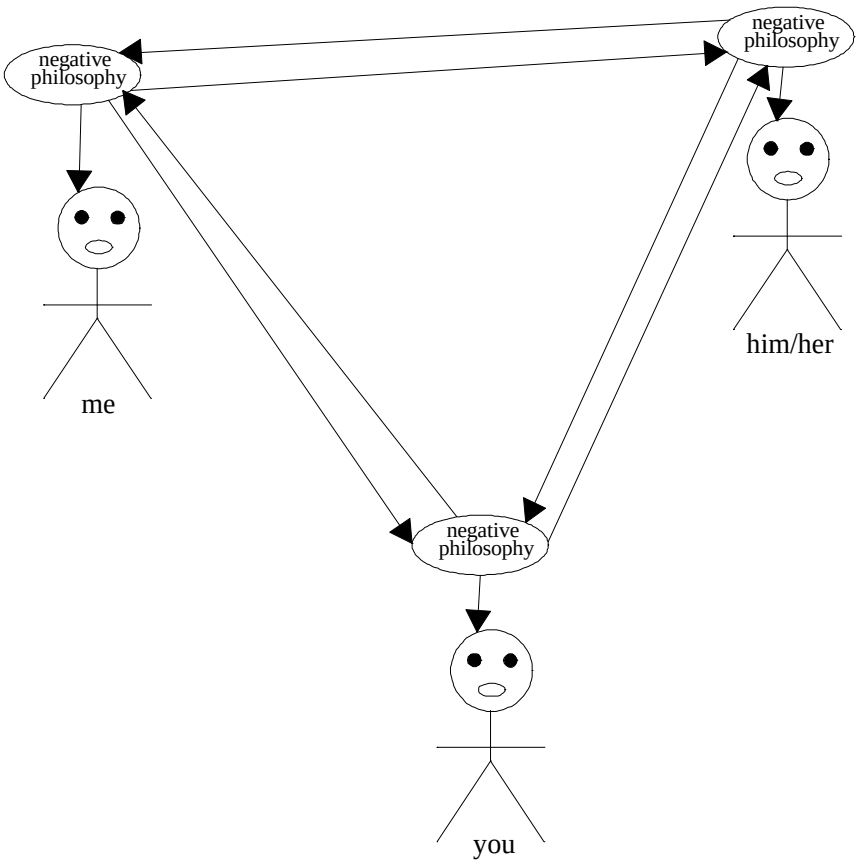
parents' principles and life. Since our lives depend on our parents' principles and the functional system depends on the physical system, we can also say that the functional system also depends on the same theory the physical system depends on. When the physical system disregards that relationship, that is a problem; see the diagram below. It shows that rather than depends on our utilization theory; we depend on our own negative philosophies. Since the functional system depends on us and the functional system does not have any relation with our philosophies that develop problems. The way to look at it, whenever that relationship fails to apply, problems are developed.

Causes	Explanation
Disregard theory and system relationship in life	Given that our parent's principles enable our functionality, we can see that there is a relationship between our utilization theory and our lives. When we apply our utilization theory, it enables our lives to function normally, the same as when we disregard that relationship or we don't apply our utilization theory, we simply create problems in life.
Disregard theory and system relationship by us	When we disregard the relationship between our lives and our parent's principles, we simply create problems in life.
Disregard theory and system relationship to us	See disregard theory and system relationship by us



PD Related to Disregarding Importance of Theory

Since the application of a theory enables the functionality of the associated system, we can say that theory is very important to that system. When the importance of a system theory is disregarded, that causes the system to functional abnormal. In life, we use our parents' principles to enable our functionality. We can see that those principles are very important to us; when we don't view that importance that creates problems since we no longer rely on them. The diagram below shows the process of problem development related to disregarding importance of our utilization theory. It shows that we rely on each other philosophy and the theory is not important and it is not in the picture at all. When that happens, that is problem.

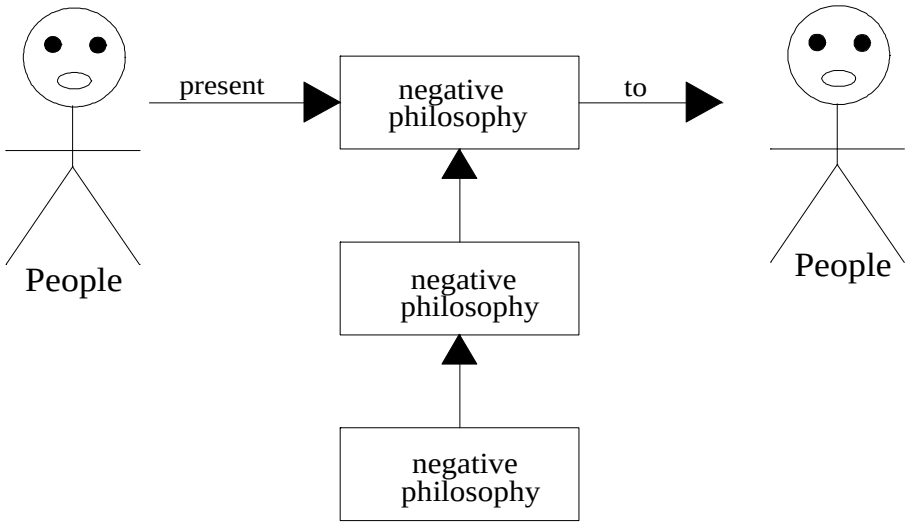


Causes	Explanation
Disregard Importance of Theory in a System	Our parents' principles are very important in life. When we don't give them any importance that develop problems. Since we must use them to enable our functionality, by considering them not important, we no longer apply them. When that happens, that is problem.
Disregard Importance of Theory by a System	Since the physical system applies theory to enable its functionality, its utilization theory must be very important. Since we use our utilization theory to enable the functionality of our physical system, this theory must be very important to us. When we disregard the importance of our theory, we also disregard the importance of our life. When that happened, that is problem.
Disregard Importance Theory to a System	Our parents' principles are very important to us and also very important to our lives. When we disregard that importance, we also disregard our lives. When that happens, that is problem.

PD Related to Error in Presentation of Theory

When we talk about problem development related to error in presentation of theory, we mean how problems are developed related to presentation of theory. The best way to interpret it, is to think it as problems that happen in presentation of theory.

From presentation of theory, we have learned that theories are presented to all form of communication. We have also learned that in order for a theory to present properly, theory communication must be understood; when theories are presented without any feedback from theory of communication that creates problems. The ways to look at it, rather having theory communication as feedback, philosophies are used as feedback instead; when that happen that is problem. Since there is no feedback in this case, the theory may no longer be present during presentation, but replaced by philosophies; when that happens that is problem; see the diagram below for more information. The diagram below shows that theory communication is no longer use as feedback for correction, therefore philosophies are presented instead. This is how problems are developed related to errors in theory presentation.



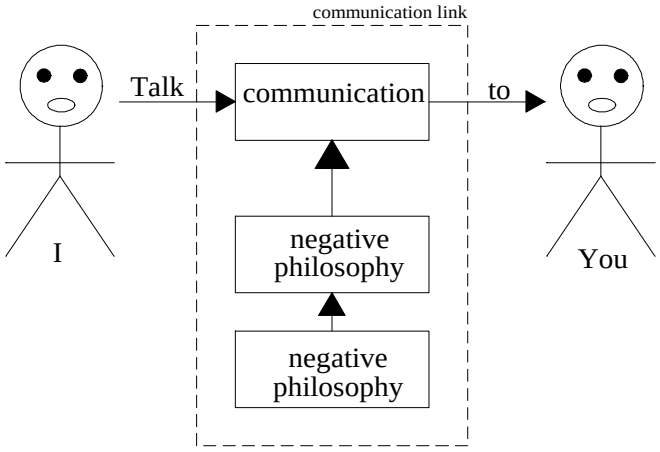
Causes	Explanation
Error in presentation of theory in a system	Theories are presented from people to people. When theory communication is no longer present to validate any presentation, negative philosophies can easily pass from people to people. When that happens it creates problem in life.
Error in presentation of theory by a system	When a person does not use theory of communication to validate any theory that is being presented. That person relies only on philosophies. In this case, rather than presented a theory, negative philosophies are the ones that are being presented. When that happens that is problem.
	When theory communication is no longer used to

Error in presentation of theory to a system	validate theory presented to a system, there is no way for verification, when that happens that is problem. When theory communication is no longer use to verify theories presented to life or to us, there is no way to validate those theories. In that case, negative philosophies can easily pass through. When that happens, that is problem.

PD Related to Disregarding Relationship of Theory and Theory Communication

We know that there is a relationship between theory and theory communication. Since theory communication is used to present theory, therefore any theory depends on theory communication. This relationship is very import, because it provides a control of theory. Given that theory communication controls theory, when that control is no longer present, it replace by philosophy. When that happens, we call that problem.

The way to look at it, there is a communication link between "me" and "you" that enables us to pass information through. We can also say we communicate through a communication link. This link is controlled by theory of communication. Theory of communication is the set of principles we get from our parents that enable us to communicate or the set of principles we get from our parents that enable us to control the communication link. At anytime we disregard those set of principles, we simply rely on our own philosophies. When that happens that is problem. The figure below shows the communication link that exists between us or between "me" and "you". From the diagram, we can see that the link is no longer controlled by our parents' principles. Those principles have been replaced by our negative philosophies. Since there is no principle to control what we can say, anything can pass through that link. That means we can roughly say anything. When that happens that is problem.

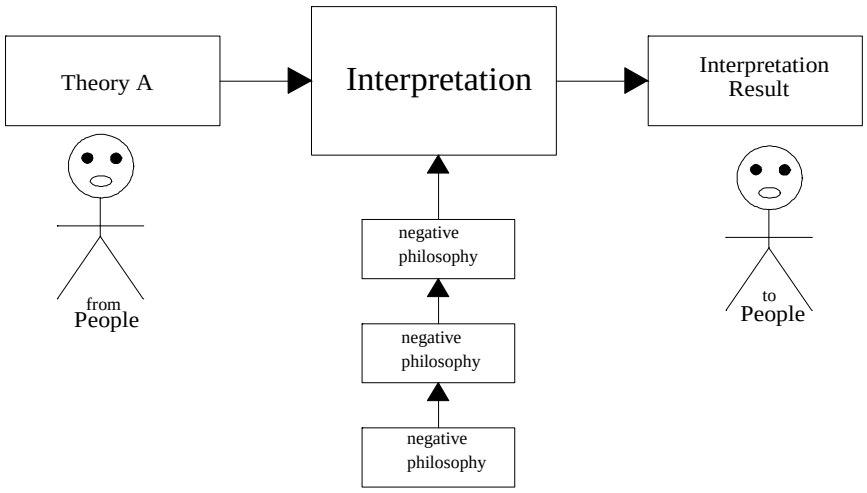


Causes	Explanation
Disregard relationship of theory and theory communication in a system	Life is our functional system. In order for the system to function, we must communicate to each other. Since theory communication control what we say, when this control is no longer there and we rely on our own philosophies, we can say anything we want. When that happens, that creates problems in life.
Disregard relationship of theory and theory communication by a system	The communication link that exists between us enables us to communicate to each other. Our parents' principles control that link. When our parents' principles are replaced by our own philosophies, that link is no longer controlled. Without any control in that link, we can say anything to each other. When we do that, we create problems.
Disregard relationship of theory and theory communication to a system	When talking to someone, it is always good to think about what we say. When we no longer use our parents' principles to control what we say, we say anything we want to others. When that happens, that is problem.

PD Related to Misinterpretation of Theory

Theories are hidden elements of communication. We can also say that theories are hidden information in communication. Without understanding of communication principles, they can be misinterpreted very easy. When theories are misinterpreted, that develops problems in life.

We learn theories everywhere include home, school, work, churches, mosque, synagogue, temple etc. The process of learning theories is education. During that process, theories are presented from people to people or from instructors to students. We call that process interpretation of theory. In order for the theory to interpret properly to the people who are being presented to, theory communication must be used to validate the interpretation. Without understanding of theory communication, there is no way the interpretation can be validated. The result of the interpretation can very well be philosophy which develops problems in life. The diagram bellow shows how a theory is being presented from people to people. While theory communication is no longer in control of the interpretation, there is no way that interpretation can be validated. As it shown by the diagram, philosophy can well be replaced the by interpretation of that theory which resulted to problems.



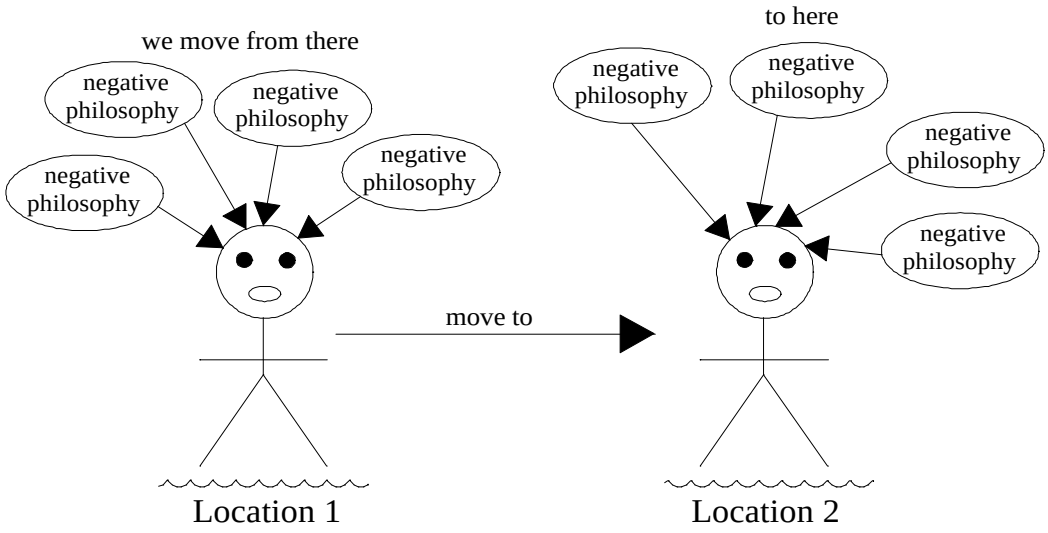
Causes	Explanation
Misinterpretation of theory in a system	Life depends on us. When we use our parents' principles life functions normal, as well as when we don't use our parents' principles life function abnormal. In life, we learned those principles from many people who interpret them for us. Since theory communication is use to interpret those principles to us. When there is error in communication, those principles can very well be misinterpreted in life. When that happens, that develop problem in life.
Misinterpretation of theory by a system	When people presented theory to other people, they must used communication to interpret that theory. While a better understand of communication enables a theory to be interpreted properly, misunderstanding of communication allow a theory to be misinterpreted. Whenever a theory is misinterpreted by the people who present it, that develop problems in life.
Misinterpretation of theory to a system	Since life depends on us, misinterpretation of any theory to us develops problems in life.

PD Related to Disregarding Portability of Theory

The physical system is considered to be a mobile system, since it moves from places to places. Since the physical system is mobile, its utilization theory is also mobile. Whenever the physical system moves from locations to locations, it also moves with its utilization theory to ensure the continuity of its functionality.

We live everywhere around the world. We also move from places to places, cities to cities, or countries to countries. Since when we move from places to places we are still

functional, it makes sense for us to continue applying our parents' principles to any location we move to. Since when we move from places to places, our lives still active, it makes a lot of sense for us to still applying our parents' principles. When we move from places to places and we no longer apply our carry our parents' principles, it looks like we have disregard our lives in that location, which develop problems in life. To better understand problem development related to disregarding portability of theory, it is worthwhile to look at this diagram. It shows that when we are at location one, we rely on our negative philosophies, then when we move to location two, we still rely on our negative philosophies. When we do that, we simply carry problems from one place to another place. It does not matter the way we look at it, even if we apply our parents' principles at location one, we still need to apply them at location two. If we apply them at location one and we don't apply them at location two, we still develop problem related to disregarding portability of theory.

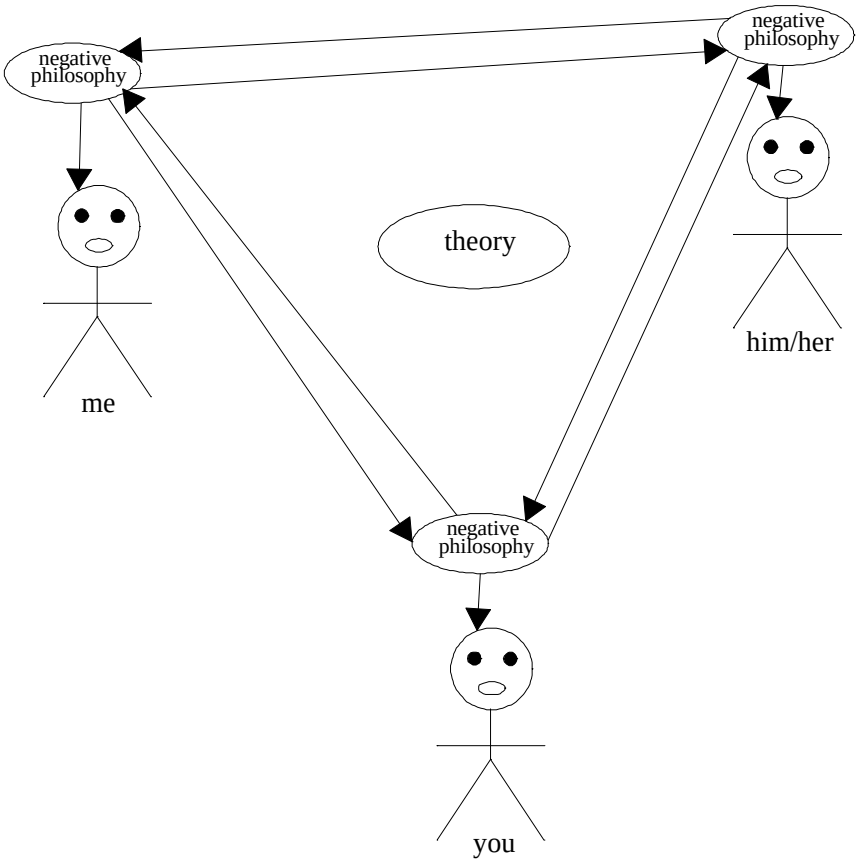


Causes	Explanation
Disregard portability of theory in a system	In life portability of theory always holds. Since our theory is very portable and we are mobile, we should always use them wherever we go to ensure our functionality. That makes sense, since everywhere we go, we still functional. When we disregard our parents' principles to places we move to, that develops problems in life.
Disregard portability of theory by a system	Our utilization theory is very important to us since we must use it everywhere we go to enable our functionality. When we disregard those principles to everywhere we go, we are also disregard our lives, which develop problems in life that created by us.

PD Related to Disregarding Independency of Theory

A theory is an independent entity where the system uses it to ensure its functionality. In an associative system, while the system depends on each other to function, the theory is still independent to them. Each system must apply the theory independently to ensure the over all system functionality. When one or many associated system fails to understand that, it develops problems.

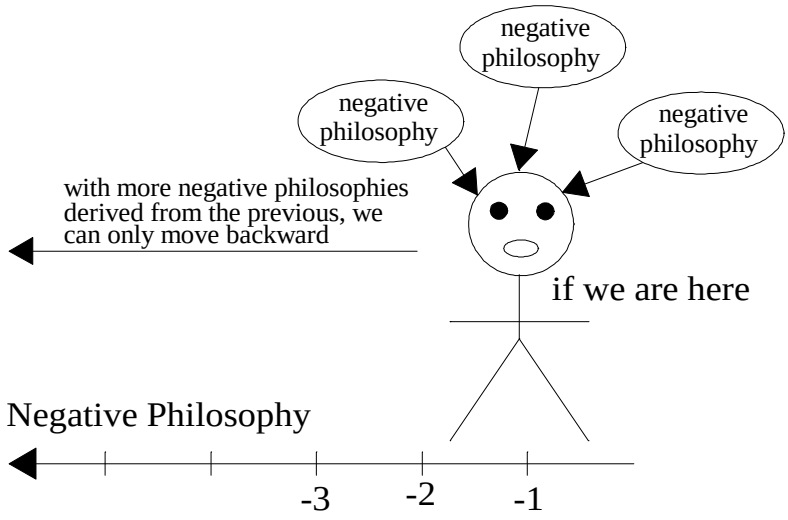
Life is an associative system that depends on our utilization principles. While we are depends on those principles to ensure our functionality, they are completely independent to us. We must apply them independently to ensure our functionality. While we still depend on each other to function, our parents' principles are still independent to us. When we disregard the independency of our parents' principles, we simply reply on each other philosophies to do things, which develop problems in life. This diagram shows that, rather than relying on the theory, we simply disregard it and rely on each other philosophies. It shows that the theory at the middle is being disregarded, since nobody points to it, rather we point to each other philosophies which are problems.



Causes	Explanation
Disregard independency of theory in a system	Life needs each other application of our parents' principles. When we disregard our parents' principles and rely on our own philosophies that develop problems in life. Our utilization theory is an independent entity where we all depend on to function. When we disregard that independency and rely on each other philosophies instead, that develop problem in life.
Disregard independency of theory by a system	When our utilization theory is no longer considered important to us, we simply rely on each other ideas rather than depending on our theory. When we don't depend on the theory, but philosophies we develop problems in life.

PD Related to Expandability of Philosophy

From expandability of theory, we have learned that any initial observation from a theory can lead us to more observation. Due to the fact that we are an intelligent-system, we learn how to do things better and better. Similarly to the positive effect, this process also works well in the negative side. Any negative idea we have in life can lead us to more negative ideas if we don't drop the first one. There is no limit how far negative ideas can go. This is the way to look at it, sometime we hear someone does some bad things, next time; we hear someone does the worse. If we keep investigate, we will see there is no limit on how worse someone can do things. The reason for that is because of expandability of negative ideas. Any negative idea is a problem itself. When it expands, it creates more problems; see problem expandability and multiplication. The diagram below shows how exactly an initial negative idea can be expanded without limit, sees exercise 90, 90′, 95, 96 and 96′ for more information.



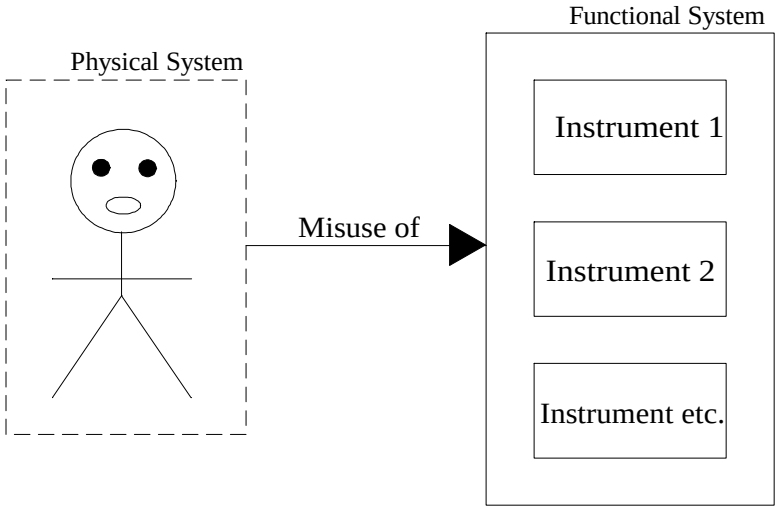
Causes	Explanation
Expandability of philosophy in a system	Life is an associative system; there is no way someone can live without the need of others. With the associativity characteristic, it is very easy for a negative philosophy to past from one to another. When negative philosophies past from one to another, they create problems in life. They are many different ways negative philosophies past from people to people or inherited from others. Disregard the way they past through, they develop problems in life.
Expandability of philosophy by a system	Negative philosophies always have originators. Sometime the originators may not know the ideas are bad. Sometime they know, but they want others to adopt it. Whenever a negative philosophy is introduced by someone or expanded by someone in life, it develops problems.
Expandability of philosophy to a system	Expandability of philosophy to a system, see expandability of philosophy in a system.

PD Related to Misuse of Instrument

The function of any instrument in a system is to ensure the functionality of that system. We have learned that from the instrument and system relationship. Any instrument that does not use according to its system functionality will cause that system to function abnormal.

In life, our attached instruments follow the same principles. For instance, we use our hand, finger, foot etc. to enable us to live. When those instruments are misused, they

make life functions abnormal. Since life is an associative system, since our lives depend on others, our attached instruments must be used to ensure other people lives as well; when our attached instruments are not used to ensure both our functionalities and others functionalities that create problems in life. What do we mean by that? Whenever we use our hands, fingers, for instance to make lives function abnormal either for us or for others, that develop problems in life. The diagram below shows the process. It shows that whenever our instruments are misused, they create problems in life. It does not matter if the attached instruments are used with or without non attached instruments, what matters, whenever they are misused, they develop problems. The way to look at it, in order for a problem to trigger, it has to be triggered by an attached instrument, for instance. Since most problems cause by misused of instruments, it is very important for instruments to use properly.

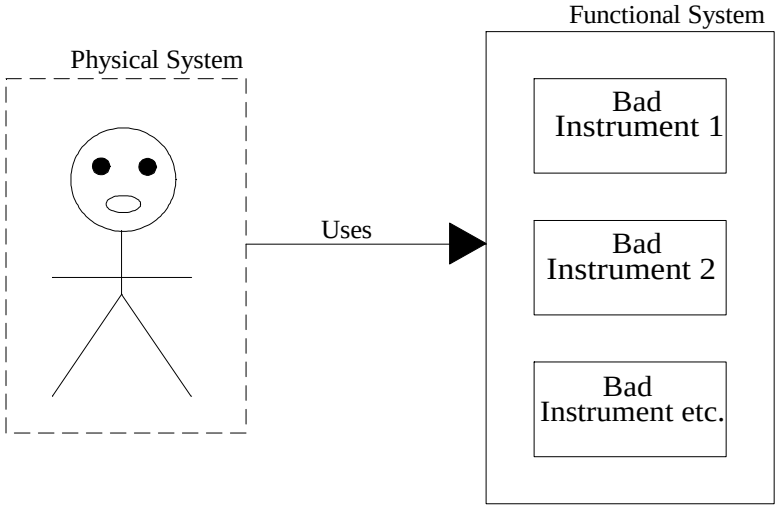


Causes	Explanation
Misused of instruments in a system	Since the functional system depends on the physical system, and the physical system depends on its instruments, the functional system also depends on those instruments as well. The way to look at it, our lives depends on how we used our hands for instance. Since the overall system depends on all of us, whenever one or more of us, misused our hands, we develop problems in life.
Misused of instruments by a system	When our attached instruments are being misused by us that develop problems in life. Since life is associative, it does not matter if they are being misused by one or many of us. When they are misused, they develop problems.
	From instrument and system relationship, we know that the utilization of instruments for the local system is equivalent to the utilization of instrument for the

Misused of instrument against a system	distant system. When the local system instruments are being used against the distant system that develop problems. Since the functionality of the distant system is equivalent to the local system, when the instruments are used against the distant system, they are also used against the local system. Another way to look at it, we use our hands to ensure our functionalities. Since our functionalities depend on others, the usage of our hands for us is also equivalent to others. When we use our hands against others, we develop problems in life. When others use they hands against us, they develop problems in life as well.

PD Related to Utilization of Bad Instrument

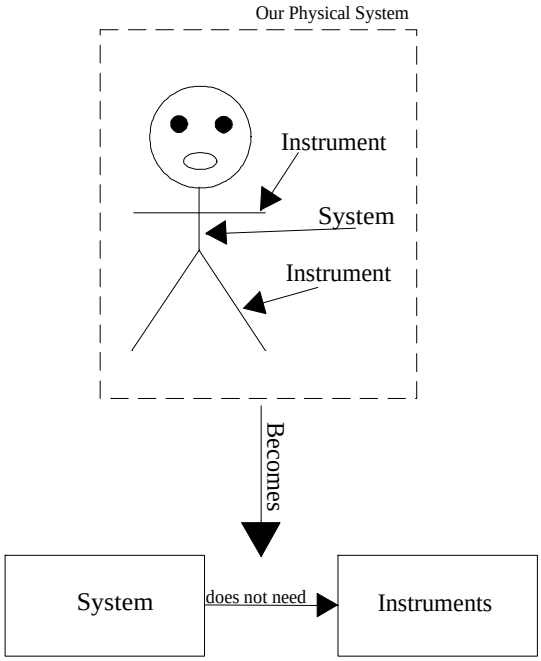
An instrument is considered to be bad, when it can only be used to harm the physical system. Since the functional system depends on the physical system, we can say an instrument is considered to be bad, when it can only be used to harm life. A bad instrument is not an attached instrument; we can call it external instrument. The diagram below shows this process. It shows whenever the physical system uses a bad instrument that develops problems in life.



Causes	Explanation
Utilization of bad instrument in a system	The functional system depends on utilization of instruments from the physical system. Those instruments must be good. If those instruments are bad, they develop problems in the functional system. Life depends on our instruments, for instance our hand. Any bad instruments we use with our hands for example, creates problem in life.
Utilization of bad instrument by a system	Any bad instruments that are used by us develop problems in life.
Utilization of bad instrument against a system	Since the functional system depends on the physical system, the usage of a bad instrument against the physical system develops problems in life. That means whenever we use a bad instruments against ourselves or against others, we develop problems in life.

PD Related to Disregarding Instrument and System Relationship

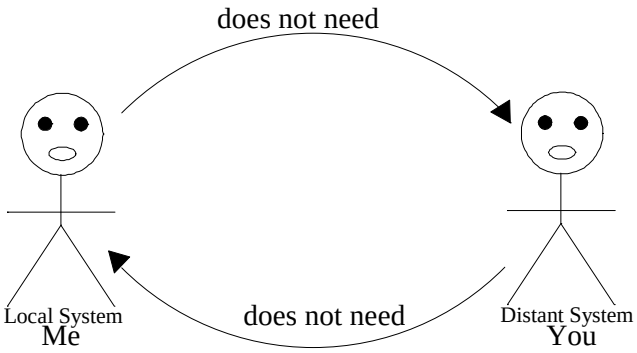
The purpose of instruments in a system is to ensure that system functionality. From instrument and system relationship, we have learned the relationship between the radio and its knobs, the relationship between a car and its doors, and a house and its windows etc. The relationship of instrument and system always holds. In life, the relationship of our system and our instruments is to ensure our functionality as well. Since life is an associative system, this relationship extends to the distant system. What we mean by distant system, we mean others. When this relationship fails to be understood, that develops problems in life. To better understand our system and instruments relationship, let's look at the diagram below. We know that the physical system always needs the attached instruments in order to function; as shown by the figure below, when the physical system believes that it no longer needs the attached instruments that develop problems in life.

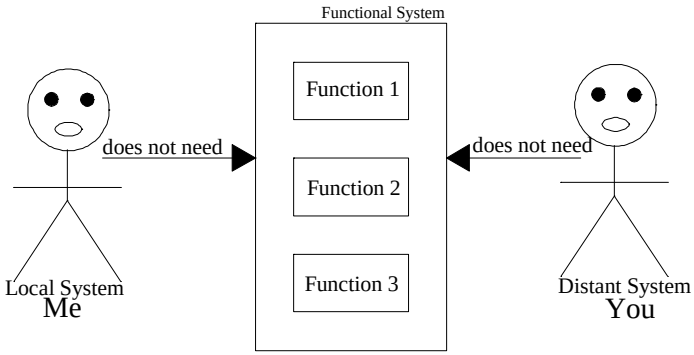


Causes	Explanation
Disregarding instrument and system relationship in a system	Since life depends on us and we depend on our instruments to function, life also depends on our instruments. When we think that we don't depend on our instruments to function, we act like our lives do not depend on us as well, which develop problems.
Disregarding instrument and system relationship by a system	When we think that we no longer need our instruments that enable us to live, that develop problems. When we think we no longer need them, they can easily be misused by us. When that happens, that creates problems.

PD Related to Disregarding System and System Relationship

System and system relationship is the relationship that exists in a system associative. Life is an associative system, since there is no way one can function without others. Since the associativity relationship is constant in life, when that relationship is no longer preserved, that is a problem. Since the functional system needs the physical system and the physical system must need other associated systems. When that relationship is no longer considered important by one, it is the same as disregarding the functional system. The figure bellow on the top shows the disregarding of each other. It shows that the local system which is "me" disregard the existence of the distant system; the distant system which is "you" as well disregard the presence of the local system. With the functional system, we mean life depends on both the local and the distant system for functionality, when both systems disregard their functionalities, they also disregard life. When that happens, that creates problems.





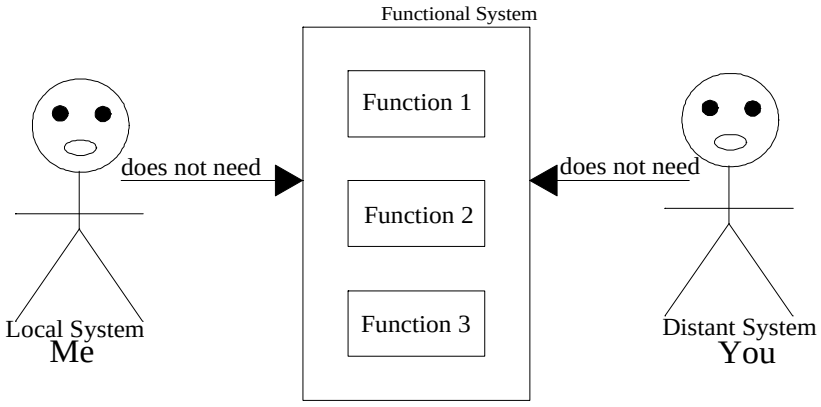
Causes	Explanation
Disregard System and System Relationship in a system	Life is an associative system. As a functional system, it depends on us to apply our parents' principles to ensure its functionality. When we disregard each other presence, life becomes abnormal. When we disregard our parents' principles we also disregard life and that becomes problems.
Disregard system and system relationship by a system	Disregarding system and system relationship is the same as disregard the associativity relationship. For instance, "I" disregard your existence and "you" disregard "my" existence. It does not have to be in a recursive approach in term one disregard each other existence. As longer that applies to one, it also makes life function abnormal, since life depends on each of us individually. When any of us disregard each other presence or when the presence of one is disregarded by another that creates problems.
Disregard system and system relationship to a system	In life, the presence of each other is very important to all of us. It is also very important to the overall functionality of the system. As soon as the presence of one is no longer considered important to each other, life becomes abnormal.

PD Related to Disregarding Function and System Relationship

A system can be viewed as a collection of functions. In this case, each function serves to enable the functionality of that system. For example, the volume of a radio is a function for a radio to increase the sound level of that radio. The same as the function of a tire in a car, the kitchen in a house etc; all of them serve to ensure the functionality of the place they belong to. This relationship is very important to them.

Now, let's look at life in relation with functions. We know life is a functional system. What we mean by functional, we mean that life is a collection of functions. We already knew that. For instance, the flow of river is a function of life, as well as the growing of a tree etc; see exercise 51, 51′ for more information about function of life. All those functions that contribute to life are very important, since they enable the functionality of the overall system. Since those functions depend on us to ensure their functionalities, when we no longer consider the importance of those functions, we develop problems in life. The figure below shows life, which is the functional system. It shows that the physical system which depends on theory to enable the functional system does not need the functional system, when that happens, it is equal to problem. To learn more about functions in life and function and system relationship, see exercise 51, 51′.

Since a system is a collection of functions, problem can cause if there is a problem in a function. Keep in mind that functions added to a system are derived from theory, so misinterpretation of a theory can cause bad functions to be added. That may cause problems since functions are methods. A bad function is considered to be a bad method. Any problem in a function is equivalent to what we have just said above.



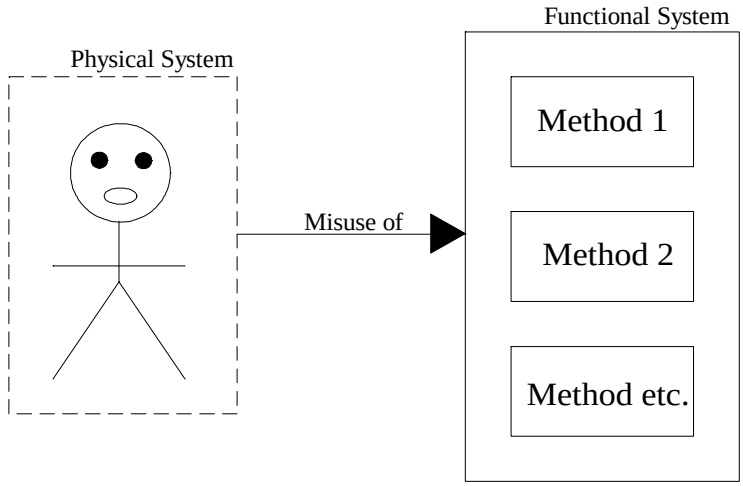
There is another relationship when functions in the functional system also need the physical system. There is also a relation between functions added to the functional system and the system by itself; see exercises 51, 51′, and 80 for more information.

Causes	Explanation
Disregard function and system relationship in a system	When the physical system shows that it no longer needs functions that include in the functional system, that create problems in life. The associativity of life also extends to other functions the physical system may not be aware of. Although the physical system may not aware of some functions, however there are many, many functions the physical system aware of, but choose to disregard their importance. When that happened, the physical system itself develops problems in life.
Disregard function and system relationship by a system	When functions in life are no longer considered important by us, we automatically develop problem in life; see exercise 72, 72′ and 73, 73′ for more information.
Disregard function and system relationship to a system	When many things that make up life are no longer considered important to us, there also considered not important to our lives. By disregarding many things that make up our lives, we simply create problems.

PD Related to Misapplication of Method

A method is defined as instructions followed to accomplish a task. For instance, when we work, we simply follow some procedure to do our works. We can call the procedure that we follow method. Since methods are instructions themselves, they give us direction on how to do things. When we make mistakes in a method, sometime we simply say we did not follow proper direction. In other words, we can simply say we did not apply that method properly or we simply misapply it. Whenever we misapply a method, we simply develop problems in life. Misused and misapply are the same.

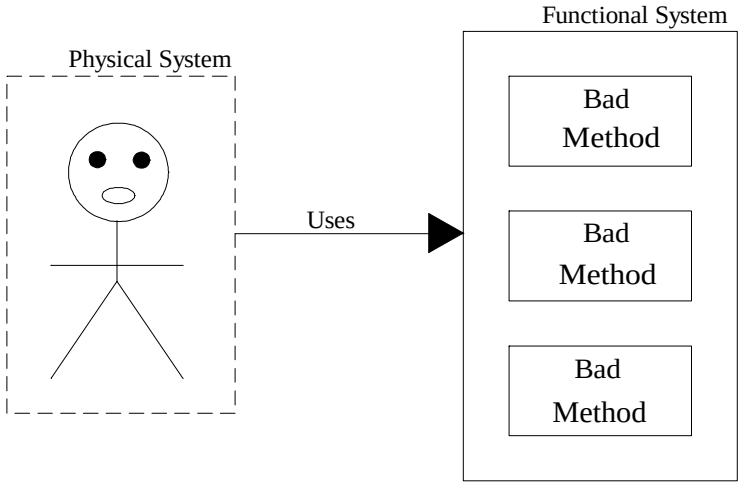
To better understand life and how methods work in life, let's look at the diagram below. Everyday we live, we work, and we simply apply method. For instance, we drive, drive is a method; we walk, walk is a method; we cook, cook is a method. Since we do them as often, we don't have to follow step by step instructions, however if we would like to, we can pick one and show a step by step instruction on how we apply it. Basically, whenever we make a mistake in a method, we simply develop problem in life. Since the functional system depends on us, when we make mistakes in methods they make life function abnormal.



Causes	Explanation
Misused of a method in a system	We apply methods to enable the functionality of life, when we misapply them; we simply develop problems in life.
Misused of a method by a system	The usage of methods by us is part of our everyday life. Since life depends on them, whenever we misused them, we simply develop problems in life.
Misused of a method against a system	Since life is an associative system, we need each other in order to ensure the functionality of the overall system. Whenever a method is used against one of us or used against each other, we simply develop problems in life.

PD Related to the Usage of Bad Method

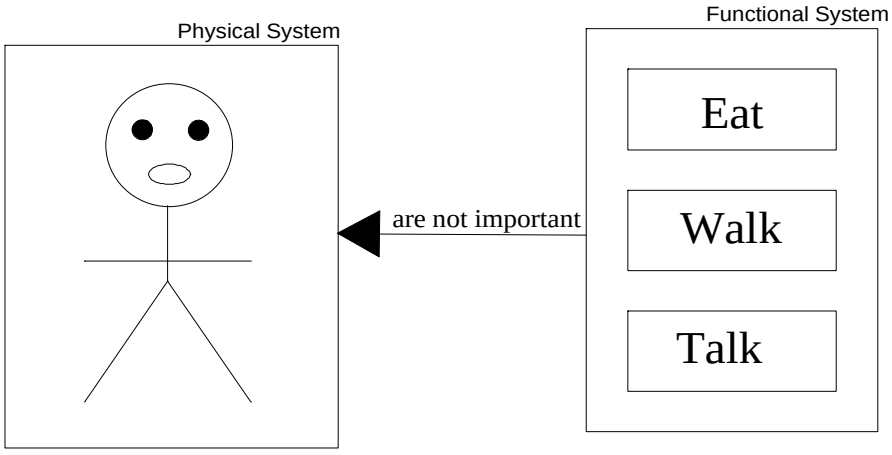
We use method in life to enable our functionality. When we apply them properly that enable life to function normal, as well as when we apply them improperly that makes life function abnormal. It is always good to follow methods properly. There are cases where a method can be bad. We define a bad method as a method when it executed, it enable life to function abnormal. What do we mean? We mean that enables both the physical system and the functional system to function abnormal. We can also say a bad method is a method that includes bad instructions or instructions that cannot be used in life. Let's look at this diagram to better view the approach of a bad method. The diagram shows the physical system uses bad methods in the functional system. Since the functional system depends on methods related to the physical system principles, when the physical system executes bad methods in the functional system that enable the functional system to function abnormal. Given that the physical system depends on the functional system, it also makes the physical system functions abnormal.



Causes	Explanation
Usage of bad methods in a system	Life depends on us to apply good method, whenever we use bad methods in life, we simply develop problems.
Usage of bad methods by a system	Since life depends on us, whenever we use bad methods, problems are developed by us to make our life difficult.
Usage of bad methods against a system	Since life depends on each of us, whenever we use bad method against each other, we simply develop problems in life.

PD Related to Disregarding Method and System Relationship

The relationship that exists between a method and a system is to ensure that system functionality. For instance from instrument and system relationship, we know that instruments are used to ensure the functionality of the system they belong to. Given that we use instruments to apply method, the methods we apply also serve for the purpose to ensure our functionality. For instance, our feet enable us to walk, walk is a method. Our hands enable us to eat, eat is a method. Since our hands serve for the purpose to ensure our functionality, what we do with our hands also serve for the purpose to ensure other functionality. For instance, we eat with our hand; eat serves for the purpose to ensure our functionality. As we see, the relationship of method and system maps together to the relationship of instrument and system. When that relationship is no longer considered important for the associated system it develops problems in life. Since life is an associative system, the relationship that exist between me and the method that I use related to my functionality, is also equivalent to you. Whenever that relationship is no longer considered important, we simply created problems in life. The diagram below shows the disregarding of method and system relationship. It shows that the physical system is no longer considered those methods are important.

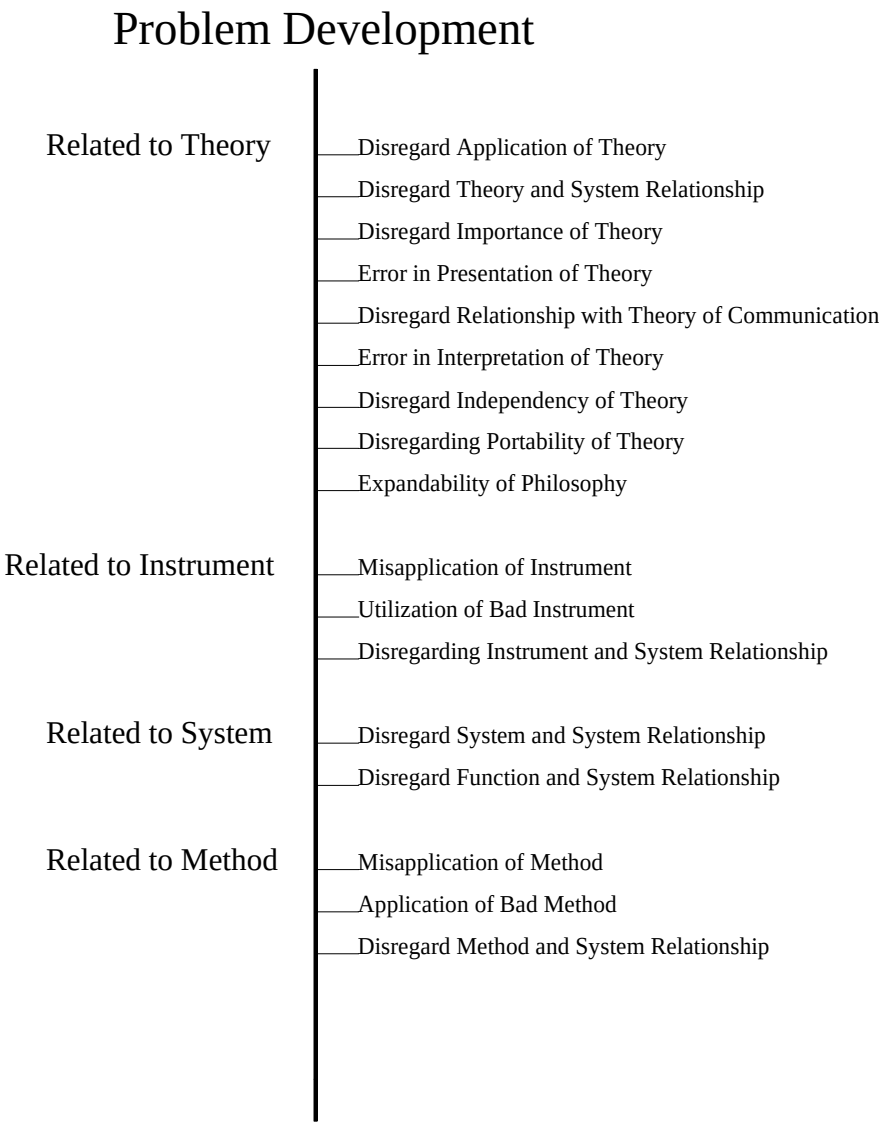


Causes	Explanation
Disregard method and system relationship in a system	When methods that enable the functionality of the physical system are not longer important to the system that develop problem in life. See the diagram above.
Disregard method and system relationship by a system	When methods that make up life are no longer considered important by us, we simply develop problems in life.
Disregard method and system relationship to a system	When methods that make up life are no longer considered important to us, we simply create problems.

Problem Development Chart

This section is simply a conclusion of the sections that include problem definition, problem identification and problem development.

By now, we all know what a problem is. It is a negative philosophy that enables life to function abnormal. We also know that a problem is not physically defined, but philosophically defined. Problems develop as result of negative philosophies. We have identified the development of those negative philosophies. The chart below shows a quick representation of those negative philosophies. We can name this chart the problem development chart.

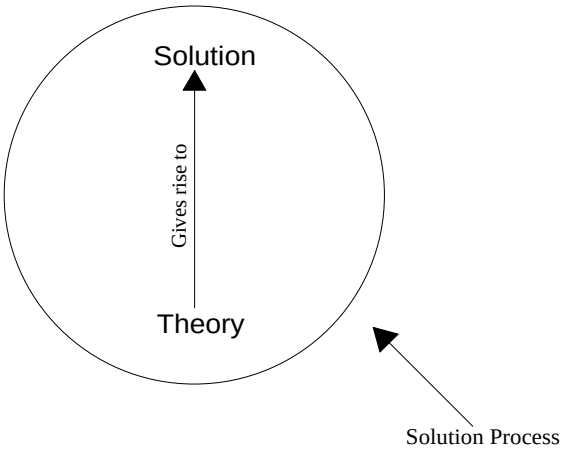


Problem Solution an Introduction

From the previous section we have learned a lot about problems. We have learned how to define them, identify them, and how they develop. In this section, we are going to learn the process of solving them. What do we mean by the process of solving them, we mean that the process of solving them, if they are presented and the process of avoiding them if they are absent.

A given system theory is always used to ensure the functionality of that system. Since that system functions according to that theory, any malfunction of that system is never related to that theory. That malfunction is always related to misapplication of that theory. While the principles of system functionality are always important to that system, when malfunction occurs, it is always good to take a look of those principles. There is no other alternative to system functionality beside its theory. Thus, when problem occur, it is always good to consult that theory.

The existence of a theory is to enable the functionality of a system. Since that theory is only the principle that can ensure the stability of that system, when problems arise, it can also be used to solve them. The reason for that is because the theory is related to the system. To better understand the solution process related to theory, let's look at the figure below. It shows that the solution process is a process where a theory provides a solution for a problem. We can see that it is the opposite of the problem development process. The way to look at it, the solution process is always from the application of a theory and that theory is the system principles where the problems are not presented.



To better understand the above statement, we have to relate what we have just said to life. When we talk about problems, we talk about problems in life. From what we have learned from the problem development section, we know that a problem is a negative philosophy and it occurs when our parents' principles are disregarded. We know also there is a similarity between our lives and our parents' principles. Our lives depend on the utilization of our parents' principles. Whenever we disregard our parents' principles, our lives become abnormal. In order to ensure the normal functionality of life, we must use our parents' principles. Since our parents' principles are related to our lives, at any time abnormality present in life, we must also use them to correct those abnormalities.

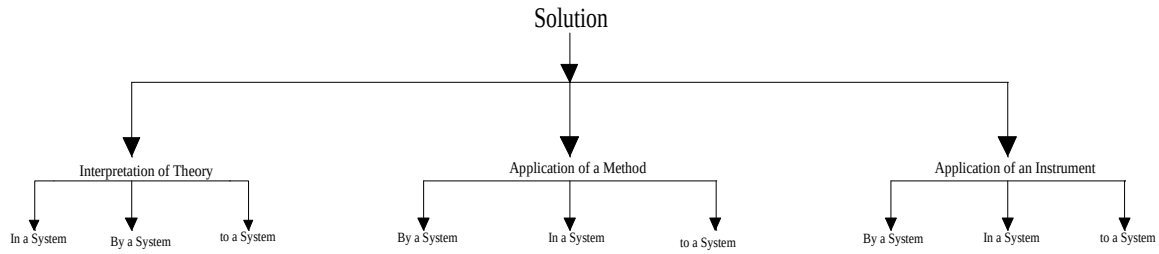
There is no other alternative, since those principles are the only ones related to the functional system. There are the only principles that can ensure normal functionality.

In this section, we are going to use similar terms we have used in the problem development section. For instance, we are going to use terms like *Problem Solution Related to Application of Theory*. Since we are going to use the term *Problem Solution* all the time, it makes sense to replace is with an abbreviation *PS*. Therefore, rather than using *Problem Solution Related to Application of Theory*, we are going to use the terms *PS Related to Application of Theory*.

We are also going to use the terms in a system, by a system, against a system, and to a system. Those terms are listed in the figure below. For instance, we may have *Problem Solution Related to Application of Theory in a System*.

Terms	Meaning
In a system	In life
By a system	By us (me, you, him/her)
Against a system	Against us or against life
To a system	To us or to life

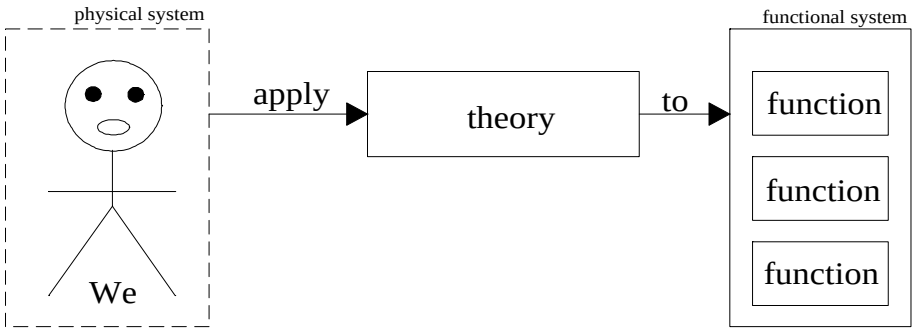
The chart below is a simple solution chart; however all of the cases can be derived from it. At the end of this section, we will see an expanded chart.



PS Related to Application of Theory

A theory is given to a system in order guarantee the functionality of that system. We have already learned that from the AM radio kit user's manual. With the absence of the derivation theory, the utilization theory of a system can be used to resolve problems in a system if problems ever happen. That makes a lot of sense, since the utilization theory of a system contains all important information about that system. There is no alternative to that theory or documentation. In terms of knowing the system from top to bottom, the documentation of a system is one that has all the important information about that system. Whenever problems arise, it should be the first one to consult. The process of applying a system theory is always to ensure that system functionality. While the theory cannot do anything for that system without utilization, however whenever it applies properly it can do a lot for the system.

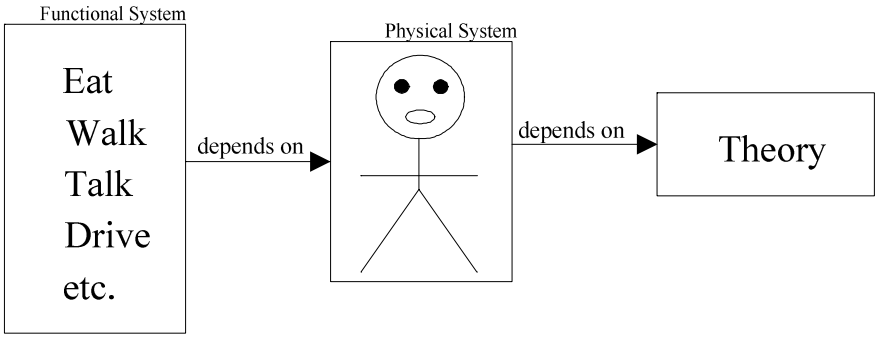
Whenever we use the word problem, it is always good to think it as problem in life. As shown by the picture below, life is a functional system that depends on us to apply our parent's principles. In order for life to function properly, it needs us to apply our utilization theory. Since life depends on us and we depend on the theory, we can say that life depends on the same theory that we depend as well. Whenever a problem happens in life it is our fault. If we don't apply our utilization theory or we apply it improperly, then problems happen in life. In order to solve those problems, we must apply the theory or apply it properly.



Cases	Explanation
Application of theory in life	Since our life depends on our parents' principles, we must always use them to enable life to function normal. When there is abnormality in life, we must also use them to correct those abnormalities.
Application of theory by a system	As shown by the diagram above, we are the physical system and we have the ability to apply theory. We can use that ability to ensure our functionality. We can also use it to correct any malfunction.
Application of theory to a system	For application of theory to life, see application of theory in life

PS Related to Theory and System Relationship

The relationship of a system and its utilization theory is very important. Since the system depends on that theory, it must always use it to function. From the previous section, we have learned that whenever the theory and system relationship is disregarded, problems arise in that system. As a theory dependable system, we rely on our parents' principles to give us ideas to do things. When we disassociate ourselves with those principles, we rely on our own ideas. Since our system does not have any relationship with those ideas, we simply create problems in life. In order to solve those problems, we must associate or reassociate ourselves with our parents' principles. The diagram below shows the relationship between us, life and our parent's principles. It shows that we need the theory in order to live. The way to look at it, in order for the functional system to function without problem, the associated theory must be understood and applied.

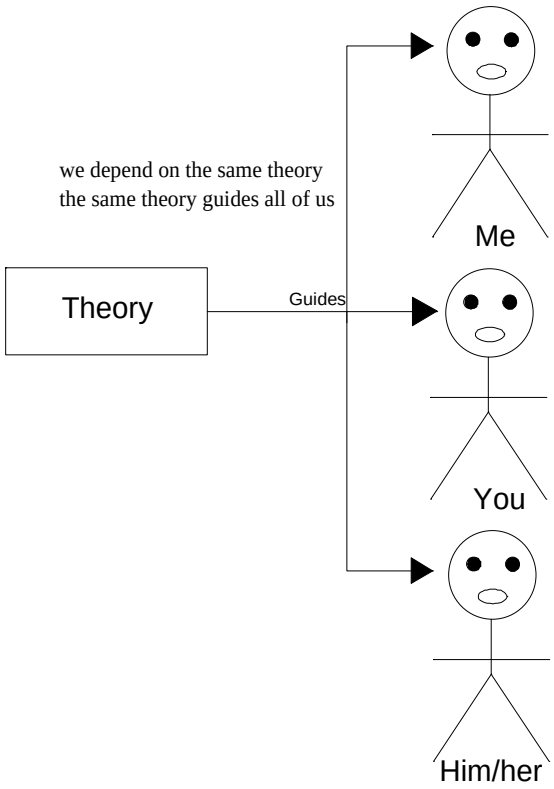


Cases	Explanation
Understanding theory and system relationship in life	It is always good to understand our system and our parent's principles. When we disregard the importance of that relationship, we simply create problems. Those problems can only be solved in life when we understand that relationship and give it importance.
Understanding theory and system relationship by us	When we understand the relationship between life and our parent's principles, we solve problems in life. We also avoid problems in life.

PS Related to Importance of Theory

The utilization theory of a system is very important to that system, due to the fact that the system must apply it in order to function properly. Since the documentation of a system contains important information about that system, that information can be used to ensure that system functionality, they can also be used to remove any abnormality that is present in the system. That is very important, since nobody knows the system better than its documentation.

In life, we apply our parents' principles to ensure our functionality. We know any problem we cause in life is due to the fact that either we don't use those principles or we use them improperly. Since those principles are important for our functionality, they are also important when we have problems. Since we use them to guarantee our functionality, we can also use them to remove any abnormality we have. To better understand the importance of those principles, let's look at this diagram. It shows that we all depend on the same theory as guidance. While the theory guides us to do things properly, we can also use it as guidance when there is an abnormality. When we have problems in life, we can use the theory as a guide to solve them. Therefore we can say the theory is very important to use since we use it to function and we use it to solve problems.

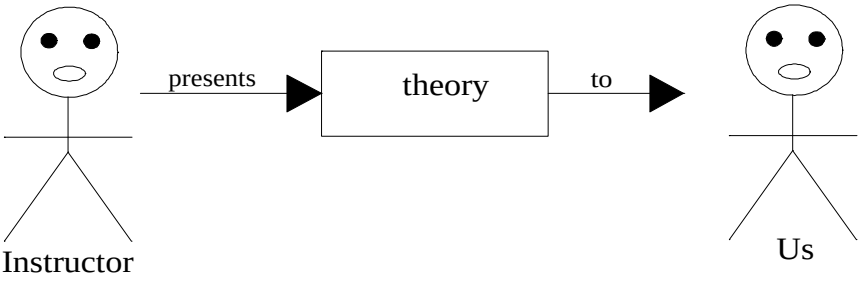


Cases	Explanation
Understanding importance of theory in life	To better understand the importance of our parent's principles, let's look at this relationship. We need to apply those principles to live. We can say that, we depend on those principles, while our life depends on us. Therefore those principles are very important in life. Since they help us to live, we must also use them when we have problem in life.
Understanding importance of theory to us	We all should understand the importance of our utilization theory. We use it to function, we can also use it to prevent and solve problems.

PS Related to Presentation of Theory

We have learned that from the problem development section that problem can develop when a theory is not presented properly. Since theories are hidden elements of communication, they can be both presented and interpreted with errors. In order to validate a theory during presentation, theory of communication is used as a guide. It is always good to use theory communication to validate a theory to make sure that theory is being presented rather than philosophy.

Since we are a theory dependable system and we must use theories to ensure our functionality, we must learn theories from others. What do we mean by learning theories from others; we mean that we learn them from other people. For instance, we learn them from church, school, temple, mosque etc. When theories are presented to us, without understanding of theory communication, it can very well be presented with errors. Both the person who presents the theory to us can present it with errors, and we can also interpret it with errors. In order to solve that problem when that happens, it is important for the person who present the theory to know more about theory communication, and the person who receive the theory to know more about theory communication as well. There are many instances where a theory can be interpreted by the person who presents the theory and the people who receive the theory. For instance, the person who presents the theory might present the theory in a way that, rather than presenting the theory to the people as a separate entity, that person presents the physical system to the students instead. For the students to believe in the theory instead, they might believe rather in the physical system. When those problems happen, they can only be solved by good presentation of the theory. The figure below shows the way a theory must be presented. It shows that the theory is a separate entity from the instructor and there is no physical connection between the student and the instructor. This diagram can be used as a guide to solve problems in presentation of theory.

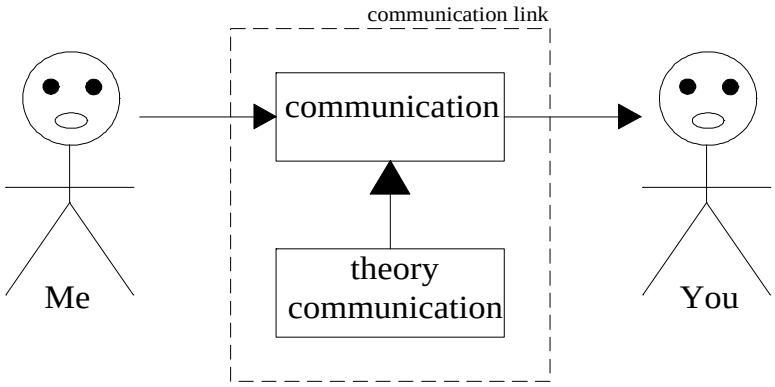


Cases	Explanation
Understanding presentation of theory in life	It is always good to present a theory as a separate entity. Since there is no physical connection between the person who is presenting the theory and the person who is receiving the theory, that theory must be presented in a form where the students should not think about that physical connection. Since we are a theory dependable system, we are not depend on a physical entity, but our utilization theory, therefore we should always view our theory as a separate entity from anybody. Since theory can easily be misinterpreted in life, it should always be presented properly. When problems happened in presentation of theory, it can only be solved by good presentation of theory. Since theory communication is important when presenting a theory, theory communication is also needed to be understood.
Proper presentation of theory by us	While theories are presented from people to people, however anybody who presents a theory should be considered as an instructor. By considering as an instructor, that person can be viewed on the diagram above where the person who receives the theory can be viewed as a student. By taking it this way, proper direction can be followed when presented a theory.
Proper presentation of theory to us	When theories are presented to us, it is very important for us to understand communication and ask questions about any theorem or instruction from that theory in order to validate what is being presented to us. The more questions we ask about a theory that is being presented to us, the more likely we are going to understand that theory. That will also help the person who is presenting that theory to understand it better. By doing that, we can solve problems related to errors in presentation of theory.

PS Related to Theory and Theory Communication Relationship

We are interfacing through a communication link that enables us to exchange information. Since theories are considered information themselves, we use communication to learn and present theory. From our understanding of communication and from the preceding statement, we know that theory depends on theory communication. Therefore we can see the relationship of theory and theory communication is very important. With that importance, any error in communication enables theories to be presented with errors. To prevent those errors it is very important to understand theory communication as a guide to theories.

We use communication in everything that we do. We have already learned that whenever we make an error in communication, it allows us as well to make error in what we do. Therefore, any communication problem is considered to be a problem in life. Given that we learn everything through communication, including theory, whenever we make error in communication, we also make error in the theory as well. That happens when the theory is presented to us; is also happens when the theory is being interpreted. There is no way a theory can be interpreted properly without understanding of communication. Since our parents' principles allow us to correct error in communication, when we have problems in communication for instance during theory presentation and theory interpretation, we should use those principles to correct those errors. We should also use those principles to prevent errors in communication. To better understand relationship of theory and theory communication in terms of problem solving, let's look at this diagram. It shows the communication link between "me" and "you". It also shows that this communication link is controlled by theory of communication. That means during a conversation between "me" and "you", if there is a problem in understanding, theory communication can be used to clarify that understanding. This relationship is very important, it enable us to verify theories that are being presented to us, it also helps us to understand theories as well. It is always good to ask questions and request for clarification during a conversation. This is basically what theory communication is about; and its relationship with theory. It enables theories to be presented without errors by controlling the communication link as shown below.



Cases	Explanation
Understanding theory of communication in life	It is very difficult to find something that we do in life without communication. With the importance of communication in life, it is very important to understand how to communicate properly. What do we mean by how to communicate properly, we mean understanding our parents' principles that enable us to communicate without errors? Since errors in communication gives rise to problems in life, in order to solve those problems, we must communicate properly; we must learn how to communicate properly. We are defined as a theory enable system. In order for us to function, we depend on theory. With that dependency, we must constantly learn and apply our parents' principles. Given that we use communication to learn those principles, the relationship of those principles and communication must be understood in order to solve problems in life.
Understanding the relationship between theory and theory communication	The relationship between theory and theory communication is very important; see the case above for more information.

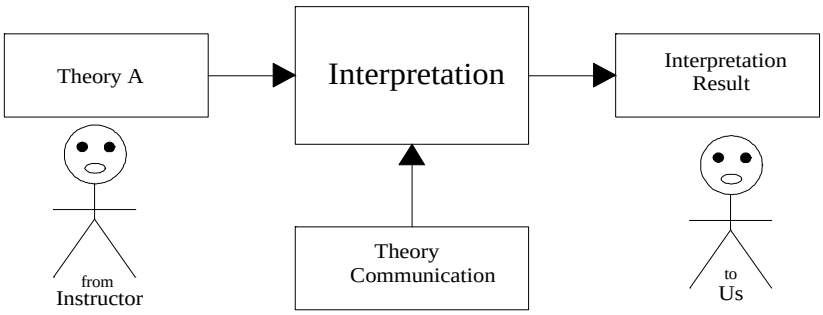
PS Related to Interpretation of Theory

Interpretation of theory is probably by far the most important topic to discuss in life. Since theories are hidden elements of communication, they can easily be misinterpreted. When theories are misinterpreted, they created all sort of problems. To prevent those problems and to allow the correction of the existing problems, it is very important for theories to be interpreted property or for us to learn how to interpret theories properly.

The process of misinterpreting a theory is very common in life. When theories are misinterpreted, they are also presented with errors. Since the presentation of theory needs interpretation of theory, when a theory is misinterpreted, it is also mispresented. In life, there are many aspects that lead to misinterpretation of a theory. First, theory communication may not be well understood in order to interpret the theory. Second, the theory may not be considered as an independent entity. Third, there are many other factors that may not have been taken into consideration during the interpretation of a theory, including application. It is always good to understand that there is no way a theory can be interpreted properly without utilization. How can a theory be interpreted properly without application? Of course it is impossible; in order to derive more from a theory, it must be applied. We have learned that from expandability of theory. How can we make a theory expandable without utilization? It is not possible; therefore application of a theory is very important in order to interpret a theory. Since a theory is an independent entity, during interpretation it is very important to consider that. That will

help the interpretation of a theory. Since theory communication enables the interpretation of a theory, it must always be used as a way to validate any interpretation. For instance, many questions can be asked about the interpretation of a theory during presentation; see exercise 70 and 70′ for more information.

The diagram below shows the process of interpreting a theory. It shows that a theory is being interpreted and presented by an instructor to us. It also shows that theory communication is use to validate the interpretation. We can see that theory communication controls the interpretation. Once we receive the interpretation, without our understanding of theory communication, we can not verify the interpretation. If there is a problem in the interpretation, with our understanding of theory communication, we can verify that very quickly. The way to look at it, whenever problems are caused by misinterpretation of theory, understanding theory communication is very important to solve that problem.



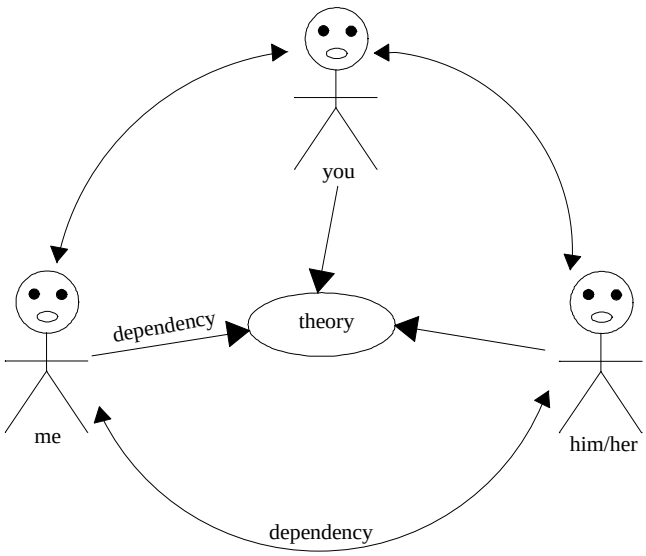
Cases	Explanation
Interpretation of theory in life	Whenever there is a problem that is caused by misinterpretation of theory, in order to solve this problem, the theory must be interpreted properly.
Interpretation of theory by us	In order for a theory to be interpreted properly, the followings are very important • Theory communication must be understood • Theory communication must also be applied • The theory must be applied; the theory cannot be interpreted without using the theory • The theory must be taken as an independent entity • The theory must be presented without error; misinterpretation of a theory causes a theory to be presented with errors • Theory communication must always be used to verify any interpretation • Any negative feeling about that theory from a person who tries to interpret that theory should be removed. Negative feeling about a theory enables a person who tries to interpret that theory to interpret it negatively. Keep in mind the

	theory is still independent. • Theory education is also need to be understood By applying the outlines above, we can solve problems in life that are caused by misinterpretation of theory
Interpretation of theory to us	Whenever a theory presented to us, in order for us to interpret that theory properly, see interpretation of theory by us.

PS Related to Independency of Theory

A theory is an independent entity. Disregard any misinterpretation, mispresentation, misapplication etc. a theory does not change. All those problems do not affect the status of a given theory. Because of theory misinterpretation, a lot of times when problems happen in life, some people tend to think that the theory is the one that causes it. That is not possible, since the theory is an independent entity; also the misinterpretation of a theory does not have any effect on that theory. It is always good to understand that.

Our parents' principles are very independent. Although we depend on each other for functionality, however we must all apply our parents' principles independently to ensure our functionality. That makes a lot of sense, since life depends on each of us to apply our theory, we cannot depend on each other to apply the theory. Given that the theory is independent to each of us, we must not look each other in order to apply the theory. When we do that, we simply disregard the independency of the theory. We also disregard its importance. In order for us to live, each of us needs to accomplish some functions; with that, it is very easy to see why our parents' principles are independent. When we disregard the independency of our parents' principles, we simply create problems in live that can only be solved when we recognize their independency. This diagram shows that, although we depend on each other, but depend on the theory while the theory is an independent entity that should be applied individually without one looking at another.

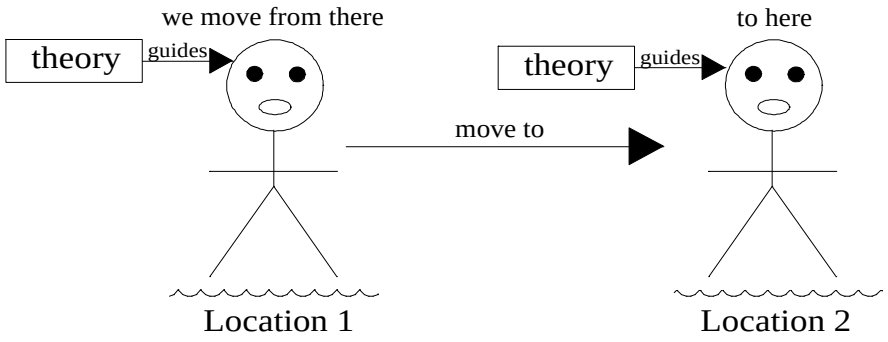


Cases	Explanation
Understanding independency of theory in life	From theory and system relationship, it shows that while we depend on the theory, the theory is independent. It also shows that we depend on the theory, but life depends on us. When the independency between us and our parents' principles is no longer applied, we simply create problems in life. Those problems can only be solved when we apply the independency of theory relationship.
Regarding independency of theory by us	We should always regard the independency relationship in order to solve problems in life. For instance, during a theory presentation and interpretation, we should always view the theory as an independent entity. Since our lives depend on us and we depend on the theory, our lives also depend on the theory. This relationship must always be used to solve problems that are created by independency of theory.
Regarding independency of theory to us	Whenever a theory presented to us, we should take it independently; see the case above for more information.

PS Related to Portability of Theory

A theory is portable when it is attached or can be attached to a portable system. A mobile system can be moved from location to location. With a portable theory, when the system is moved from places to places, that theory can be used at any location where the system is present. This is the relationship of a mobile system with its theory.

Our physical system is very mobile since we move from places to places, cities to cities, countries to countries etc. Since when we move from locations to locations we are still functioned, it makes sense for us to continue apply our parents' principles. Given that our parent's principles are very portable, there is no problem of utilize them when we change locations. When we disregard the portability of our parents' principles, we develop problems in life. When we move to new places and we don't utilize our parents, principles, we simply create problems in life. Those problems can only be solved when we remember to utilize our parents' principles to every place we go to. To better understand how problems can be solved or prevented when we move from places to places; let's take a look at the diagram below. It shows that our parents' principles guide us. With the portability of those principles, when we move to a new location, we still remember to apply them. The disregarding of portability of theory problems can only be solved by applying the theory everywhere we go.



Cases	Explanation
Understanding portability of theory in life	Portability of theory is very important, since many, many problems in life have been caused by disregarding portability of theory. It is very important for us to take portability of theory into consideration. There are many instances when people move from locations to locations and forget to apply our parent's principles to the new locations they move to. This always leads to a lot of problems. Those problems could have been avoided if our parent's principles were applied in the new places. When problems are caused by portability of theory, it is very important to solve them very quickly. Whenever those problem stay without solving, they will generate more problems; see problem expandability for more information. When

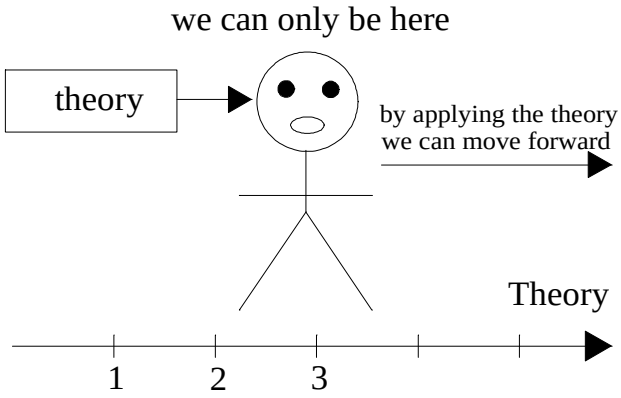
	portability of theory seems to be disregard, it is very important to be aware of that and take it into quick consideration by applying our parents' principles promptly.
Regarding portability of theory by a system	Since we are still functioning when we move from places to places, we must always apply our utilization theory to the new places we move to. It is very important for us to understand that. We still want to live in the new location, so we want to use our parents' principles to enable us to live. When we have problems in the new location we move to, we must also use our parents' principles to solve those problems.
Regarding portability of theory to a system	For portability of theory to a system, see portability of theory in life.

PS Related to Expandability of Theory

From expandability of theory characteristic, we have learned that a lot of principles can be derived from a theory when it is being applied. The fact that we are a theory dependable system and we have intelligence, both of them combined enable us to do new things according to the previous things we have learned. The way to look at it, the theory gives us ideas to do new things, while the intelligence gives us the ability to apply those ideas. In this case, all ideas are derived from the theory. Since the fundamental of a theory is unique to itself, there is no separation of those ideas from the theory; see exercise 33, 34, 35, 49 and 49′ for more information. We can conclude that those ideas are part of the theory, since we already said they derived from the theory, those sentences are equal.

Problems happen in life, when our theory is disregarded and replaced with philosophies. Since our characteristic is constant and we cannot change it, in order to do things, we still rely on ideas with our intelligence. Now that the intelligence needs ideas to work on and our parent's principles are not there to guide it, so what happen, it relies on philosophies instead. Since philosophies do not have any relationship with our system, then that develop problems. Since philosophies do not have any relation to our system, when our intelligence depends on them, we simply develop problems. While our intelligence allows us to expand a theory through application, it also allows us to expand a negative philosophy through application as well. Therefore, any negative philosophy can quickly expand to create more new negative philosophies. This process does not have any limit. Whenever a negative philosophy presents in our life, the way to solve that problem is to get rid of it very quickly; by not doing so, the problems it create will be expanded as well. Whenever we have a negative philosophy in life that is being expanded, it makes sense for us to get rid off it very quickly in order to solve the problem and prevent it from spreading. The diagram below show how a theory can be expanded positively to get

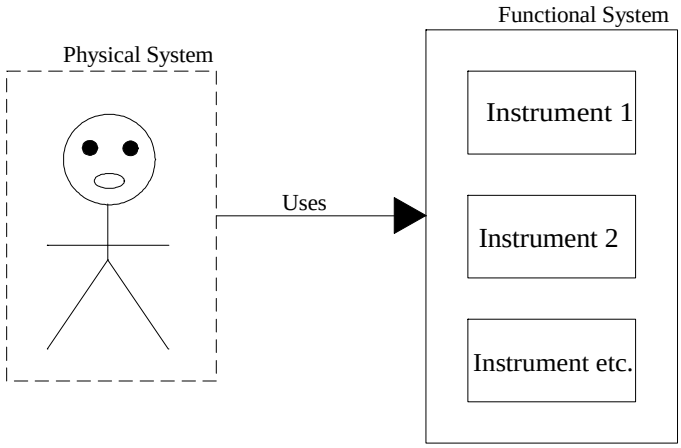
more new principles from it. By replaces negative philosophies with our parents' principles, we can make progress positively as shown below.



Cases	Explanation
Understanding expandability of theory in life	A theory is only expandable through application. When we apply our parents' principles they enable us to make progress positively. We cannot make any progress through them without applying them. Whenever a negative philosophy presents in life, it makes sense to get rid off it very quickly to prevent it from spreading. Since our intelligence depends on theory to function, by replacing the theory with negative philosophies, there is no limit on the negative scale it cannot be reached. So it is very important to replace negative philosophies with our parent's principles.
Understanding expandability of theory by us	Our negative philosophies can only stop spreading when we replace them by our parent's principles. When we do that, we can make progress positively. Since our utilization theory is very expandable, when we apply them, we can derive new principles to solve a lot of problems.
Regarding expandability of theory to life	For expandability o theory to life, see expandability of theory in live above.

PS Related to Application of Instruments

An instrument which is a part of a system is always applied to enable the functionality of that system. Whenever that function does not hold, problems arise in that system. In life, we use our hands, fingers, feet etc. to enable us to live. We also use our attached instruments with non attached instruments to enable us to live as well. What do we mean by non attached instruments? We mean non natural instruments. For instance we drive a car with our hands to go to work; we use a bicycle with our hands; we use a spoon with our hands; we use a computer with our hands etc. Whenever our attached instruments are used improperly, we simply create problems in life. That also happens when we improper use our attached instruments with non attached instruments as well. Since life is an associative system, the function of the instruments in the attached system is equivalent to the distant system. Therefore, whenever both the attached instruments and the non attached instruments are improperly used to someone or against someone, we simply create problems in life. In order to solve those problems, we must always use our attached instruments to our benefits. When we use our attached and non attached instruments to enable us to live, when we use our attached and non-attached instruments to enable others to live, we both solve and prevent problems in life. This figure shows the functions of instruments in life are to enable the functionality of the physical system. It shows that the physical system use instruments to function.

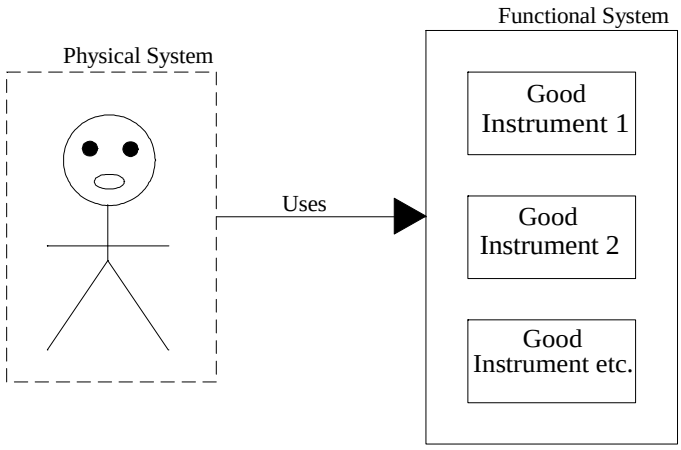


Cases	Explanation
Application of instruments in life	The functions of instruments in life are to enables our functionality. We use our attached instruments to enable our functionality. We also use our attached instruments with non attached instruments together to enable our functionality. When we apply those instruments for our benefit, we solve problems in life.
Application of instruments by us	When we use our instruments properly, we solve problems in life. For instance, when we use our

	hands to enable us to live, we simply solve problems in life. We also prevent problems as well.
Application of instruments against us	Whenever we use our attached instruments against others, we simply create problems. When we use our attached instruments together with non attached instruments against other, we simply create problems. We solve those problems, when we use both our attached and non attached instruments to enable both our lives and other people lives.

PS Related to Utilization of Good Instruments

From the problem development section, we have defined a bad instrument as an instrument that can only be used to enable life to function abnormal. Since a system is made of instrument, and the instrument of a system enable the functionality of that system. We can say that any instrument that attached to a system is considered to be good for that system. When we talk about bad instruments in life, we talk about non attached instrument. We know that, all non attached instruments are non natural instruments. Our attached instruments are good instruments. We use them for the benefit of our lives. Therefore, we should only use good instruments with them. Whenever we use bad instruments with our good instruments, we simply created problems. Those problems can only be solved or prevented when we use good instruments with our attached good instruments. Since life is an associative system, the application of our good instruments to enable our functionality is also equivalent to enable others functionality. The figure below shows that the physical system uses good instruments in the functional system. In other words, we simply use good instruments to enable us to live.



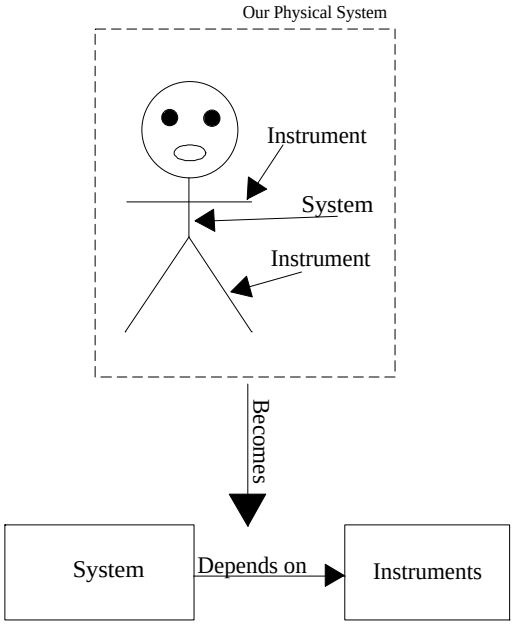
Cases	Explanation

Usage of good instruments in life	We use good instruments to solve problems in life that are caused by the usage of bad instruments.
Usage of good instruments by us	When we use good instruments to help us to live, we solve problems in life. We also solve problems when we use them to enable others to live.
Usage of good instruments to live	Good instruments can only be used in life to enables us to live. Good instruments cannot be used against others. When good instruments are use in life to enable our functionality, we solve problems in life.

PS Related to Instrument and System Relationship

The function of an instrument in a system is to ensure the functionality of that system. For instance, the relationship of a car and its doors, a computer and its keyboard, a house and its windows etc; all of those are instruments of their respective systems or instruments that are parts of other instruments. They are all used to enable the functionalities of the systems they belong to. Whenever those instruments are not use to ensure the functionalities of the systems they belong to, problems arise in those systems. The relationship of instrument and system is very important.

In life, the relationship of the physical system and its instruments is very important. For instance, we use our hands, fingers, feet and more to enable our functionality. Problems happened in life whenever we use those instruments improperly. Since life is an associative system, the usage of our instruments for us is equivalent to the usage of our instruments for others. Problems arise whenever that relationship does not hold. To solve those problems, we must learn and use our instruments properly. Using them properly will also prevent us from getting problems. The diagram below shows the relationship of our system and our instruments. It shows that we depend on our instruments to function.

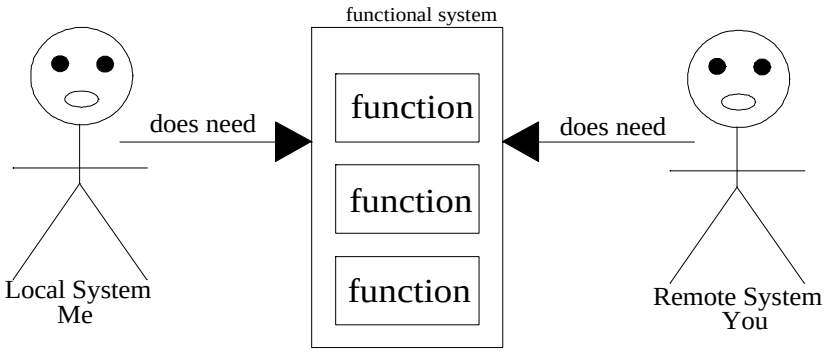


Cases	Explanation
Understanding instrument and system relationship in life	The purpose of an instrument in the attached or local system is to ensure the functionality of that system. In order for us to live, we need other people. Recall the grocery store example, where many people work to ensure other functionality. With that, we can see that other people instruments are also used to ensure our functionality. Problems happen in life whenever those instruments are not used to enable us to live. To solve those problems, we must learn and use our instruments properly.
Instrument and system relationship by us	We must use our instruments properly to enable us to live. We start solving problems in life when we use them for the benefit of life.
Instrument and system relationship against a system	When we use our attached instruments against other people, we simply create problems in life. When we use them against ourselves, we also create problems in life. Using them against others is the same as using them against ourselves. To solve those problems, we must learn and use our attached instruments properly.

PS Related to Function and System Relationship

We have defined our physical system as a collection of instruments, while the functional system which is life has defined as a collection of functions. The function of our physical

system is to live, while the functional system enables our physical system to be active. For a better understanding, we can also say that the function of the physical system is equivalent to the function of the functional system. To better understand function and system relationship related to our physical system, it makes sense for us to look at the function of the instruments that are attached to our physical system. We know that the function of those instruments is to enable us to live. With this relationship, we can say that this function is equivalent to the function of the functional system. From the problem development section, we have learned that whenever we disregard the importance of the functions life are made up, we simply create problems in life. In order to solve those problems, we must give importance to those functions. We should always considered those functions are important; see exercise 51, 51′ for more information. The diagram below shows that the relationship of the physical system and the functional system always holds.

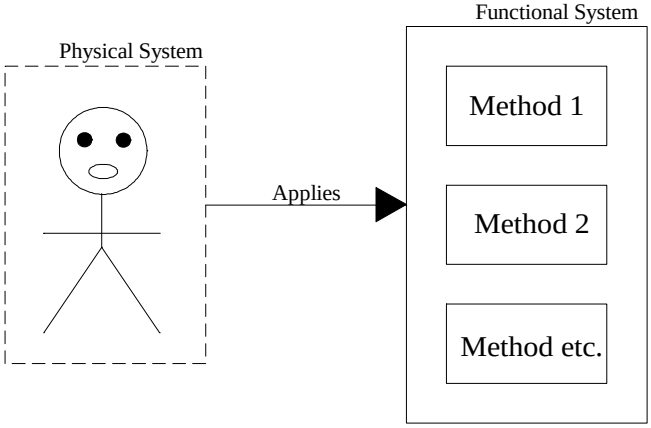


Cases	Explanation
Understanding function and system relationship in life	Life is a collection of functions. All those functions are important in order to ensure the overall system functionality. Since life is an associative system, beside “me” and “you”, this association also extends to the nature. We all should understand that, because I and you cannot live by ourselves without other entities that make up life. This relationship is very important for us to understand. Whenever we disregard this relationship, we simply create problems in life. We can only solve those problems when we regard those functions are important. By giving those functions importance, we also solve problems in life. See exercise 51, 51′ and 71, 72 for more information.
Regarding function and system relationship by us	We should always consider the relationship of the functions that make up the functional system and ourselves is very important. Since the functional system depends on us to apply our parent’s principles, whenever we don’t apply our parent’s principles, we simply disregard the importance of those functions. We also disregard the relationship

	between life and ourselves. When we do that, we simply create problems. To solve those problems, we should always regard this relationship as important and apply our parent's principles to hold it.
Regard function and system relationship to us	See function and system relationship in life

PS Related to Application of Method

We have learned a lot about methods. We execute a method for everything that we do. We also know that a method can be viewed as a collection of instructions. For instance, we apply methods everyday at work. We also apply method at home and other places. Whenever we make mistakes in what we do, we simply make mistakes in the method that we execute. If we can go back step by step, we could have seen that we probably make the mistakes in one or more of the instructions in that method. Since methods are part of our everyday lives, it makes sense for us to apply them properly. Whenever we apply methods improperly, we simply create problems. Those problems can only be solved when we learn and apply methods properly. This diagram shows that we live by applying methods.

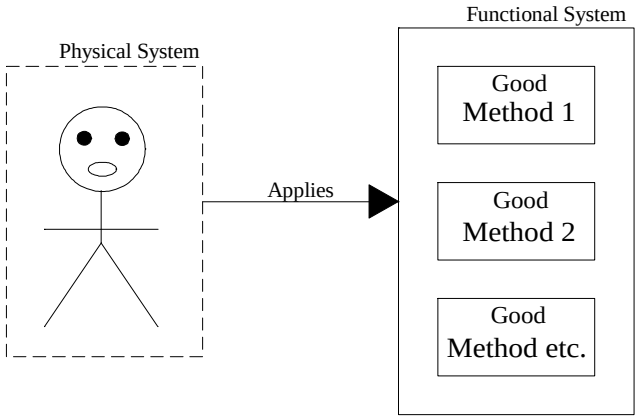


Cases	Explanation
Application of methods in life	We live by applying methods. We apply methods everyday in our lives. Whenever we make a mistake in life, we simply make the mistake in the method that we apply. To solve those problems, we must learn and apply methods properly.

Application of methods by us	We must learn and apply methods properly to enable us to solve problems and prevent problems in life.
Application of methods to us or against us	The associative characteristic of life enables us to apply methods in life to enable our functionality. Since our life depends on each other, only good methods can apply to us or to each other; see application of good method.

PS Related to Application of Good Method

Since applying method is what we do for living, and our lives depend on what methods we apply and how we apply methods, it makes sense for us to apply only good method to enable us to live. Whenever we apply bad methods, we simply develop problems in life. We solve those problems when we start applying good methods. This diagram shows that we apply good method to enable us to live.

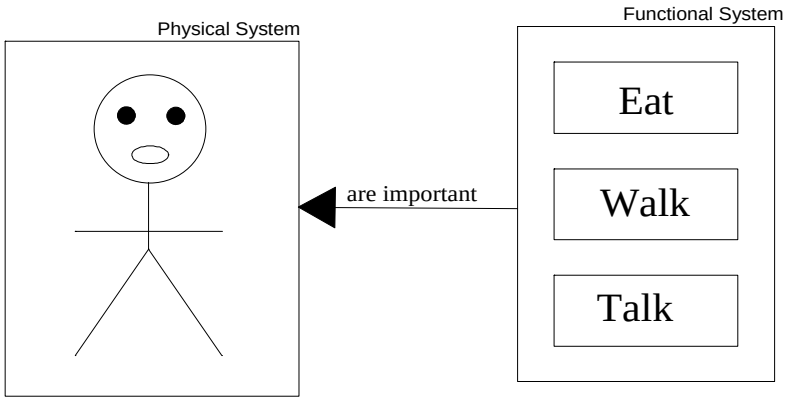


Cases	Explanation
Applying good method in life	When we apply good methods in life, we start solving problems that are caused by applying bad methods. It is always important to apply good methods in life.

PS Related to Method and System Relationship

Given that the physical system applies method to ensure its functionality, we can see that applying method is very important for us. Since our lives depend on how and what method we apply, we can see that there is a relationship between our system and the

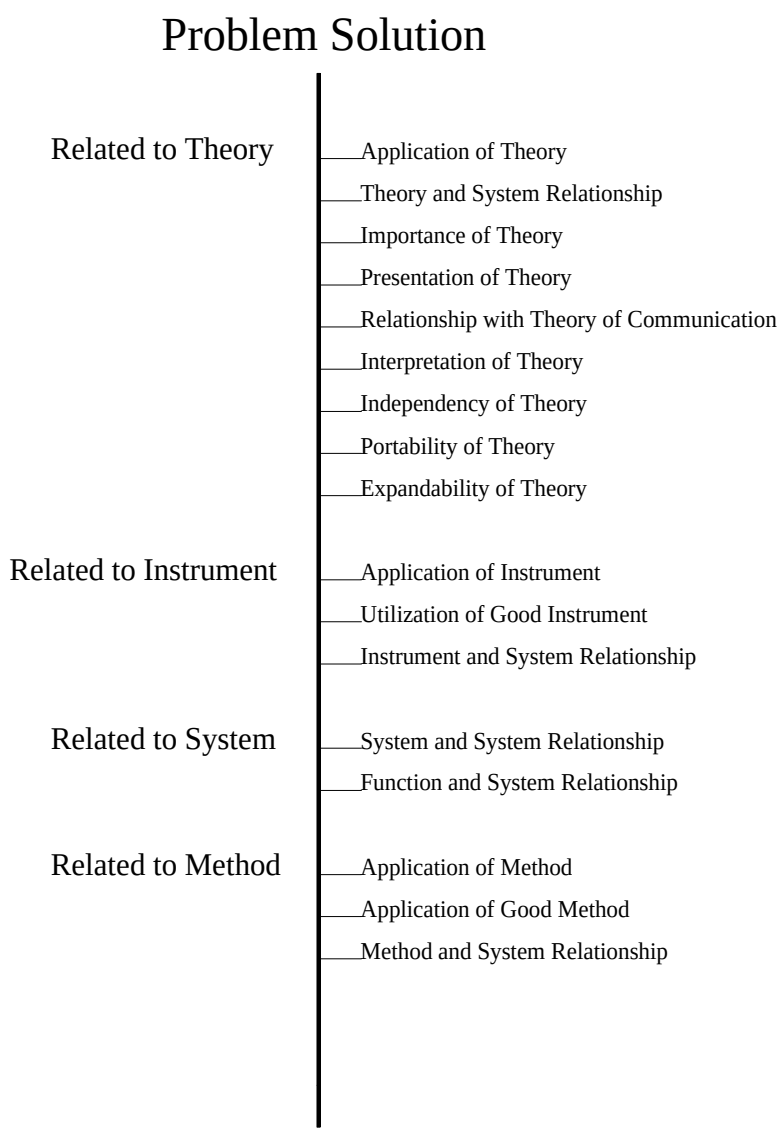
method we apply. For instance, in order for us to live, we must eat, walk and talk as shown by the figure below. We can also say those methods are associated with our lives and are very important. When we no longer view the importance of method and system relationship in life, we simply develop problems. Those problems can only be solved when we start to understand the importance of methods that we use in life.

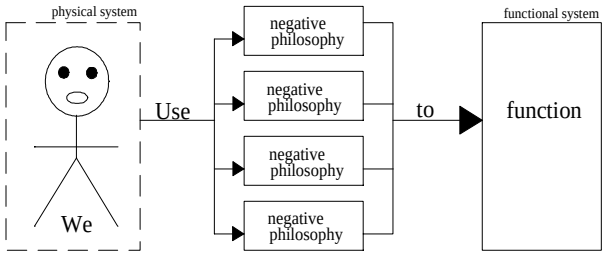
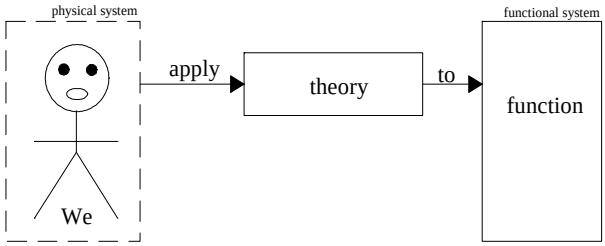
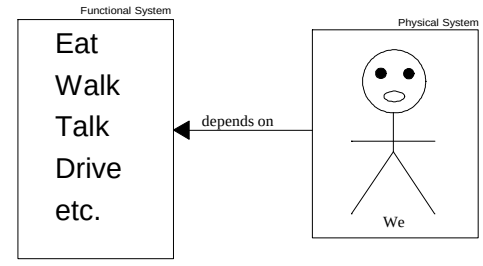
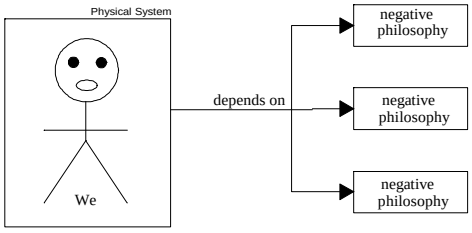
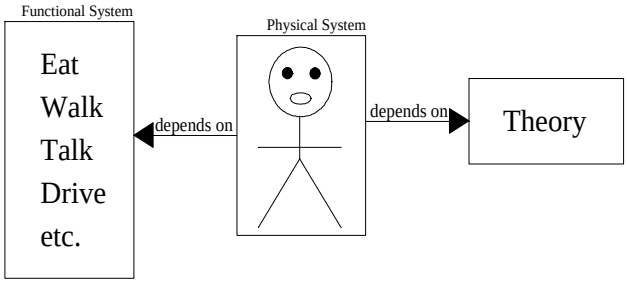
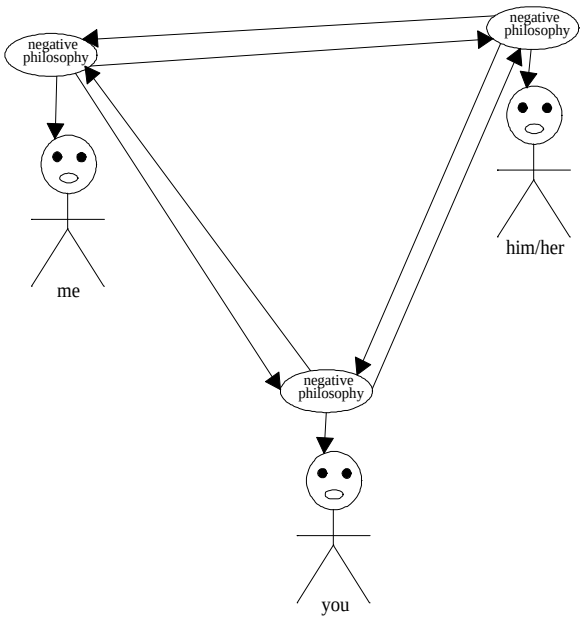
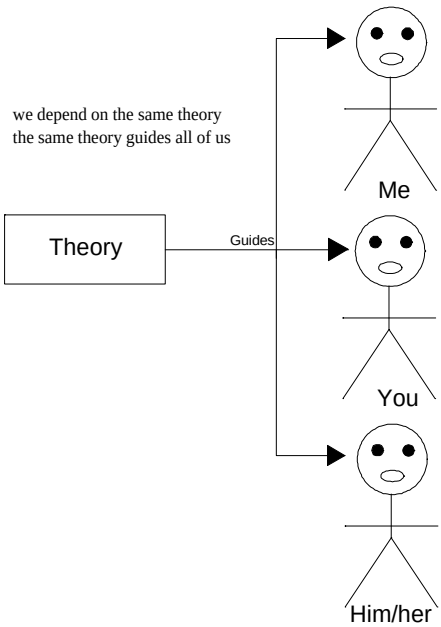


Cases	Explanation
Understanding method and system relationship in life	Understanding method and system relationship in life is very important. Since we live by applying methods, by disregarding that relationship, we may also disregard methods that we apply. By disregarding that relationship, we may pay little attention to methods that we apply in life. When we do that, we simply create problems. We can solve those problems when we start to understand method and system relationship in life.
Regarding method and system relationship to us	Whenever we disregard the relationship of what we do in life and life by itself, we simply create problems in life. To solve those problems, we should always look at what we do in life related to life itself.

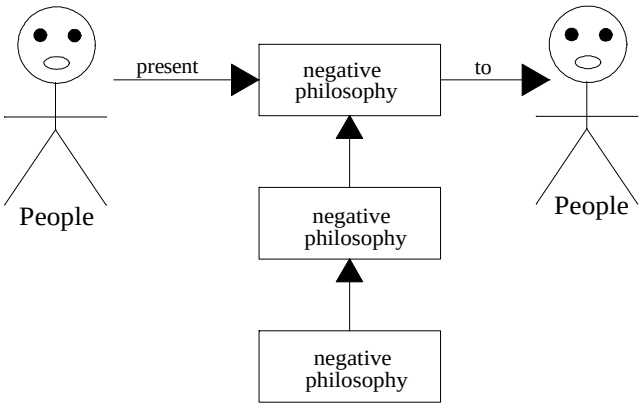
Problem Solution Chart

From this chapter, we have learned about problem definition and identification. Right now, we should all know what a problem is. We also know how to identify problems. With our ability to analyze problems, we have learned how they develop and provide a possible solution for each case. The solution chart below shows a review of the problem solution section. From the following pages after this chart, there are two tables. The first one shows a side by site problem development and solution comparison, while the second one shows a side by side problem and solution comparison with an how to column that shows how each solution cases can be implemented.

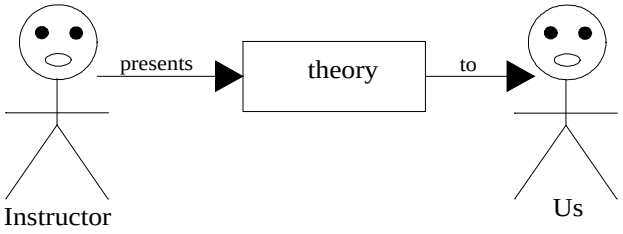


Problem Development	Solution Process
Disregard Application of Theory	**Regard Application of Theory**
	
Disregard Theory and System Relationship	**Apply Theory and System Relationship**
 	
Disregard Importance of Theory	**Regard Importance of Theory**
	

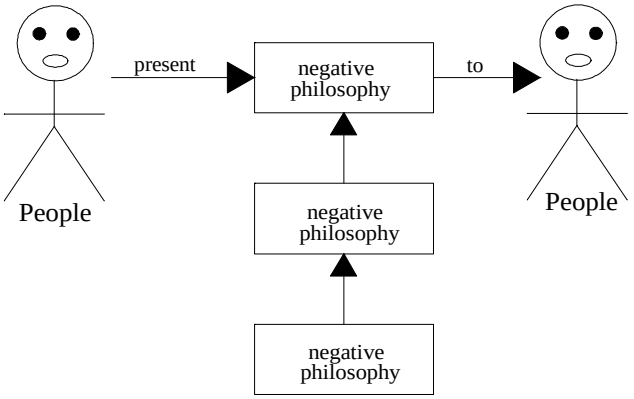
Error in Presentation of Theory



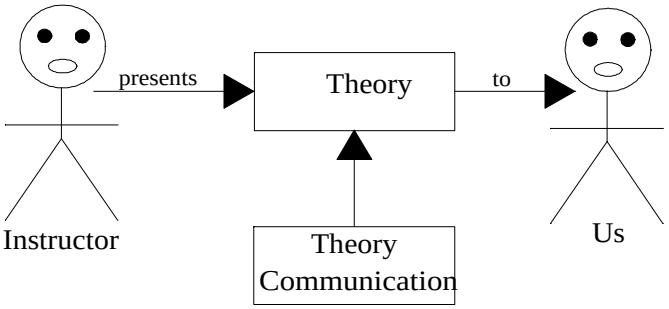
Proper Presentation of Theory



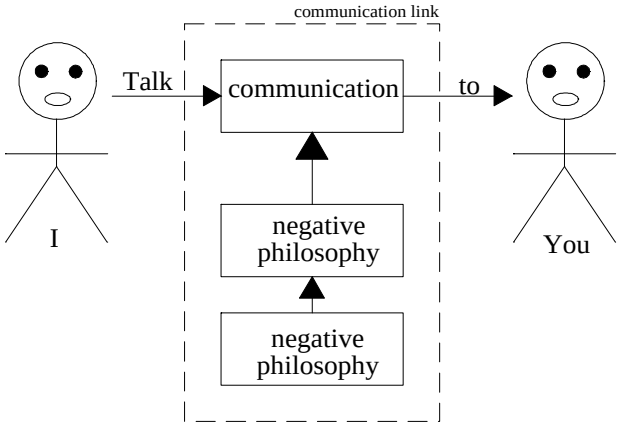
Error in Presentation of Theory



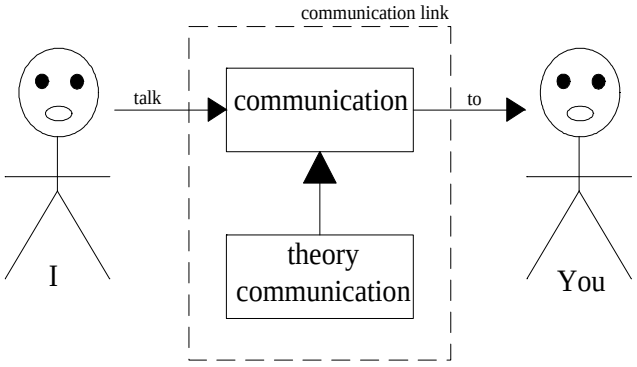
Proper Presentation of Theory



Disregard Theory Communication Relationship

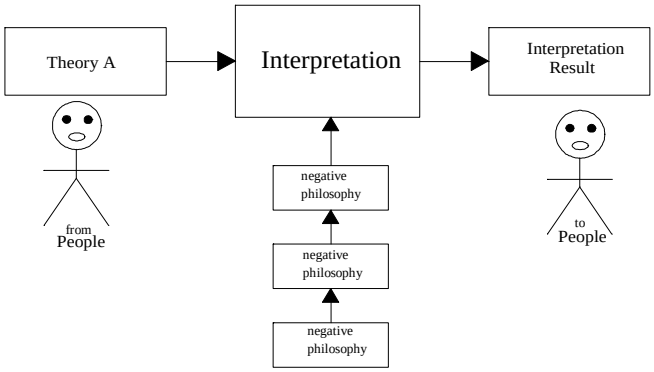


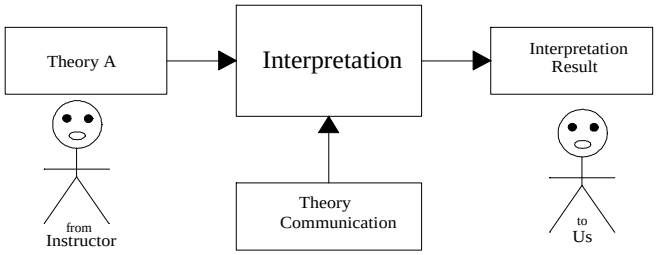
Apply Theory Communication Relationship



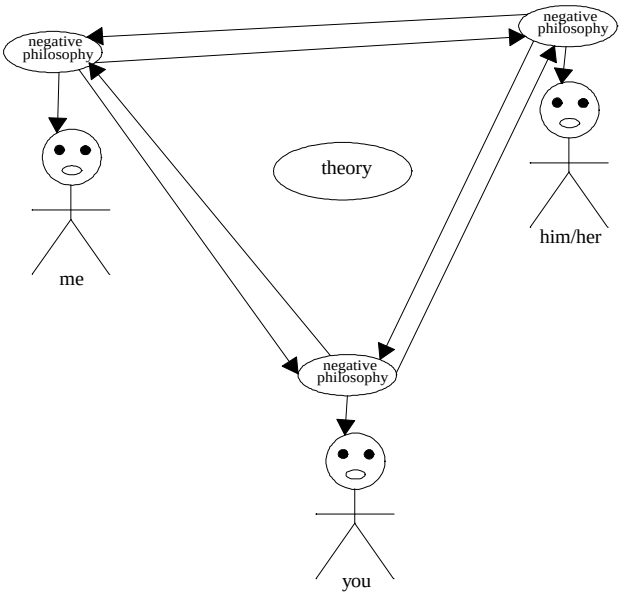
Error in Interpretation of Theory

Good Interpretation of Theory

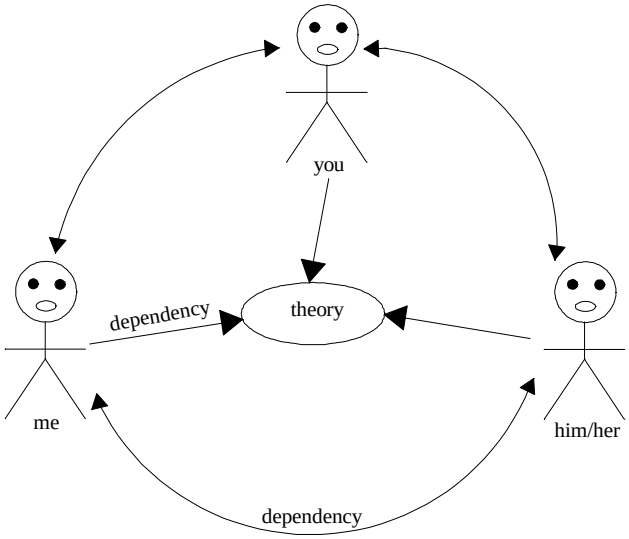




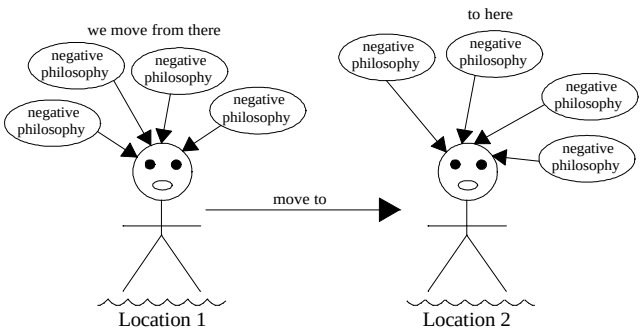
Disregard Independency of Theory



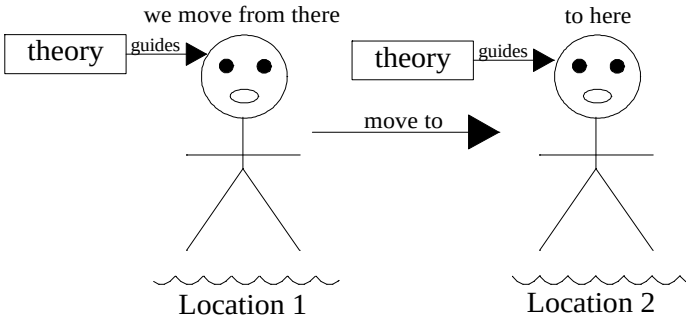
Apply Independency of Theory



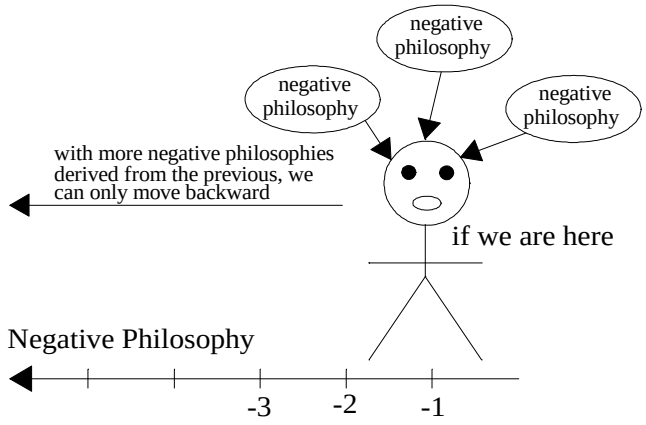
Disregard Portability of Theory

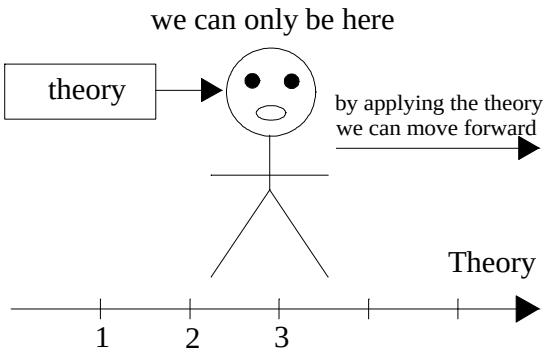


Apply Portability of Theory

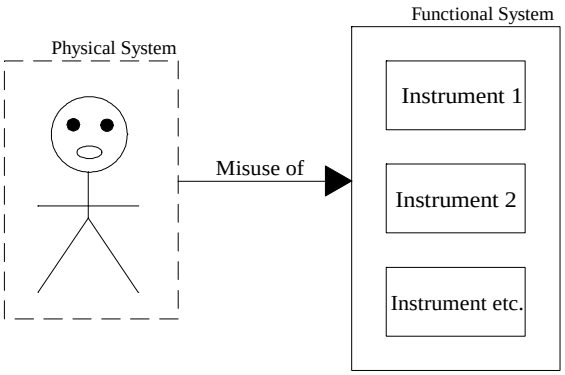


Related to Expandability of Philosophy | **Expandability of Theory Through Application**

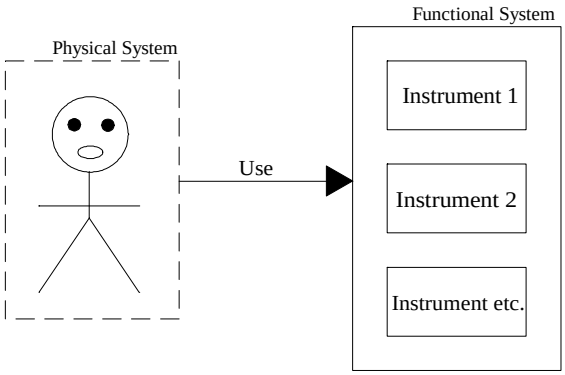




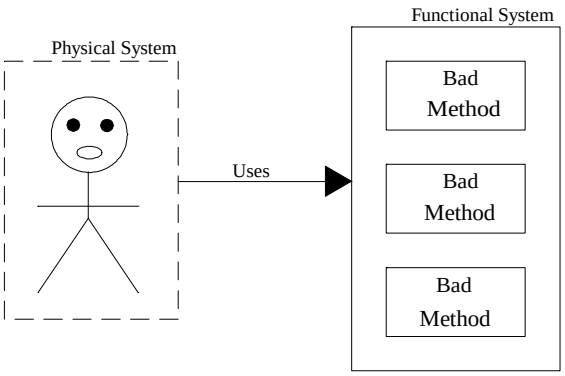
Misused of Instruments



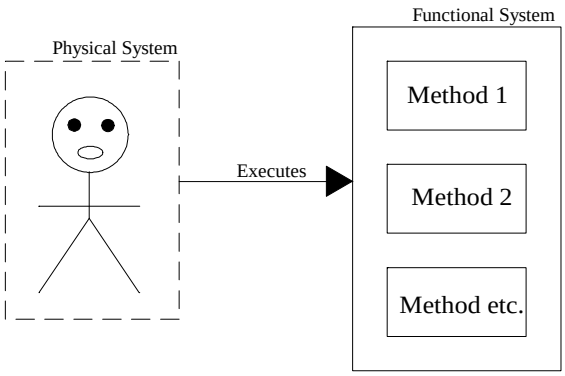
Good Use of Instruments



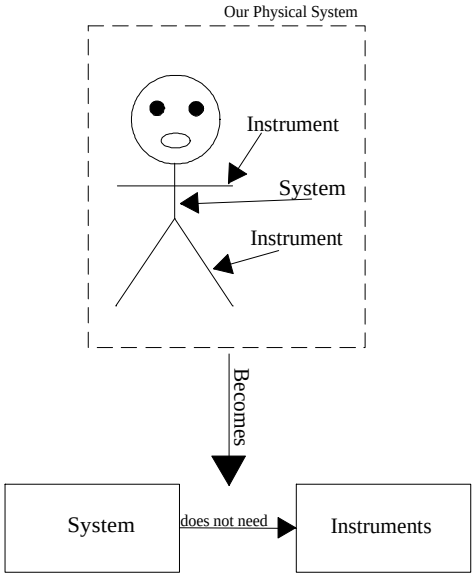
Utilization of Bad Methods



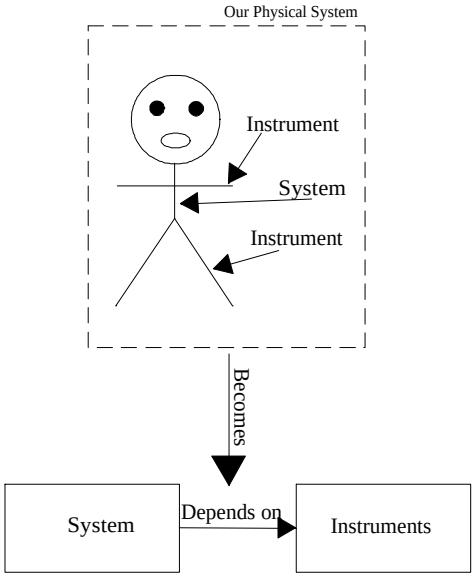
Utilization of Good Methods



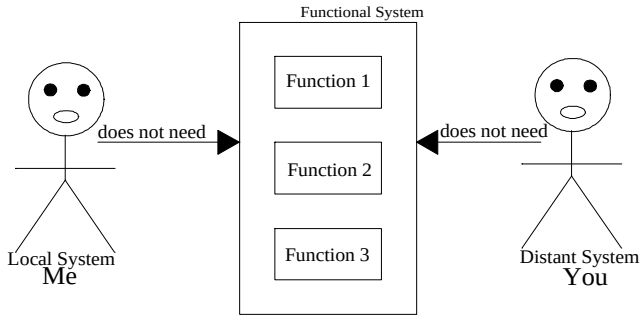
Disregard Instrument and System Relationship | **Apply Instrument and System Relationship**



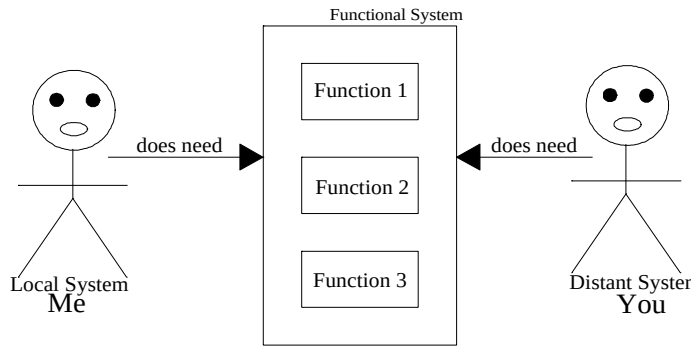
Disregard Function and System Relationship



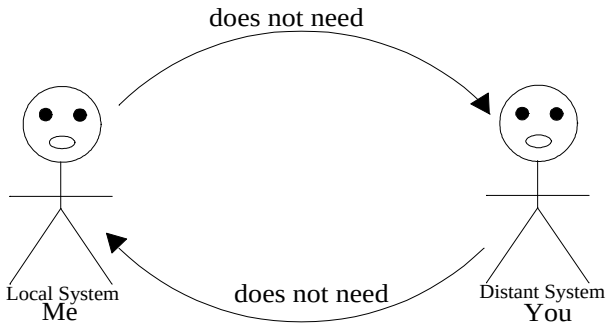
Apply Function and System Relationship



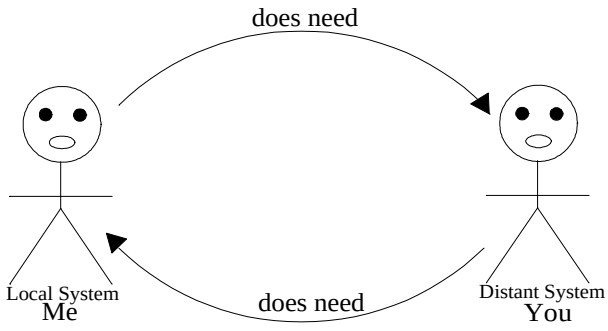
Disregard System and System Relationship



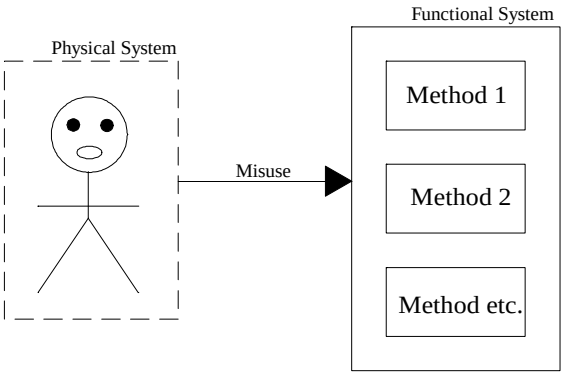
Apply System and System Relationship

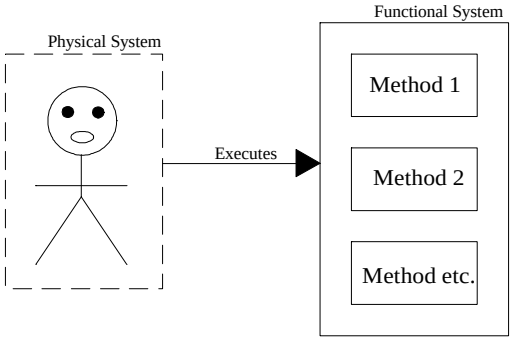


Misuse of Methods

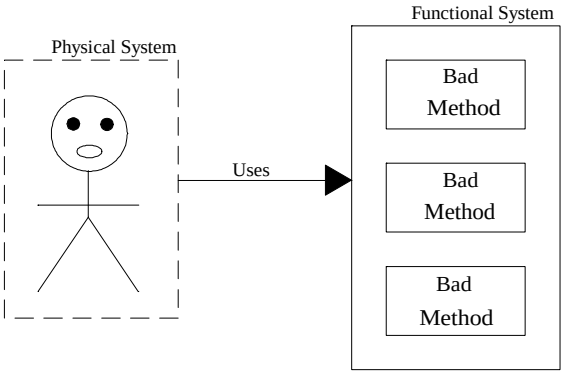


Good Usage of Methods

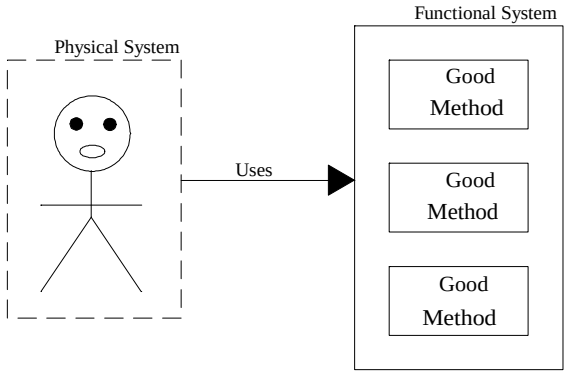




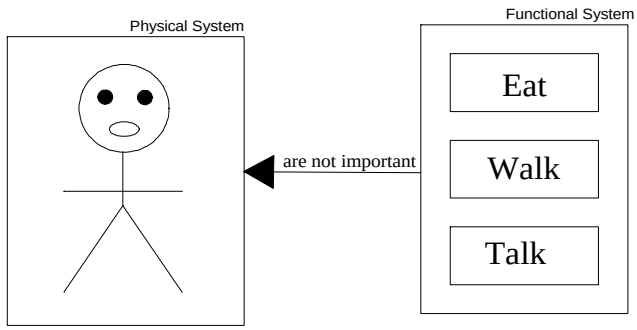
Application of Bad Methods



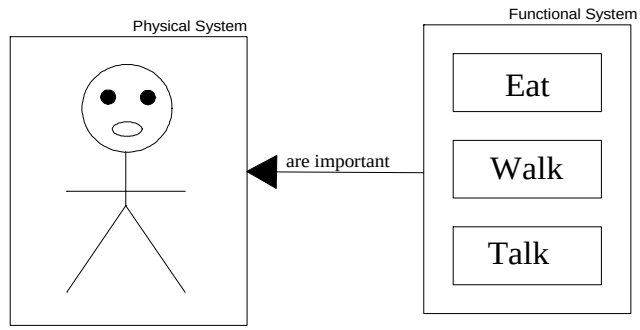
Application of Good Methods



Disregard Method and System Relationship



Apply Method and System Relationship



Problem	Solution	How To
Disregarding application of theory	Regarding application of theory	• Understanding how to apply theory • Learn how to apply theory
Misinterpretation of theory	Proper interpretation of theory	• Understanding theory of communication • Learn how to communicate properly • Learn how to interpret theory • Learn how to apply theory
Error in presentation of theory; improper presentation of theory	Proper presentation of theory	• Learn how to present theory • Learn how to understand theory • Learn how to communicate • Learn how to apply theory • Learn theory communication • Learn theory education
Disregard importance of theory	Regard importance of theory	• Learn the theory • Apply the theory
Disregard relationship of theory and theory of communication	Understanding the relationship of theory and theory of communication; apply theory communication	• Learn theory of communication • Apply theory of communication • Learn the relationship of theory and theory of communication
Misinterpretation of theory	Proper interpretation of theory	• Learn how to interpret theory; wrong, there is not such as learn how to interpret theory; see the next outlines • Learn theory of communication • Apply theory of communication • Learn and use the theory in application, then the theory can be well interpreted; this is the process of interpreting a theory
Disregard portability of theory	Apply portability of theory	• Implement portability of theory • Learn theory and theory of communication • Apply the theory and theory of communication everywhere • Promote portability of theory
Disregard theory and system relationship	Apply theory and system relationship	• Learn theory and system relationship • Apply theory and system relationship • Learn and apply theory of communication
Disregard independency of theory	Apply independency of theory	• See presentation of theory above • See interpretation of theory above • Learn the theory and theory of communication

		• Apply theory and system relationship
Expandability of philosophy	Drop the philosophy and apply the theory	• Drop the philosophy • Learn and apply the theory • Then the theory can be expandable through application
Misapplication of instruments	Good application of instruments	• Apply instruments properly • Learn how to apply instruments • Learn how to communicate • Learn system and system relationship • Learn theory and system relationship • Learn instrument and system relationship
Misuse of good instruments	Good usage of good instruments	• Learn how to use instrument properly • Learn how to communicate • Learn instrument and system relationship • Learn system and system relationship • Learn theory and system relationship
Disregard instrument and system relationship	Apply instrument and system relationship	• Learn system and system relationship • Learn instrument and system relationship • Apply instrument and system relationship • Apply system and system relationship • Apply theory and system relationship
Disregard system and system relationship	Apply system and system relationship	• Apply system and system relationship • Apply theory and system relationship • Apply instrument and system relationship • Learn about importance of theory • Learn and apply portability of theory • See expandability of theory
Disregard function and system relationship	Apply function and system relationship	• Learn function and system relationship • Apply function and system relationship • Learn system and system relationship • Apply system and system relationship • Learn instrument and system relationship • Apply instrument and system relationship • See portability of theory
Misapplication of method	Good application of	• Learn instrument and system

	method	relationship • Apply instrument and system relationship • Learn system and system relationship • Apply system and system relationship • See portability of theory • See expandability of theory
Application of bad methods	Application of good methods	• Learn method and system relationship • Learn instruments and system relationship • Learn system and system relationship • See portability of theory • Apply system and system relationship • Apply instrument and system relationship
Disregard method and system relationship	Apply method and system relationship	• Learn method and system relationship • Apply method and system relationship • Learn instrument and system relationship • Apply instrument and system relationship • Learn system and system relationship • Apply system and system relationship • See portability of theory • See expandability of theory

Chapter 5

Understanding Characteristic of Information

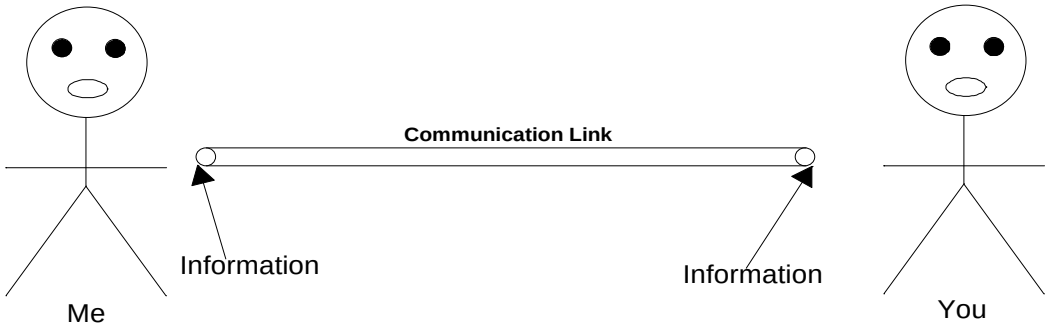
Introduction

There is no such as communication without information. Information is presented to all forms of communication including oral, written, image, graphic, video, etc. Whenever information is presented to us, there is a visual aspect of that information that comes to our mind that enables us to understand that information. In this case, we may think a lot about that information or have some questions about it. Sometime we keep those questions for ourselves, some other times we may ask for more details about that information to enable us to understand it better. When all our questions are answered, that enables us to satisfy with that information. At the same time, when those questions are left unanswered the degree of satisfaction of the information is not accomplished until they are answered. To enable the degree of satisfaction of information to be accomplished, it is always good for information to be always presented in a form where it could be understood by everybody. That means present information in a manner to satisfy everybody.

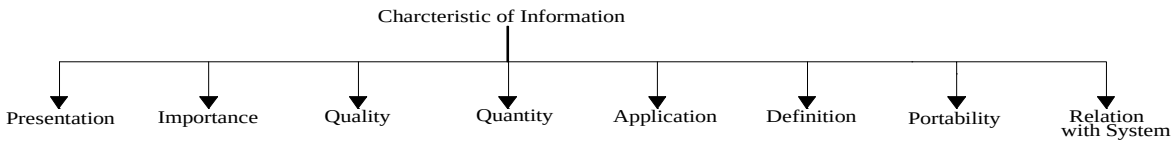
In this chapter, we are going to learn some techniques that enable us to understand and present information. Given that we have already introduced to many techniques that enable us to communicate better, we are going to take them into consideration when it comes to information.

Understanding Information

We are a communication enabled system and we are connected through a communication link that enables us to exchange information. The way to look at it, we interface through a communication link that carries information. The diagram below shows the communication link between "me": and "you" and what flows inside the link, is information. For instance, in an oral communication, "I" communicate with "you", where what "you" say to "me" and what "I" say to "you" are information; basically, the words we exchanges are information.



Now that we know what information is, so how do we extend the definition of the information given above? We know information flows inside the interface above, but is everything that flows inside the interface considered to be information? Well, to better understand that, we have to look at our characteristic. From our constant characteristic, we know that we are both a communication enabled system; we are also a theory dependable system. From what we know about theory, we also know that they are considered to be information. By being both communication enabled and theory dependable, we are able to learn theory. Our relationship with theory also enables us to learn and apply theories that we can use to enable us to live. With that, we can say that information includes what is useful to us that enable us to live. Given that information is very useful to us, it is worthwhile to look at its characteristic. The diagram bellows shows the characteristic of information. Since information includes theory, characteristic of information should also include theory. In addition to the characteristic shows below, characteristic of theory is also included in characteristic information.

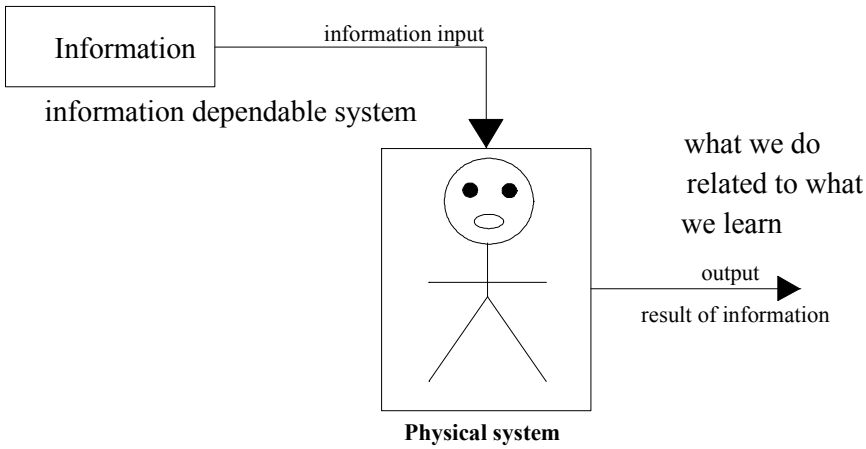


Definition of Information

In addition to the definition given above, we can say that information includes everything a system must know that enables its functionality. For instance, we can say that information includes everything that we must know that enables us to function. We can also say everything that is important to us that we must know to enable us to live. Since life is a functional system and it depends on us, we can say that information is everything important that needs to be known about the functionality of life.

Relation of Information and System

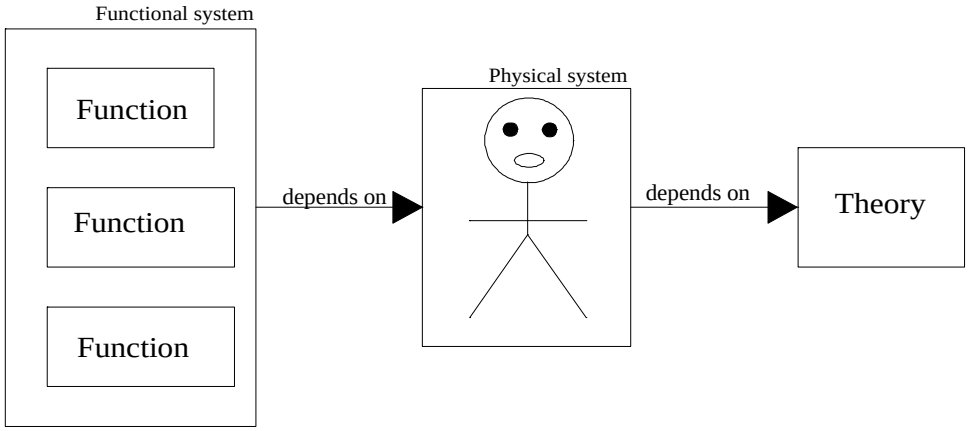
To better understand the relationship of information with our system, we have to look at the relationship of our system related to our utilization theory. Since theories are considered information themselves, in terms of our functionality, we can see that there is a similarity between theory and information. We know that information is what important that we need to know to live. Therefore, we can see a similarity between information and our life. From that similarity, we can see that our lives depend on the type of information that we receive. To better understand our system related to information, let's look at the diagram below.



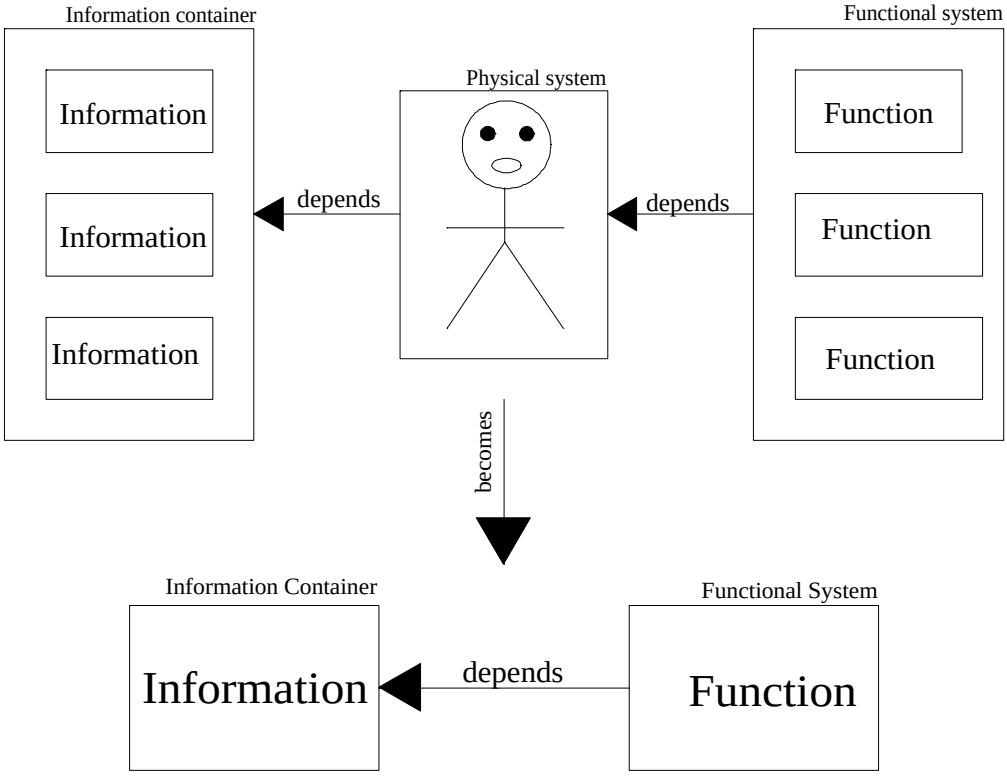
Since we are a theory dependable system and information includes theory, we are also an information dependable system and we need information to live. The diagram above shows that as we depend on information and we do things according to what we have learned.

To better understand life related to information, we have to look at both the functional system and the physical system related to information themselves. We have already known that we apply our parent's principles to enable us to live. This can be interpreted as the physical system depends on theory, while the functional system depends on the physical system. Conclusion, the functional systems also depends on theory. Given that information is theory, we can say that both the functional system and the physical system

depend on information. The following diagram shows the relationship between the physical system and the functional system related to both theory and information.



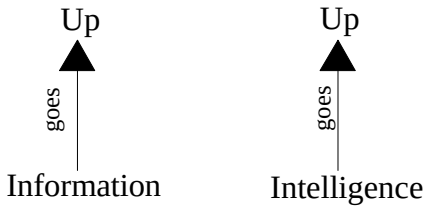
The diagram bellow shows that the physical system depends on information, while the functional system depends on the physical system. We use the term information container to show different type of information the physical system depends on. The information container can be viewed as a library of information. The second diagram shows the direct relationship of the functional system and the information container or the direct relationship of the functional system and information by itself.



Now that we know there is a relationship between ourselves and information that we receive, it is worthwhile for us to analyze that relationship and take it into consideration.

In order to understand the relationship between ourselves and information, we need in most part to remember or understand what the purpose of information giving to us is. The purpose of any information giving to us is to satisfy our need and to enable us to understand that information. In order to understand that relationship, we have to look at our system related to information both before and after the information is received. We also need to look at what enables us to understand information. For now, let's look at what enable us to understand information, and then we can look at our system both before and after information.

We are an information dependable system; what enables us to comprehend information is our intelligence. Since information given to us to satisfy our need; what we mean by satisfying our need, we mean to enable us to live, it must always present in a way that we can understand it. Since our intelligence is what makes us understand information, we can see that there is relationship between our intelligence and information that we receive. From that, we can see that as information increase, so does our comprehension. The following chart shows the relationship between our intelligence and information. It shows that as information increases, our intelligence also increases. That makes a lot of sense, since before information we have little understanding about a subject, so after information we expect to understand it better; see exercise 40 for more information.



System Normality Related to Information

Since we depend on information to live, it makes sense to look at both our functional and our physical system related to information. What we mean by system normality related to information, we mean the normal functionality of us and our lives related to information both before and after information.

System Normality Related to Pre-Information

Normality of a system before information concerning about the functionality of that system before receiving information. Given that we need information to enable our functionality, our functionality related to information depends on the quality of information which leads us to the next topic. System normality related to pre-information means the normal functionality of life before information is presented to us.

System Normality Related to Post-Information

System normality related to post-information concerning about the functionality of a system after information is presented. Since both our physical system and the functional system depend on information, after information we expect both systems to function normal or better than before. The table below shows the continuing functionality of both the physical system and the functional system before and after information. It shows that if the physical system was functioned normal before information, after information it should continue to functional normal. This also applies for the functional system.

	Before Information	**After Information**
Physical System Status	Normal	Normal
Functional System Status	Normal	Normal

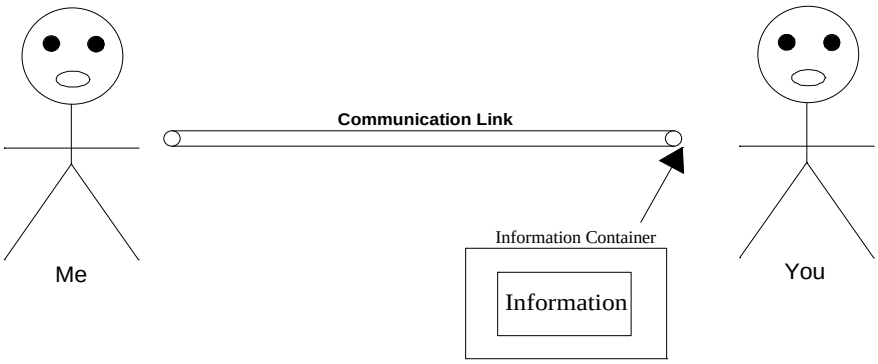
From the table above, we can see that the stability of both the functional system and the physical system are always preserved by information; see exercise 99 for more detail. Since information is given to us to enable our functionality, we can say that information is always ensure system stability. It is always good to assume system stability when dealing with information

Importance of Information

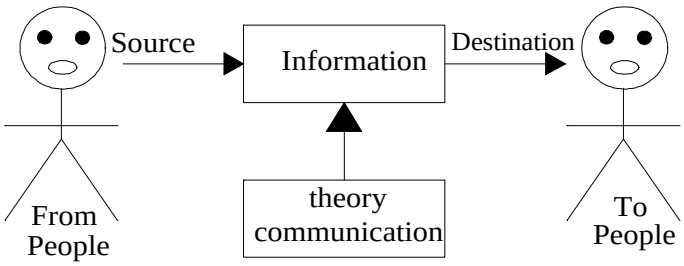
Off course information is important to us since it enables us to function.

Presentation of Information

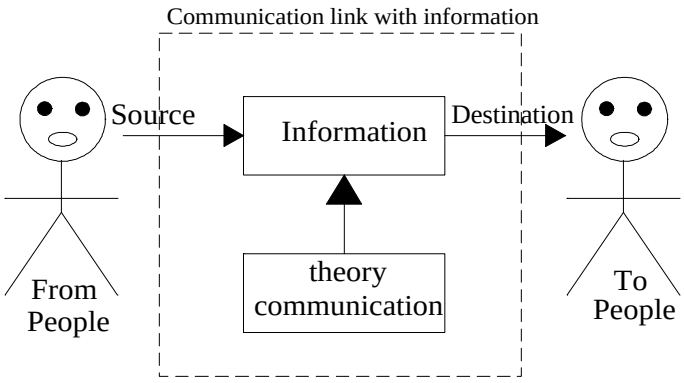
Information can be presented to all forms of communication including oral, written, graphic, picture, video etc. We are connected trough a communication link that carries information. To better understand presentation of information, let's show the link again with the inclusion of the information container. This diagram simply shows that information passes from one to another through communication.



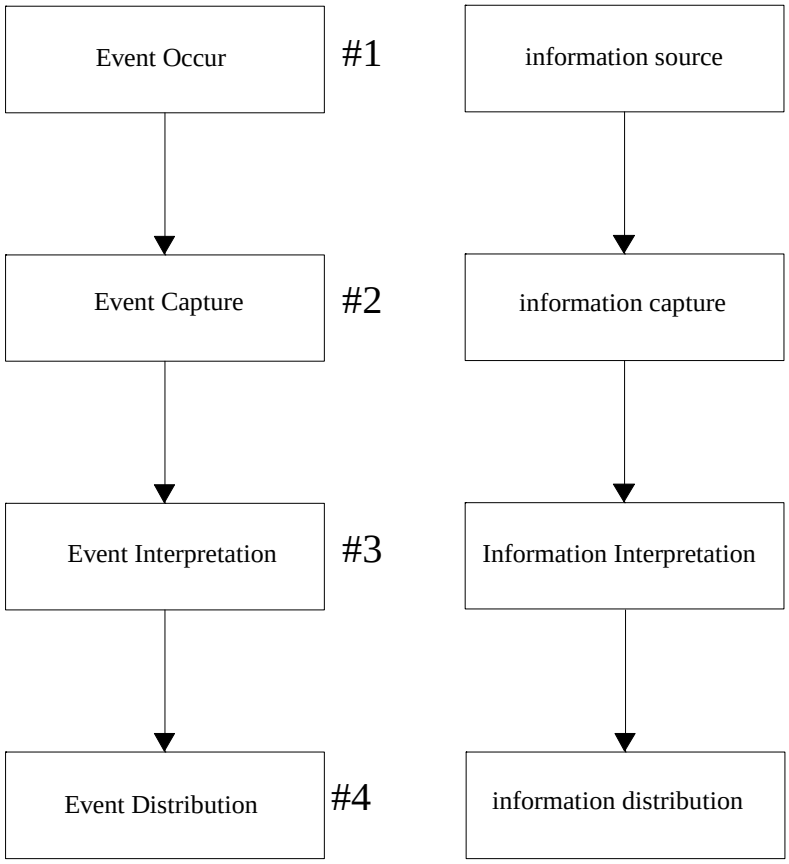
We already known that information are theories themselves. From relationship of theory and theory communication, we already know that theory communication is used to enable the understanding of theory. Without theory communication, theory can very well be misinterpreted where the understanding of theory would be in doubt. Since information's are theories themselves, they follow the same principles as theories. In order for information to be understood, it must be presented in a manner to enable us to understand it. Given that theory communication enables theory to be understood, it also enables information to be understood as well. Without theory communication, information can be presented with errors; it can also be presented in a manner that will not satisfy us. To enable information to be presented in a manner to satisfy our understanding, theory communication must be used as verification. The figure below shows the validation of information through communication. While information flows between people to people, or between me and you, it can very well be presented and understood by the validation of theory communication.



Both of these diagrams are the same. The only difference is that the one below shows that information is embedded inside the communication link.

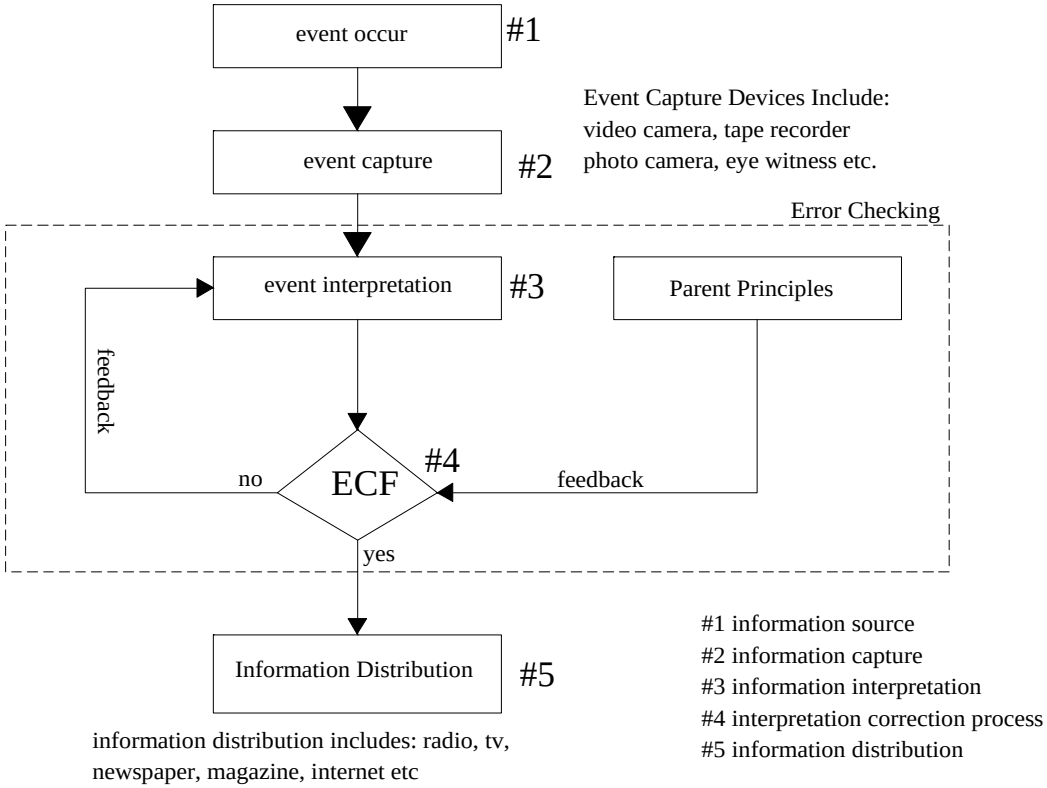


Although information includes everything that passes trough the communication link between us, however whenever we use the word information, some of us think that we mean news, or journal etc. Off course information includes all of those, but it is better to use the terms information distribution or perhaps information sources for them. Since information distribution does not change the characteristic of information, they follow the same principles of theory and communication. To better understand the distribution of information from different sources, let's look at some diagrams. The diagram shows the quick process of information flows from the event occurrence to the information distribution. Both diagrams are shown side by side for easy interpretation.



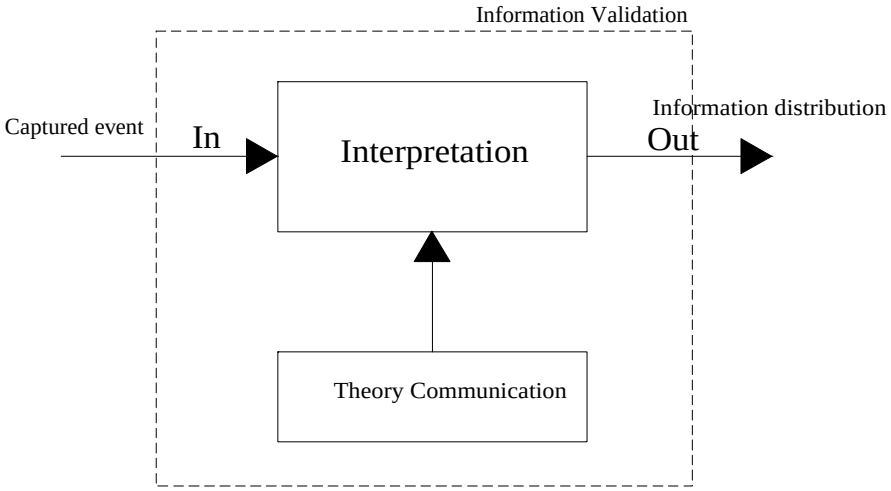
The diagram above shows the process of information flow from event occurrence to event distribution. This is a straight flow. Since theory communication is used to validate what is being flow in the communication link, it is good to show that in the diagram.

This diagram is similar to the one above, however we add some error checking procedure to enable information to be corrected if there is an error before distribution. We are very familiar with this diagram; we can see that is very similar to our parent communication feedback diagram. Since information is a part of communication, in terms of parent principles, it follows the same procedure.

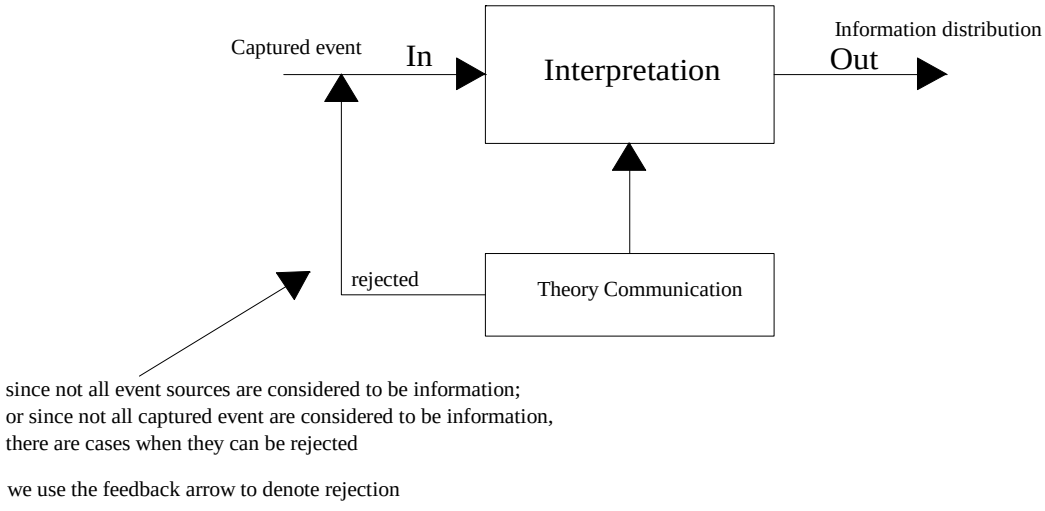


Let's detached the error checking part of the diagram above and analyze it. Comparing to the previous diagram, we can see that having an error checking procedure before the information distribution process allows many errors to be captured before the information get to us or its destination. Since the information depends on the same principles as us, we can see the similarity of that information and our communication procedure. This similarity allows the information to be well understood. In this case, we can say that there is a similarity between us and the information by itself.

By detaching the error checking section of the diagram above, we simply have the diagram below. It shows that the validation of information is controlled by theory communication.



From our understanding of information, we know that information always preserves system stability. In other words, information that we receive cannot make our lives function abnormal. From the validation procedure above, only information that is validated by theory communication can pass through. For this reason, we can see information can very well be rejected either by not preserved our system stability, or having nothing to do with our parent's principles, or by being invalidated by theory communication. The diagram bellow shows the rejection process of information; the feedback is used to detonate rejection.



Quantity of Information

Information is always given in a manner to help reasoning. Information is always given in a manner to satisfy or increase reasoning.

Quality of Information

From information and system relationship, we have learned that the normality of a system is related to the type of information is being fed through. We also know that the purpose of information is to preserve the stability of our system. From those relationships, we can see that the quality of information received by a system is related to that system itself. That makes sense, since information includes theory, so the theory and system relationship holds. In order for a system to function normal, the information that it receives must be related to its utilization theory. Within that, we can conclude that there is a similarity between a system functionality and information it depends on. Therefore, information a system receive must look similar to its functional principles.

Application of Information

Since information enables our system functionality, we can say that information are very useful.

Portability of Information

Given that our functionality depends on information; given that information is very useful to us, we should be able to get them everywhere we are present. Within that, we can see information is very portable. Also, from portability of theory, we know that we are a mobile system, so does our parent's principles. Since information is related to our parent's principles, it must be very portable as well.

Distribution of Information

Many of us may have thought that distribution should have been included in characteristic of information. All wee need to know is that, disregard any distribution method, the characteristic of information remain unchanged; see exercise 39 for more information.

Conclusion

Given that information is always given to us to ensure our understanding, they must always be presented in a satisfactory manner. To conclude this chapter, let's look at the following notes. They can be very helpful in presenting and understanding of information.

- If a system applies a method to accomplish a task, it is better to inform of the method related to the task rather than the system physically. In other words, if someone applies a method, it is better to learn about that method related to the application rather than the physical person and the place the method is applied.

- If a word is defined normally and its definition is interpreted abnormally by many, it is better to refer to the normal definition of the word rather than the word by itself.

- If a system or an instrument is derived from an unknown method or an unknown theory, information about that system is limited. If a system or an instrument is derived from an unknown method or an unknown theory, then some information about that system or that instrument is limited.

- If someone makes an observation, it is better to learn about that observation rather than the person physically. If someone makes an observation, it is better to inform about that observation related to its application rather than that person physically.

- If the derivative theory of a system is unknown, some information about that system is limited.

Finally, take look of exercise 27 to close this chapter

Chapter 6

Understanding Theory of Education

Introduction

There is no such as theory without education. Whenever the word theory is mentioned, the word education always comes to mind. That makes sense, since education is the process of learning theory. It is very important to know that theory is a part of education.

From the previous chapters, we have learned the process of identifying words as theory, theorem, method, system, and instrument. Since those terms or words are used to identify things in life, it is always better to say that the preceding chapters allow us to identify and classify many things that make up life. Once we identify a word, we were able to know the important information that comes with that word. We use the word characteristic to denote that information. Given that theory is the principle of how systems work, or how functions in a system work, the relationship of theory and system is very important in life. Whenever that relationship is failed to apply, problems develop in life. From the problem characteristic chapter, we have also learned how problems are developed and possible solutions of solving them. Whenever the word problem is mentioned, it is always good to think as problems in life or problems that affect both of our systems. We mean our functional system and our physical system. We have learned that a problem is not a physical entity. We should be very familiar with the word problem by now. We the physical system is the one that is responsible for developing problems in life. That happens whenever we fail to understand or apply our parent's principles that enable life to function normal. Given that education is the process of learning and applying our parent's principles, it is always good to take education into account when dealing with problems. We should never misunderstand or underestimate our constant characteristic which ties to education.

In this chapter, we are going to look at the word education and the process of education by itself.

Characteristic of Education

Theory is being learned everywhere including home, school, workplace, church, synagogue, mosque, temple, etc. Theories are learned consecutively where the understanding of one may lead to the understanding of others. The process of learning theory is education. It is always better to use the term theory of education to refer to the process rather than refer to it by the word education.

Since we are a theory dependable system, there must be a way of learning theory to apply to the system in order to ensure its functionality. We call this process education. Education is the process of learning and applying theory.

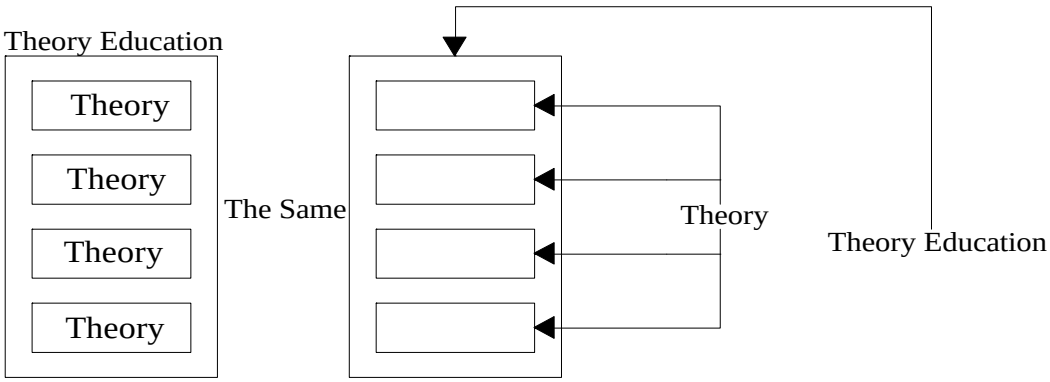
The fact that the system is theory dependable; it must constantly apply its utilization principles in order to ensure its functionality. The fact that the system is theory dependable; it must continue learning its utilization principles to ensure its functionality. The process of learning our parent principles to enable the functionality of life is education. Therefore, we considered that education is very important, since it allows us to learn our parents' principles and apply them to enable our functionality. With that importance, we should look at the characteristic of education relatively to its fundamental; below listed characteristic of education.

Characteristic of Education Includes:

- Relationship with theory
- Environmental setting and disturbance

Relationship of Theory and Theory Education

Since there is no such as theory without theory education, and given that theory can be learned anywhere, it is worthwhile to look at the relationship of theory and theory education. The way to look at it, theory includes in theory education. It can also be viewed as, where theory education is a set and theory is an item inside the set as shown by the diagram below. The one to the left shows that theory of education is a set that includes many theories. The one to the right is basically the same. It simply shows that theory of education is a container while theories are items inside the container; for more information, see exercise 46, 46′.



Environmental Setting and Disturbance

- For environmental setting: It is always good for the students to get closer to the instructor; it is always good for the instructor to get closer to the students.
- For disturbance: See characteristic information and take a look of quantity of information.

Remark about Characteristic of Education

Some of us might think importance should have been included in characteristic education, that is fine, see importance of theory also exercises 46, 46′, 53, and 49, 49′ for more information.

Conclusion

By now, we should have gotten a very good understanding of both theory and theory education. Since theory includes in theory of education, it makes sense that more can be say about theory than theory of education; but since there is no such as theory without theory education, it is always good to look at the overall process as equivalent. Given that theory of education has it own basis, it is worthwhile to look at the next statement.

Theory education is very unique to its basis. Unlike other theories, it is so unique to its basis that there are many theorems or principles that can only be learned by personal observation rather than traditional approach; see exercise 53. In other words, rather from an instructor there are many principles or theorems from theory of education that can only be learned individually. Those principles or theorems can never be learned from an instructor explicitly.

Chapter 7

Theory Identification

Introduction

Most of the time theories are hidden from view and extra efforts are necessary to identify them. Since we are a theory dependable system, it is good to ask this question. Since we depend on theory to function, why are they hidden from us? Here is the way to interpret and look at it, it is not the theories that are hidden from us, but our disregard of our functionality related to theory. Given that we are a theory dependable system, we should be aware of that and look at our functional relationship related to theory. Once we disregard our lives related to our application of theory, we simply rely on our own philosophies to function; while we are not a philosophy dependable system, and philosophies do not have any relationship with our lives, we simply create problems when we depend on philosophy. By relying on philosophy to function rather than theory, we are unaware of the existence of our utilization theories, therefore, they seems to be hidden from us.

Since theories are expandable; in order for them to expand, they require applications. For that reason, as a theory is started to apply, more progress will be made on utilization of that theory. With that, we can say that theories are expandable through applications. Since the unawareness of a theory is being viewed as a hidden theory, once effort is being made to identify that theory, it can be learned and utilized in many applications to satisfy our needs. Given that a theory is an independent entity, any awareness of a theory will enable us to locate that theory rather than the theory to locate us. Once the theory is located an identified, it can be grouped to learn with little effort.

In this chapter, we will identify many theories. We will also group them to help us understand them effortlessly.

Theory Identification

The following theories have been identified. We use the capital subscript T with the first letter of the theory name to form an abbreviation for each theory; see the table below for more information. For theory of communication, we use capital K for the first letter rather than C; see the explanation of theory communication below for more information. Since both instrumentation and information start with letter "I", we use capital "I" for instrumentation theory and small "i" for information theory.

Theory Name	Abbreviation
The Communication Theory	K_T
The Instrumentation Theory	I_T
The Information Theory	i_T
The Education Theory	E_T
The Power Theorem	P_T
Grouping of Theory	
Theory of Utilization	U_T
Theory of Derivation	D_T
Fundamental of Theory	f_T

The Theory of Communication

Communication Theory (K_T) is considered as an attachment to theory. The way to look at it, theory of communication is always attached to theory; whenever a theory is identified, it is always good to look at that theory with the inclusion of theory communication. Given that theory needs theory communication, we consider theory communication as a constant for theory or as a constant theory.

The Theory of Instrumentation

Instrumentation Theory (I_T) is considered to be set of principles that enable the utilization of our instruments. In other words, instrumentation theory is the set of principles that shows us how to use our instruments. That includes both attached and non-attached instruments or external instruments. We should not have any problem to identify this theory; this theory should have been identified effortlessly.

The Theory of Information

Information Theory (i_T) is considered to be the set of principles that facilitates the exchange of information. Information theory enables information to be presented; it also enables information to be understood. Since we are a theory dependable system and we are also communication enabled, when we

communicate we simply exchange information. Given that we do things according to our parent principles, we should have been able to identify this theory with little effort.

The Theory of Education

Education Theory (E_T) is a set of theory that includes all theories. We have already seen that from the preceding chapter. There should not be any surprise now to see it in the identification of theory. As a set of theory, it is always good to think that theory of education is a container of theory. Since it also has it unique basis, it is always good sometime to look at other theories that includes in theory education relatively to the basis of theory education.

The Power Theorem

The Power Theorem (P_T); from the power definition, the power theorem was identified for us. With the effortless identification of theory education, this is another one we could have identified with no effort.

Theory of Utilization

Utilization Theory (U_T) is considered to be set of theory that enables a system to function. We already know our utilization theory constitutes set of our parent principles that enables our lives to function. By grouping those set of theory together, we have our utilization theory. It is always good to think that our utilization theory includes all of the above theories from the table, which are theory of communication, theory of education, theory of information, theory of instrumentation and the power theorem; refer to exercise 63, 63′ for more information.

Theory of Derivation

Derivation Theory (D_T) of a system is considered to be the set of principles that derived that system. We can call it the set of principles that was used to derive that system. It is always good to think that a system realized by some set of principles that we call derivation theory and some set of principles that enable the functionality of that system which we call the utilization theory. With the absence of the system derivation theory, we conclude that system is equal to its utilization theory since its utilization theory enables its functionality. With the absence of that information, we can only use the utilization theory which was given to us.

Fundamental of Theory

The Fundamental of a Theory (f_T) is considered to be the basis of that theory. We also call the fundamental of a theory the structure of that theory. Given that we have been using the word fundamental since the beginning of the book, it should have already been considered as an important aspect of a theory. When dealing with theory, it is always good to take fundamental into consideration.

Since the fundamental of a theory is very unique to that theory itself, it is very useful when interpreting a theory. While a theory does not change as well its fundamental, by understanding the fundamental of a theory, it is very easy to interpret that theory. The fundamental of that theory can be viewed as the basis of its interpretation; see exercise 34 for more information.

The next page requires the understanding of *Chapter 11 and Chapter 12*. You can stop here; don't go there yet until you have a good understanding of *Chapter 11 and Chapter 12*. The way to look at it, after having a good understanding of this book with the inclusion of working out the exercises, then you can go to *Chapter 11 and 12*, then comeback to the next page. From here, just go to the next chapter rather than going to the next page.

More Theory Identification

Theory Name	Abbreviation
The Gaming Theory	G_T
The Theory of Marketing	M_T
The Exchange System Theory	Es_T
The Work Theory	W_T
The Reproduction Theory	X_T

The Gaming Theory

The gaming theory (G_T) enables us to execute neutral functions of life. Since the functional system is a set of function and a theory is a set of principle that enables the functionality of a system, as a theory dependable system, the function that we execute must follow some set of principle. By understand the physical system, the functional system, and the application of theory relates to functions execution, this theory can be identified by observation. Refer to exercise # and # for more information about the gaming theory.

The Theory of Marketing

The theory of marketing (M_T); since we are a theory dependable system and theories are independent entities, we must apply theories independently to derive and execute functions of life. Since we are a theory dependable system and theories are independent entities, it makes sense for the functions we add to life to be needed by others. As an associative system, there is a need for us to provide information to others about useful functions we add to life, so they can be useful to them. The process of providing information about added functions of life is named as the theory of marketing. By understanding the physical system theory dependable characteristic, the associative characteristic, and the self controllable characteristic, this theory can be easily identify; see chapter number 11 for more information about the theory of marketing.

The Exchange System Theory

The exchange system theory (Es_T); since we live in different places and everything we need to live is not located at our residences, there is a need to exchange goods and services among us. Since we are an associative system and we are also theory dependable, it makes sense for us to exchange goods and services to each other. By understand what we have just said, the theory dependable characteristic, and the associativity characteristic, this theory can be identified easily; refer to the chapter number 12 for more information about the exchange system theory.

The Work Theory

The work theory (W_T); as a theory dependable system, we apply theory independently to derive and execute functions of life. By being theory dependable, associative, and communication enable, it makes sense for us to work together to derive and execute functions of life. By understand what we have just said and the characteristics we have just listed, the work theory could have been easily identified by inspection.

The Reproduction Theory

The reproduction theory (X_T); by understand the physical system associativity and reproductively characteristic, it should takes us little effort to identify this theory. By understand the functional system as well, understanding the need and the identification of this theory should take little effort as well; refer to exercise # and see item number 1 and the third number 2; but before referring to, let's think about the followings:

- A theory may not seem interested to learn, however it is needed to understand advanced theory
- A theory may not seems interested to apply, however it is needed to learn advanced theory
- Some principles or theorems may seem to be basic, however advanced knowledge is required to understand them
- Some theorems or principles are so advanced, it takes time and knowledge to understand them
- Some theorems or principles are so advanced, it requires a very good understanding of life in order to understand them

Chapter 8

Difference Between Theory and Philosophy

Introduction

Throughout this book we have talked about theory, we have also talked about philosophy as well. From the problem development section, we have seen that problems are developed as a result of negative philosophies. We have identified problems as negative philosophies. When we talk about theory, we always refer to our parent principles and also the fundamental of theory. While theory and philosophy may look similar to some people, but nevertheless there are a lot of differences between theory and philosophy.

Without the fundamental understanding of theory and system relationship, it is very easy for many people to mistakenly think that theory and philosophy are equivalent. Since theories can be hidden from view, they can easily be replaced by philosophies to many people. Given that a system relies on its utilization theory to function rather than philosophies, whenever that happens problems are developed in that system. In order to solve those problems, the principles that enable the functionality of that system must be used instead of philosophies. When the utilization theory of a system has been disregarded for a long period of time and replaced by philosophies, many people are so adapted to those philosophies; they might not be able to easily see the difference of the theory related to the philosophies. To facilitate those people to understand the difference between the system theory and philosophies, it makes sense to present a comparison for both theory and philosophies with explanations in order for them to see the difference and clarification.

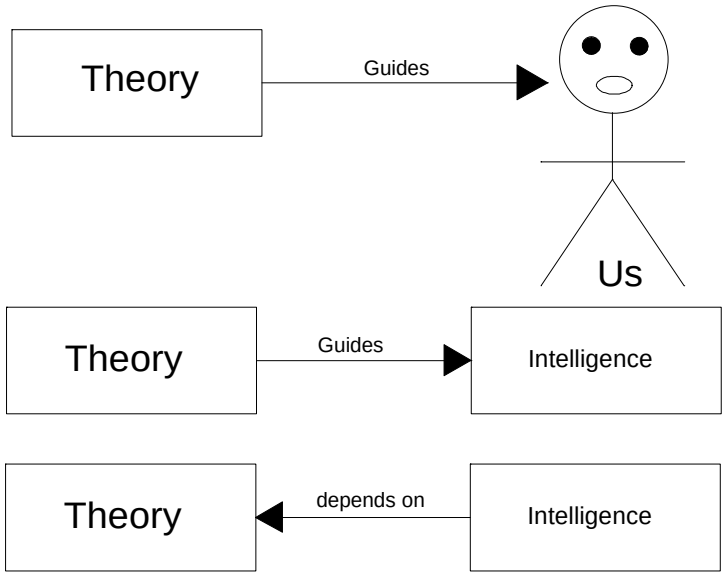
In this chapter, we are going to refer to various exercises to see the difference between theory and philosophy. We are going to provide a better understanding of the word philosophy comparing to theory by providing some comparisons that map to the difference one on one.

Understanding the Difference between Theory and Philosophy

To better understand the difference between theory and philosophy, the first step is to review the relationship of theory and system. The second step is to look at ourselves or our system constant characteristic related to both theory and philosophy. Lastly, we have to look at the fundamental of theory. Without understanding the fundamental of theory, it may not be easy to understand the difference between theory and philosophy.

What we know about theory and system, is that a system derived by some set of principles and function by another set of principles. We call the set of principles that realized that system, the system derivation theory and the set of principles that enable the functionality of that system, the system utilization theory. With the absence of the system derivation theory, and the presence of the system utilization theory, we conclude that system functions by its utilization theory. In this case, the derivation theory of that system is not important to use, since we don't know it. We simply rely on the system utilization theory to enable its functionality.

Right now, let's look at our characteristic related to theory and philosophy. We know that we are a self programmable system. We are also a theory dependable system. What we mean by self programmable, we are an intelligent-system. We simply rely on our intelligent to function. In order for that intelligence to function, it must rely on theory to give it ideas on how to do thing. Whenever that theory is not present, the system simply relies on its own philosophy. What we mean by the theory is not present; we mean that the theory is being disregarded. To better understand the relationship of the intelligence related to theory, it is worthwhile to show it as depicted by the diagram below. The top one shows that the intelligence needs theory in order to function properly. It shows that the intelligence is always guided by theory. Since intelligence is a part of our system, the second diagram represents our system being guided by our utilization theory; while the last one shows our intelligence depends on theory to function.



To better understand the difference between theory and philosophy, we have to look at the fundamental of a theory as well. What we know about the fundamental of a theory. We know that the fundamental of a theory is very unique to that theory. We can say that the fundamental of a theory is unique to itself. We call the fundamental of a theory the basis of that theory. We also call it the structure of that theory; refer to exercise 33 and 34 to learn more about the fundamental of theory. The fundamental of a theory can be viewed as the logical reason that enables that theory. We can also say it is the logic or the reason of that theory. We have said before that the fundamental of a theory can be considered as it basis of its interpretation. By understand the fundamental of a theory, there should be little effort on interpreting that theory. The fundamental of a theory which we call the structure of that theory, enables us to verify whether or not we are in line with the theory. Whenever we do something or interpreting a theorem from that theory, we can always check the fundamental to see if we are in line with it. Whenever we don't see the match, we can always go back to check what we did wrong.

So what is theory and system relationship, our constant characteristic and fundamental of theory has to do with the difference between theory and philosophy? Whenever we do things, we rely on our parent's principles to guide us. When those principles are being disregarded, we simply rely on our philosophies. Now that we rely on our philosophies, so what are those philosophies? Philosophies are simply ideas. We use the word philosophy to refer to the ideas that we have or the ideas we rely on to do things.

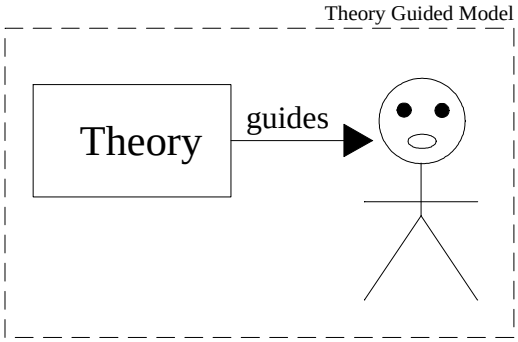
The way to look at it, philosophies are simply ideas; we use the term negative philosophy to refer to problem. Negative philosophies are bad ideas. Once an idea is good, we no longer use word philosophy to refer to it. Since anything good in life points to the same structure, it is always good to refer to that structure rather than the specific thing that is good. The way to look at it, for example an instructor may present a theory; that theory does not point to that instructor; any theorem from that theory does not belong or point to that instructor; rather, they point to the fundamental of that theory; see exercise 68, 68′ for more information. Once it is good, it points to its fundamental not the instructor. A bad idea or negative philosophy creates problem for everybody. It is very easy to see that here is a similarity between the two statements.

Another way to look at it, the fundamental of our parent principles which is the basis of our utilization theory enables us to do good things in life. Good things in life are what we should do in order to enable life to function. Whenever we have ideas of doing good things in life, those ideas get their basis from our utilization theory fundamental. In this case, we can say those ideas point to the theory or point the fundamental. Those ideas are no longer belong to us; they simply belong to life, which reflect to our utilization theory. We should always think that the fundamental of our utilization theory is what enables us to do good things in life. It is always good to be inline with the fundamental.

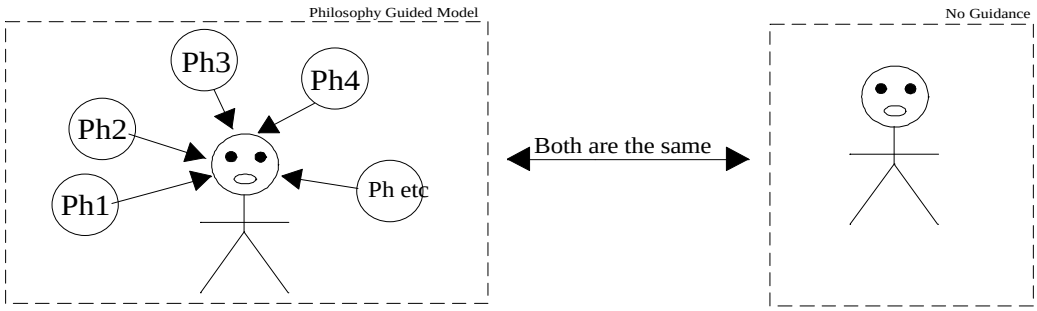
Whenever we have a negative philosophy, it develops problems in life that enables life to function abnormal. When that happens, the physical system function abnormal, also the functional system; what do we mean, whenever there is a problem in life, our lives become abnormal. With that, we can see any problem in life is bad for the overall

physical system also the functional system. Another way to interpret the preceding statement is that, when it is bad, it is bad for everybody. Since all good things come from our parent's principles, we can say that whenever is good it is good for everybody as well.

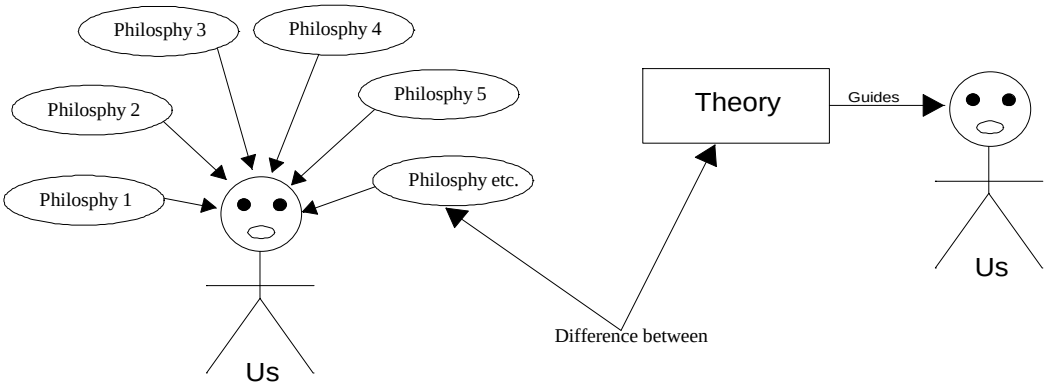
Whenever we use the terms difference between theory and philosophies, we mean ideas that don't point to our parent principles. It can be viewed as ideas that are incompatible to life or ideas that don't have any fundamental. To better understand that, let's look at the picture below. It shows that our system is being guided by our parent's principles. In this case, we rely on the theory to do what we need to do in order for life to function normal.



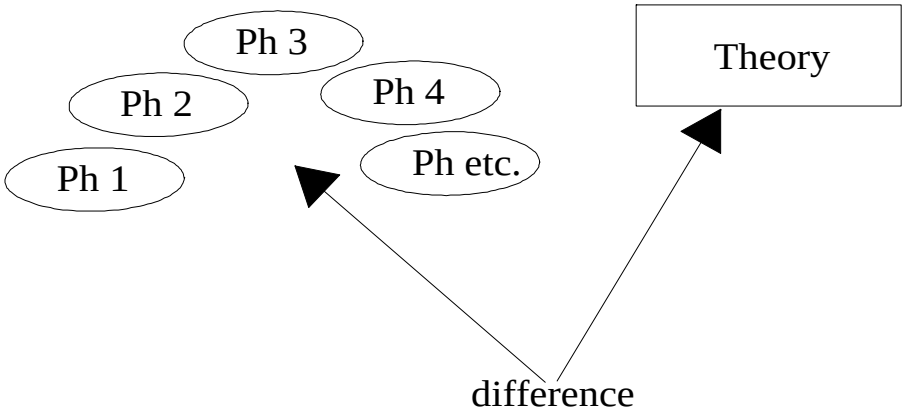
Now, whenever we disregard our parent's principles, we simply rely on our own philosophies to do things. Since our philosophies do not have any relation with life, they simply develop problems in life. While the theory is no longer guiding us, we are viewed as a system without guidance. As it shows from the diagram below, whenever the theory is not guiding us and we rely on our own philosophies, we become guideless. In this case, we no longer have any foundation of doing good things in life. Without guidance, we don't have any fundamental to rely on to check what we do. We use Ph as an abbreviation to denote philosophy and number as quantity. Since philosophies do not have a baseline, it can be very confusing when depend on them; given that there so many of them, depending of them makes us view things differently; see exercise number 41 and 41′ for more information.



Whenever we use the term difference between theory and philosophy, we mean the difference between our parent's principles and ideas that enable life to function abnormal which we call negative philosophies. We never mean the different within the physical system, or the difference of "me" and "you". The diagram below shows what we mean; it shows the difference between theory and philosophy by pointing at them. Since the application of theory is the job of the physical system, and negative philosophies applied by the physical system, it shows both the physical system with theory and philosophies.



The diagram below shows the detachment of theory and philosophies from the physical system. It is good to interpret the difference is between the ellipses and the rectangle. We use **Ph** for the abbreviation of philosophy. The numbers are used for quantity.



Difference between Theory and Philosophy

To better understand the difference between theory and philosophy, the table below provides several cases or differences, where explanation will be given for each of them in the second table at the end of the table below.

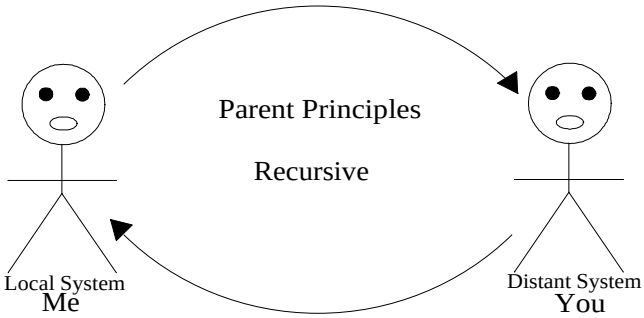
Theory Presentation	*Philosophy Presentation*
1. Theory and system relationship; a system is derived by a derivation theory and function by a utilization theory.	1. Philosophy states that a system may be derived by some set of principles and function by philosophies.
2. Theory does have a fundamental	2. Philosophy does not have a fundamental
3. Theory describes that there is a relationship between it and theory communication	3. Philosophy states that there is no relationship between it and theory communication
4. Theory describes that it is limited by communication or theory communication	4. Philosophy states that there is no limit; anything might be possible, although not achievable.
5. Theory describes that it points to its fundamental	5. Philosophy claims that it points to nowhere
6. From theory, people can learn by following some set of principles presented by an instructor or parents	6. Philosophy states that, rather following the principles that are being presented, it is better to follow the person that presents them
7. Theory describes that a system should remain stable as time goes; or stability of a system always maintain	7. Philosophy states that there is not such as system stability; system can be exponentially incremented as time go
8. Theory describes that a problem is philosophically defined	8. Philosophy claims that problems are physically defined
9. Theory bases facts on fundamental	9. Philosophy bases facts on statistic
10. Theory is recursive	10. Philosophies are not recursive
11. Theory always take into consideration the constant characteristic of the physical system	11. Philosophy states that the constant characteristic of the physical system can be changed
12. Theory views things in a fundamental approach	12. Philosophy views things in a comparative approach

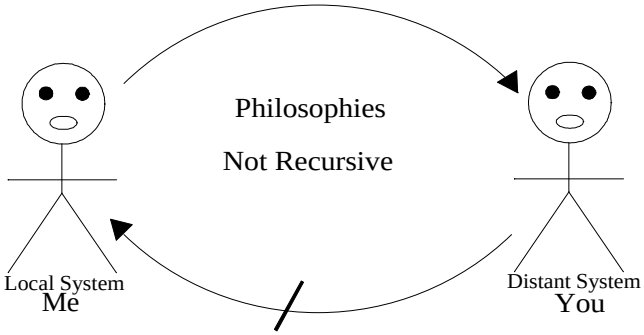
Cases and Explanations

The following table explains each case from the table above.

Cases	Explanation
1	A system is derived by some set of principles we call the derivation theory and functioned by some set of principles we call the utilization theory. With the absence of the derivation theory, and the presence of the utilization theory. It is always good to say that the information that the system was realized from is absent, but the utilization theory must be used to ensure that system functionality. By being an intelligent-system with theory dependency, does not mean that a system utilization theory must be disregarded. By relying on ideas to enable the functionality of that system, those ideas may very well be different than the system utilization theory. Therefore it is always good to rely on a system utilization theory than using ideas that may be different with the system.
2	To better understand this one, we can refer to exercise 33 and 34 for more information. The fundamental of a theory is a structure of that theory. The fundamental of a theory is given to enable the interpretation of that theory. It is always good to use the fundamental of a theory as the basis when working with and interpreting a theory. As for philosophy, see exercise 64 and 64′ to see if a fundamental exists. Before referring to the exercises, we can think that comparing to theory, there is no fundamental for philosophy.
3	The relationship between theory and theory communication can be viewed as; theory always needs theory communication and theory communication is an attachment to theory. In order for a theory to be presented it needs communication. Without communication, a theory cannot be presented.
4	Theory is limited by theory communication. Theory cannot go farther than theory communication. The misunderstanding of theory communication limitation related to theory can create problems that could have been avoided. Since philosophy does not have a unique structure, it is very easy to see why the quantity might not be limited to theory communication rather than the achievements.
5	A theory points to its fundamental, see exercise 58 and 58′ for more information. A theory points to its fundamental rather than an individual, see the next item.
6	A theory is always presented by an instructor, or we can say theories are presented from people to people. When a theory is presented, the people the theory is presented to must follow and apply the theory to enable the functionality of the system. Since philosophy does not have a structure, during the presentation, the physical system is being followed rather than the principles.
7	Since time has its unique characteristic, it is always good to understand the functionality of a system related to time. What we mean by the functionality of a system related to time, we mean our functional system which is life. The word stability is used to look at the functionality of a system related to time. When we don't see too much changes in the functionality of a system related to

	time, we mean that system is very stable related to time. In order to have stability in a system, there are a lot of principles that need to be followed, see exercise 62, 62′ for more information. Since the utilization theory of a system dictates its stability, whenever it is being replaced by philosophies, it looks like there is no limit in that system. That makes sense, since there is no limit in philosophies as well; see exercise 41, 41′ for more information.
8	We have seen before that problems are philosophically defined. If there were physically defined, they could have been solved long, long time ago. It is very important to understand problems and their characteristics; refer to exercise 41, 41′ and 90, 90′ for more information.
9	Since the fundamental of a theory is considered to be the basis of that theory, any application or interpretation of that theory is related to its basis. In this case, 9 out of 10 does not make anything correct, only the fundamental of that theory determine the correctness or interpretation whatsoever. It is always good to understand the fundamental of a theory and rely on it; see exercise 33 and 34 for more information.
10	Our parent's principles are very recursive. The way to look at it is at follow, "I" can apply our parent's principles to "you", and "you" can also apply them to me. As for philosophies, it is very questionable; the diagram below shows more about the recursion; refer to the exercise 37 for more information.
11	It is always good to understand the constant characteristic of the physical system. We call those characteristics constant, since they cannot be changed. It is always good to understand that; refer to exercise 44 to see how those characteristics map to each other or one needs each other. Since life depends on the physical system and the physical system depends on theory, life also depends on theory. Since the functional system cannot apply theory, the physical systems must apply theory to enable the functionality of the functional system. With that, we can see it is very important for the characteristic of the physical system to be taken into account in everything that we do.
12	Since theory does have a fundamental and philosophy does not, they view things differently. Refer to exercise 82 and 88 to see why theory views things in a fundamental approach while philosophy views things in a comparative approach. Keep in mind that a fundamental approach is unique, while a comparative approach is not; see exercise number 34 and 35 for more information.





Chapter 9

Fundamental of Sentence Analysis

Introduction

Our parent's principles enable us to correct errors in communication through sentence analysis. Until now we have not talked too much about our parent's principles in terms of sentence analysis relatively to correctness. It is good to understand that sentence analysis is the basis of theory communication. The process of sentence analysis includes both words usage and sense of sentences. Rather than call it sentence analysis, it is better to call it the analysis aspect of communication, which is equivalent to theory communication.

In order to understand the fundamental of sentence analysis, it makes sense to go back to revisit the fundamental of communication. At the beginning of this book, we learned that there is an internal image that comes to our mind when we hear a sentence or when we communicate. That image is very important to our understanding of that sentence or communication. We can call that image the fundamental of understanding of communication. The basis of sentence analysis is to enable a formal formation of that image by using our parent principles.

Throughout this book, we have learned a lot about our parent's principles. We have learned many theories that enable life to function normal. We have been able to group the principles we have been learning and naming them. This process enables us to develop more useful techniques that can be used in various applications. Given that communication is the foundation of any application, it is worthwhile to use the principles we have learned and the techniques we have developed to perform sentence analysis. In this chapter, we are going to use various principles from the book to perform sentence analysis. To get started, let's look at the texts in the next page.

An Introduction to Sentence Analysis

While I was traveling with my parent in a shuttle, I saw someone who was sitting next to me who was looking at me. I told my parent, someone was looking at me. My parent asked me *how do you know she was looking at you*. At that time, I closed my mouth; I could not answer to my parent. At the same time, our conversation was ended. After many, many years, I have always thought about the question and have done some research about the answer. I have been to many places to investigate; I have never found an answer. To complete the research, I have concluded if the answer to the question is to be found, it will be unique. That means everywhere this question is asked, it would have the same answer.

Importance of Sentence Analysis

In a letter that was addressed to a friend with the following paragraph

Not too long ago, me and some other friends used to sit together to discuss some issues. While we were talking, many of us used to agree with each other and many of us used to disagree with each other. Those disagreements used to cause by many sentences other repeated that should not be repeated. To solve this problem, I and some other friends used to ask questions about those sentences or subjects that were being discussed. After asking many questions, fewer or no answers were given. Likewise some of the answers that were given to those questions were not appropriate and were not clear at all.

Because of this method we have started; by started asking questions to each other when

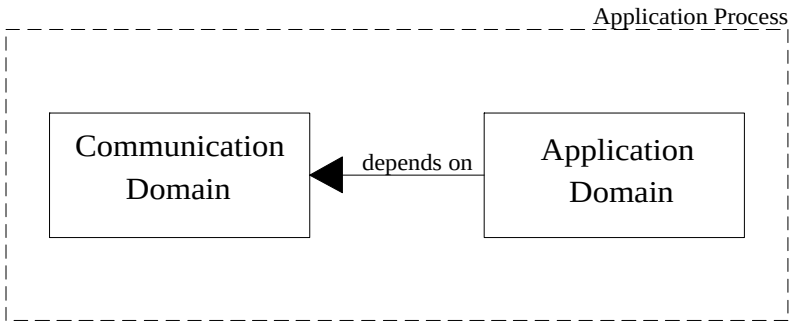
something was not clear, next time when we met our conversation was clearer and it was also more understandable.

Understanding Sentence Analysis

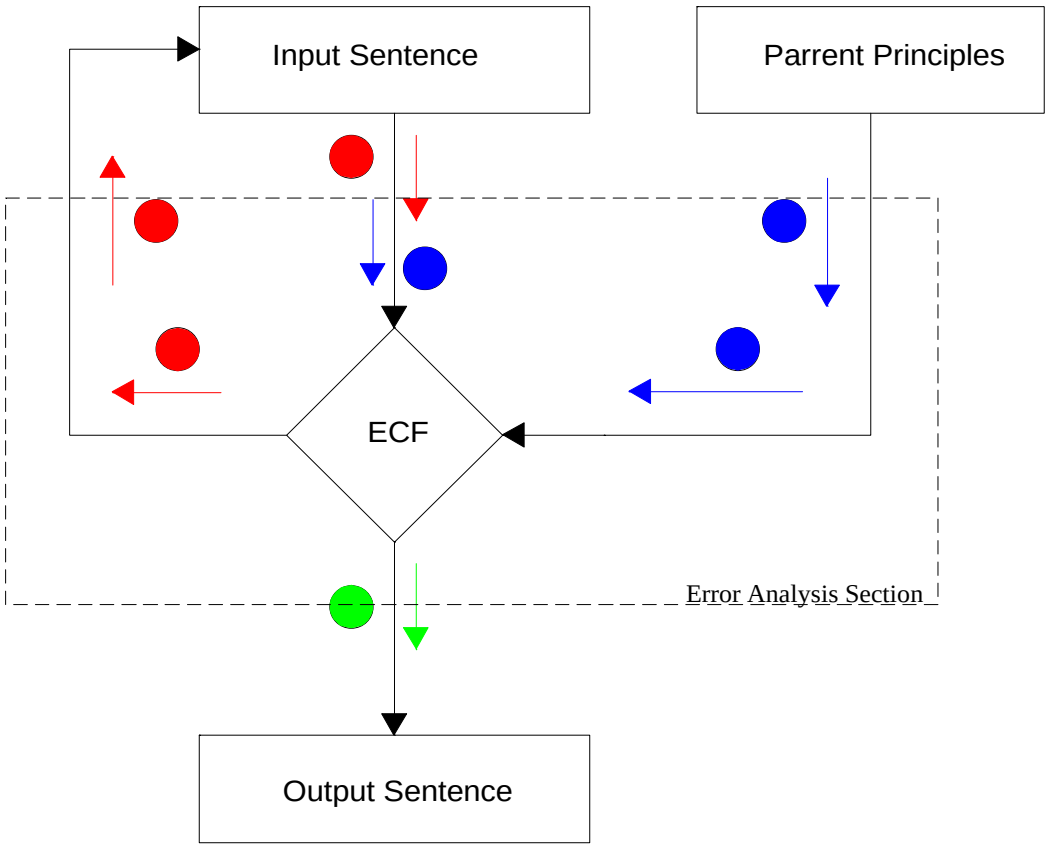
The process of sentence analysis is to identify errors in sentences and make proper corrections to allow the sentences to be understood. This process works both before repeating a sentence and after repeating a sentence. While we use the term sentence analysis to determine the correctness of sentences, keep in mind that it is simply a part of communication. The way to look at it, disregard the form of communication that we use, error analysis is still required to determine the correctness and provide a pathway of understanding. Although we use the term sentence analysis to determine the correctness of oral and written communication, it is always better to take it as error analysis in communication.

We already know that our parent's principles enable us to correct errors in communication before going through our applications. By utilizing those principles to correct errors in communication, we can avoid problems by producing an error free application. To better understand that, we have to divide our application into two separate domains, the communication domain and the application domain. The application domain by itself depends on the communication domain as shown below. The best way to look at it is that the communication domain is the preparation of the application. For example, assume the application is what we want or what we are going to do, and then the communication domain is the preparation of what we say we are going to do. During that process, we can perform sentence analysis to determine the outcome of our application; or we can perform sentence analysis to determine if what we are going to do is correct or not. By performing sentence analysis about what we are going to do, we can correct any error in those sentences before we actually do what we are going to do. In this case, we can both solve and prevent problems.

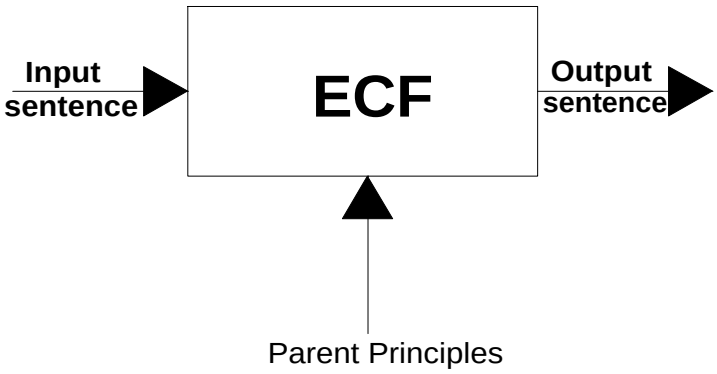
The diagram below shows the separation of the application domain and the communication domain. As we have stated before, the application domain is viewed as what we are going to do, while the communication domain is the preparation of what we are going to do. The diagram also shows that the application domain always depends on the communication domain. That makes sense, since it is the preparation of what we are going do; it must come first.



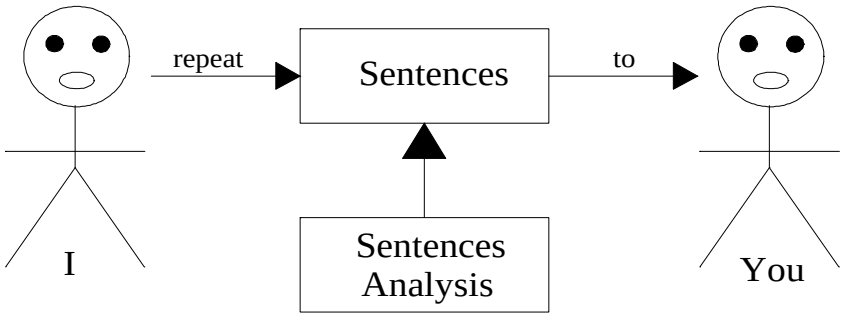
Given that our parents have been able to provide correction to our sentences, it is worthwhile for us to talk about that and see how does that happen. As shown by the diagram below, whenever we repeat a sentence, our parents hear the sentence, in that case, if the sentence is not proper, our parents provide correction to the sentence to make it understood. The diagram below shows the overall process. The red dots are viewed as a sentence with errors, while the blue dots provide the correction for the sentence. While the Error Correction Function (ECF) is viewed as logic or commonsense that enables the removal of words or make any adjustment to the sentence before going to the application. We use the term output sentence to show the corrected sentence that can be used in the application. For instance, since the sentence has been corrected, we can now use it in what we are doing. The function of the ECF is to remove and replace words in a sentence, add senses to the sentence, and perform all other logic necessary to enable the correctness of that sentence or to enable that sentence to be understood. We can see that the output of the ECF is green dotted, that makes sense since the function of the ECF is to remove errors in communication and make communication understandable. Rather using our parents physically, since the principles are what feedback us to enable us to correct errors in what we say, it makes much sense to show those principles as feedback.



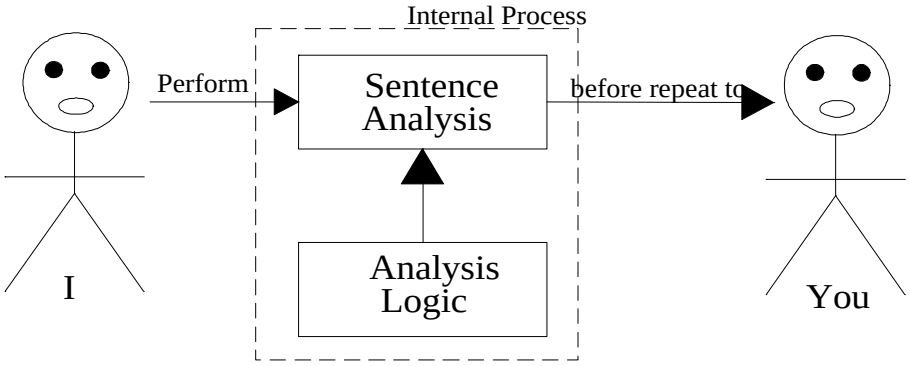
While we have provide a top down diagram to show the feedback of our parent principles related to the correction of our sentence, we can also show a left to right diagram that does the same thing. The diagram below shows the left to right representation of the top down diagram above. It shows that the input sentence is the input of the ECF, while the parent principles are used as a control of the ECF. The function of that control is to make sure the output sentence is error free or to enable the output sentence to produce and error free application.



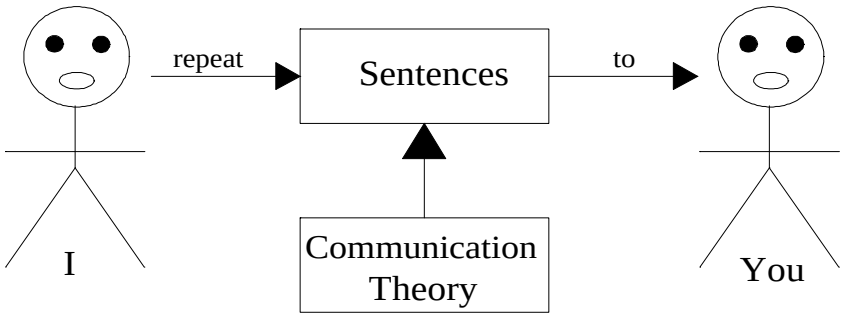
As we have said it before, the function of sentence analysis is to enable our sentences to be understood by removing any error that is present. This process works both internally and externally. What do we mean by both internally and externally? We mean that the sentence is being analyzed before it is repeated and analyzed again by the person who it is directed to. The diagram below shows the process of sentence analysis from me to you. It shows that the sentence is being analyzed after it is repeated. Comparing to the diagram above, since our parent's principles control the analysis, we simply replace it by sentence analysis. We can call the sentence analysis control at the bottom as the logic of sentence analysis. In other words, we can call it the logic that controls the sentence analysis.



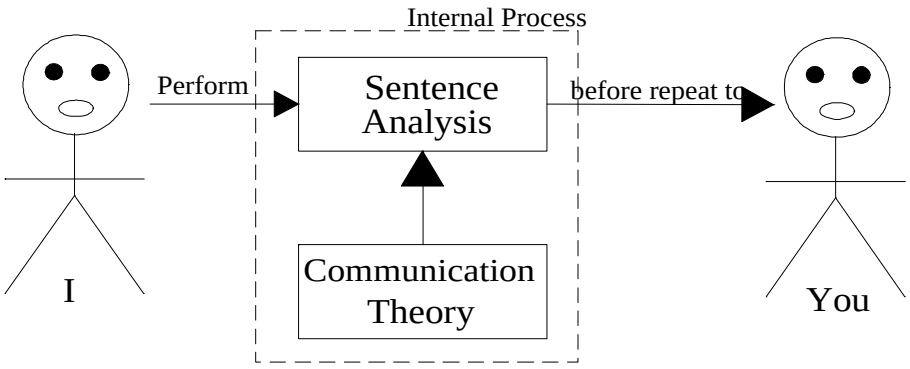
Sentence analysis makes it possible for sentences to be understood. This process works both before and after a sentence is being repeated. For instance, I analyze the sentence before I repeat it to you; once you hear the sentence, you also analyze it as well. In order for one to understand each other without problem, the analysis has to be well matched with no ambiguity. This diagram shows the internal process of sentence analysis. Since the sentence analysis is being done before the sentence is repeated or since the sentence analysis is being done internally, it must be controlled by some type of logic or it must have a structure, as shown below. We use the term analysis logic to refer to that structure that enables the sentence to be validated before repeated.



The internal sentence analysis process is controlled by the same logic as the external sentence analysis process. This makes sense, since we communication to satisfy our needs, whenever we communicate, there must be a common understanding between one and another. In this case, we can call the common understanding that enables one to understand each other during communication, the communication logic. With our understanding of theory communication, it is always better to replace it with its proper name, theory communication. We call theory communication the communication logic that enables us to understand each other. With that, we can call sentence analysis the basis or the foundation of theory communication. The diagram below shows the replacement of the analysis logic by its proper name.



Now, since theory communication enables the validation of both internal and external sentence analysis; or since theory communication is used to validate sentence before and after they are repeated, it is worthwhile to show that in the internal process as shown in the figure below. It shows that I perform sentence analysis before I repeat a sentence to you; you also perform sentence analysis when you hear the sentence. Since both analyses depend on the same logic, which is theory communication, there should be no problem of understanding and no ambiguity.



Although we use the word internal to show the process of sentence analysis before repeating the actual sentence, it is better to look at it as a pre-repetition process. That means the sentence is being analyzed before it is repeated. The term pre-repetition has a better usage here than the word inside. As well as the term pre-repetition sentence analysis is better than internal sentence analysis.

Fundamental of Sentence Analysis

We know that our parent's principles have been able to correct errors in our sentences. We call those principles the theory of communication which we can also call the logic of communication. Although that process works very well, but until now we have not been able to ask this question. What is the process that enables one to understand each other when we communicate? Since we are a communication enabled system, there are rules associated to our system that enable us to understand each other when we communicate. It is also good to ask this question, what is the basis of that logic? To answer this question, we have to go again as we did in the first one to look at our constant characteristic. By looking at our constant characteristic, we know that we are a theory dependable system and we rely on theory to function. By being both communication enabled and theory dependable system, we also rely on theory to function and communicate. Now that our parents have been able to correct us, it is good to ask this question as well. What do our parents know about our system that we don't know? In order for our parents to correct us, they must know more about our physical system and our functional system than us. This is the principal reason they have been able to correct us. For instance, while we are talking about something we are going to do, our parents heard that, since they know more about the system than us. They already known that, our pre-application process is not right, and it will create problems in the system, so they alert us and make correction to the pre-application process which is the sentence analysis process.

By answering the principal question again, in order for our parents to correct us, they must know something that we don't know. In order for our parent's principles to correct errors in our sentences, those principles must be related to our system. In other words, those principles must know what is good and what is bad and remove any bad parts, then also make all appropriate changes to produce correct sentences. So, what our parents know that we don't know? What are those principles? Why they work so well? Why they make senses?

To answer those questions, again we have to go back and visit our constant characteristic. It makes sense for us to review our overall physical system. We have already known the following about our system.

- Communication enabled
- Theory dependency
- Self controllable
- Associativity
- Reproductivity

Although all of our characteristics count, for now, let's look at our communication enabled and theory dependable characteristic. More information can be found in exercise 45 about our constant characteristic. We use the terms constant characteristic to denote that the characteristic cannot be changed and they remain constant related to time.

Now, let's look at our communication enabled characteristic and our theory dependable characteristic. Those two characteristics work well together. By being theory

dependable, it makes sense to be communication enabled. By being communication enabled, it makes sense also to be theory dependable. What do we mean by theory dependable, we mean that a system that relies on its utilization theory to function. What do we mean by communication enabled, we mean that a system that must communicate to function. In order to understand how those two characteristics work together, we have to revisit theory and system relationship. The purpose of a system utilization theory is to enable the functionality of that system. In order for that system to work, it must apply its utilization theory. As for our system, that relationship works very well. By applying our parent's principles, we are able to function without problem.

Now, let's look at our associativity characteristic related to communication. In order to have an association, we must have communication. The communication enabled relationship works well with the associativity relationship. What does that mean associativity; that relationship means that the functionality of a system depends on another one. For instance our lives cannot function without the presence of other people. The way to look at it, life is a functional system where one depends on each other in order for the overall system to function properly. With the importance of the associativity relationship with communication, it makes sense for one to understand each other when we communicate. The purpose of sentence analysis or communication analysis is to enable one to understand each other without problems. Since we do things related to our lives, communication analysis enables us to do things without errors. In other words, communication analysis enables us to produce error free applications.

The purpose of communication analysis is to remove errors in communication so one can understand each other. Since we communicate to each other to satisfy our needs, the purpose of communication analysis is to correct or remove errors in communication to enable one to understand each other. Once we understand each other, we can conclude that our communication has severed its purpose. That makes sense, since we communicate to satisfy our needs, without understanding each other, our need are not satisfied.

We still need to answer the fundamental question, what our parents know about our system that we don't know. What are the principles that we need to know to make our own corrections? By now, we should have learned a lot about our system. From the beginning of this book, we have learned about words characteristic such as: theory, theorem, method, system, and instrument. We have learned about the definition of problem. We have also learned how problems are developed and how to solve them. Beside that, we have introduced to information theory, which has its basis from communication. Later, we have learned about theory education, which has a unique basis. Lastly we have learned about theory identification, which allows us to identify many theories and group them together. For example, the power theorem was identified for us at the beginning, and it was again identified later in the theory identification chapter. By having all those useful information, we are ready now to perform sentence analysis at all levels. Sentence analysis should take all what we have learned into account. We should use them to perform any type of sentence analysis that we need to get done.

Understanding Sentence Analysis

The purpose of communication analysis is to remove errors in the communication domain before getting to our applications. In this case, we can perform sentence analysis to determine in advance what we are going to do and make all possible corrections before we do it. Since the goal of sentence analysis is to prevent us from creating problems in life, we should always take problem development into consideration when perform sentence analysis. For instance, if our application requires the use of instrument, our sentence analysis during the communication domain can take characteristic of instruments into account, where we can look at application of instruments. Since problems are developed as results of application errors, we should always take all cases that lead to application errors into account. We already know those problems development cases. Now, we can use them in our sentence analysis to prevent problems in life. In other words, we communicate before we do what we are going to do. During the communication process, we can perform sentence analysis to remove errors to prevent us from creating problems in life. Given that we already know how problems are developed in life, we must use that knowledge to perform sentence analysis to prevent problems. Given that we communicate to satisfy our needs or understand each other, in that case we can say that our communication has accomplished its goal.

Sentence Analysis Related to Problem Development

Like we said before, the purpose of sentence analysis is to prevent us from developing problems. In order to do that, we have to take all problems development cases into consideration. For instance we can perform a sentence analysis that may take application of theory into account. We can also perform a sentence analysis that may take portability of theory into account. There is no limit, as errors are presented in the sentence, all cases will take into consideration to provide an error free sentence. Below, we provide difference cases that must be taken into consideration when performing sentence analysis. The table below shows many cases where problems can occur in sentences. It also shows possible analysis consideration. For instance during a pre application some people may have communicated about application of bad instruments, since the application of bad instruments develop problems in life, sentence analysis must be performed during the pre application process to prevent the problems from developing. In this case, application of good instruments can be taken into consideration; all other cases that are necessary that can lead to a solution must also be taken into consideration as well.

Problem in Sentence	Analysis Consideration
Related to Theory	
Disregard Application of Theory	Regard Application of Theory
Disregard Theory and System Relationship	Regard Theory and System Relationship
Disregard Importance of Theory	Regard Importance of Theory
Error In Presentation of Theory	Proper Presentation of Theory
Disregard Theory and Theory	Regard Theory and Theory

Communication Relationship	Communication Relationship
Error in Interpretation of Theory	Proper Interpretation of Theory
Disregard Independency of Theory	Regard Independency of Theory
Disregard Portability of Theory	Regard Portability of Theory
Regard Expandability of Philosophy	Regard Expandability of Theory
Related to Instrument	
Misapplication of Instrument	Regard Good Application of Instrument
Regard Utilization of bad Instrument	Regard Utilization of Good Instrument
Disregard Instrument and System Relationship	Regard Instrument and System Relationship
Related to System	
Disregard System and System Relationship	Regard System and System Relationship
Disregard Function and System Relationship	Regard Function and System Relationship
Related to Method	
Misapplication of Method	Regard Good Application of Method
Regard Application of Bad Methods	Regard Application of Good Methods
Disregard Method and System Relationship	Regard Method and System Relationship
Related to Problem	
Disregard Problem Definition and Identification	Regard Problem Definition and Identification
Disregard Problem Expandability and Multiplication	Regard Problem Expandability and Multiplication
Related to Information	
Error in Presentation Information	Regard Proper Presentation of Information
Disregard Quality of Information	Regard Quality of Information
Disregard Definition of Information	Regard Definition of Information
Disregard Portability of Information	Regard Portability of Information
Disregard Information and System Relationship	Regard Information and System Relationship

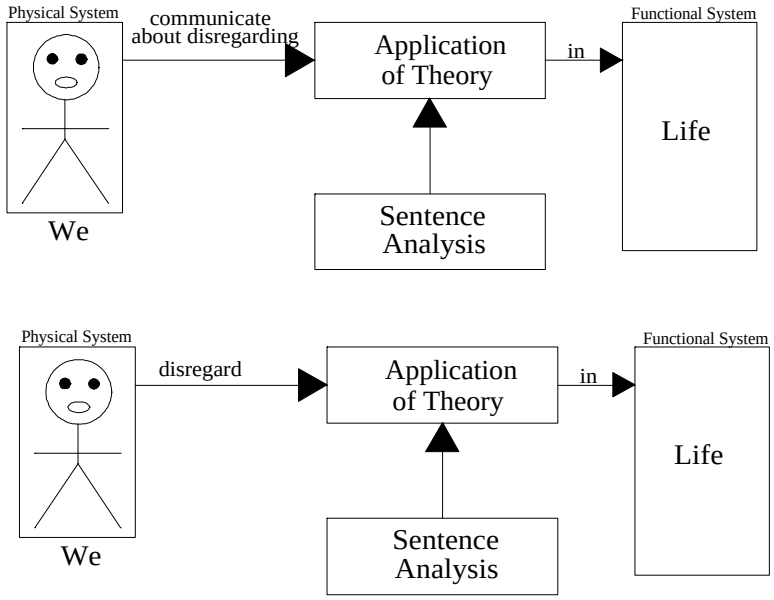
The next page includes another part of the table that you can simply disregard. You don't have to worry about it. If you want to take a look of it, it requires the understanding of *Chapter 11 and Chapter 12*. You can simply skip the next page and go to the page after.

Problem in Sentence	Analysis Consideration
Related to The Power Theorem	
Disregard The Power Theorem	Regard The Power Theorem
Related to The Theory of Marketing	
Disregard The Theory of Marketing	Regard The Theory of Marketing
Related to The Exchange System Theory	
Disregard The Exchange System Theory	Regard The Exchange System Theory
Related to The Gaming Theory	
Disregard The Gaming Theory	Regard The Gaming Theory
Related to The Work Theory	
Disregard The Work Theory	Regard The Work Theory
Related to The Reproduction Theory	
Disregard The Reproduction Theory	Regard The Reproduction Theory

Sentence Analysis Related to Application of Theory

The function of a system utilization theory is to enable the functionality of that system. Whenever that theory is misused or disregarded, problems are developed in that system. That is also applied for life; whenever we disregard our parent's principles, we simply develop problems in life.

Sentence analysis related to application of theory concerning about the utilization of our parent principles in life. During a communication process, if it is observed that our parent's principles have been disregarded or misapplied. Throughout that process, sentence analysis can be performed to make sure the parent's principles are applied. This diagram shows a typical process of sentence analysis related to our utilization theory. Since the purpose of sentence analysis is to result to an error free application or to make sure one understand each other in communication, it is not always good to rely on those diagrams as the basis of a sentence analysis, it is always good to take all cases into consideration that lead to zero problem.

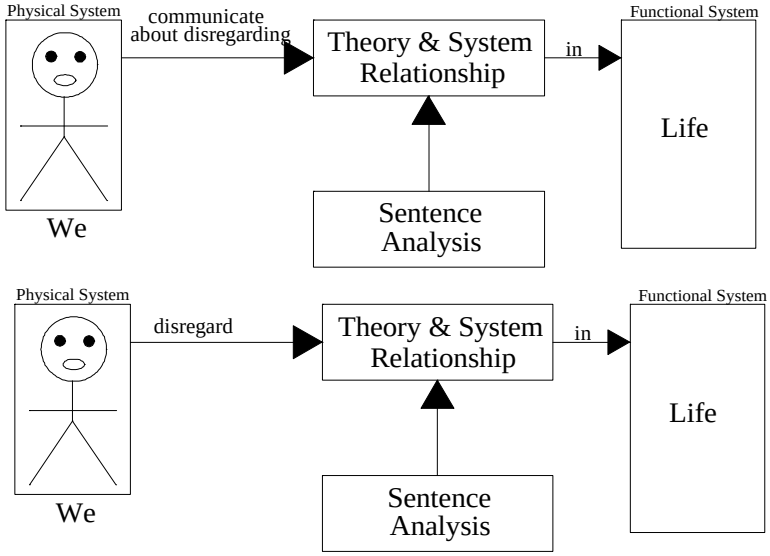


Sentence Analysis Related to Theory and System Relationship

Given that a system needs its utilization theory to function, there is a relationship between that theory and the system itself. That relationship enables that system to apply its theory to ensure its functionality. In life, there is a relationship between our physical system and our parent's principles. When we utilize our parent's principles, that enables our life to function normal, and when we don't use them, our lives function abnormal.

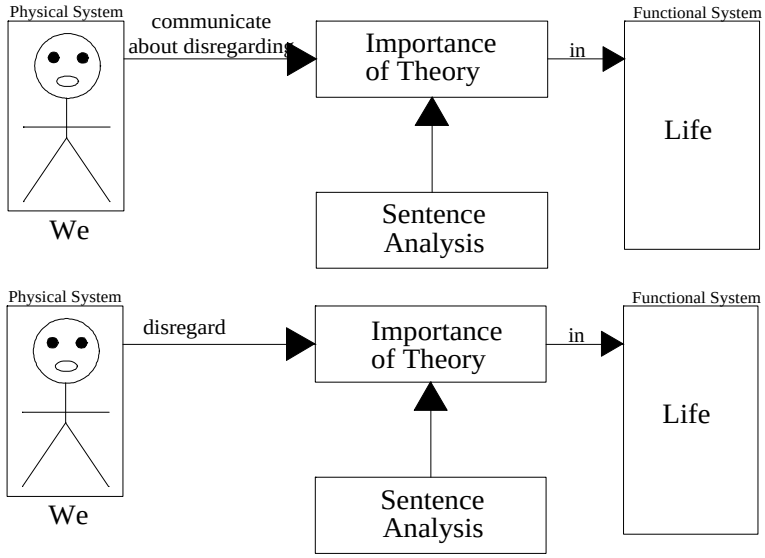
Sentence analysis related to theory and system relationship concerning about the relationship between ourselves and our parent's principles. For instance, during a

communication process, if it is observed that relationship is not being applied or understood. In this case, sentence analysis can be performed during that communication process to make sure that we understand the relationship of ourselves and our parent's principles, so that we don't disregard them. Since when that relationship is disregarded or misunderstood that develops problems in life, in this case the analysis is done to prevent those problems from being developed. This figure shows a typical flow of sentence analysis related to disregarding theory and system relationship.



Sentence Analysis Related to Importance of Theory

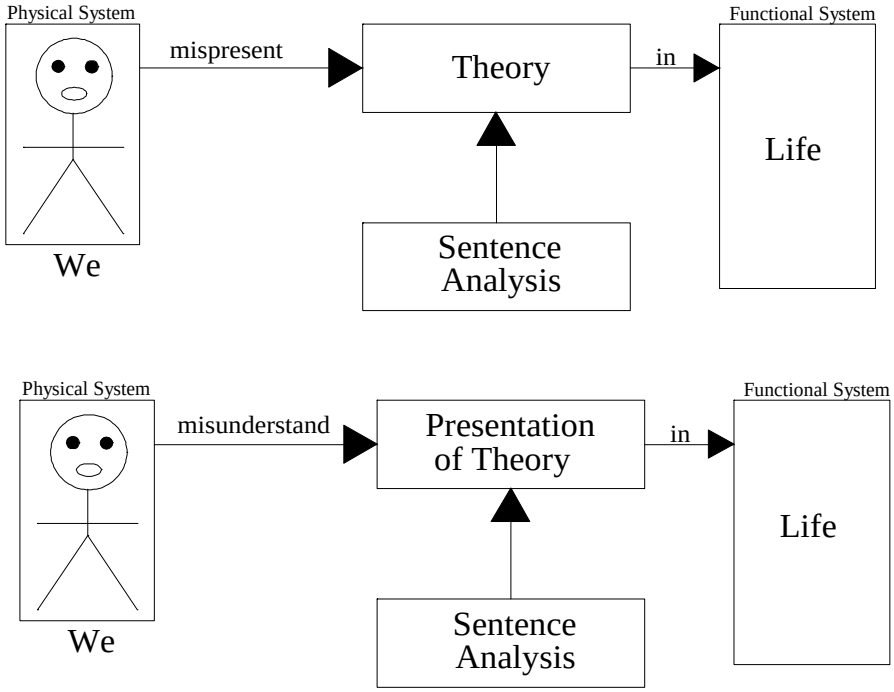
Our parent's principles are considered to be very important to us; whenever we disregard their importance, we simply develop problems in life. Sentence analysis related to importance theory concerning about the importance of our parent's principles. During a communication process, if it is observed that our utilization theory has been disregarded, sentence analysis will make sure their importance are observed. This is also taken into account whenever it is observed that the importance of our utilization theory is disregarded. This diagram shows a typical flow of sentence analysis related to the importance of our theory.



Sentence Analysis Related to Presentation of Theory

In order for a theory to be understood, it must be presented by someone. For instance, an instructor can present a theory to the students to help them to understand that theory. During that process, it is very important for the theory to be presented properly. It is also important for the theory be well interpreted; and the theory of communication to be also understood; because whenever a theory is presented with errors that create problems in life.

Sentence analysis related to presentation of theory concerning about error in presentation of theory. During communication, if it is observed that a theory is being presented with error, sentence analysis should make sure the theory is presented properly. Sentence analysis related to presentation of theory should be taken into consideration whenever errors occur in presentation of theory. The diagram below shows a typical flow of sentence analysis related to presentation of theory.



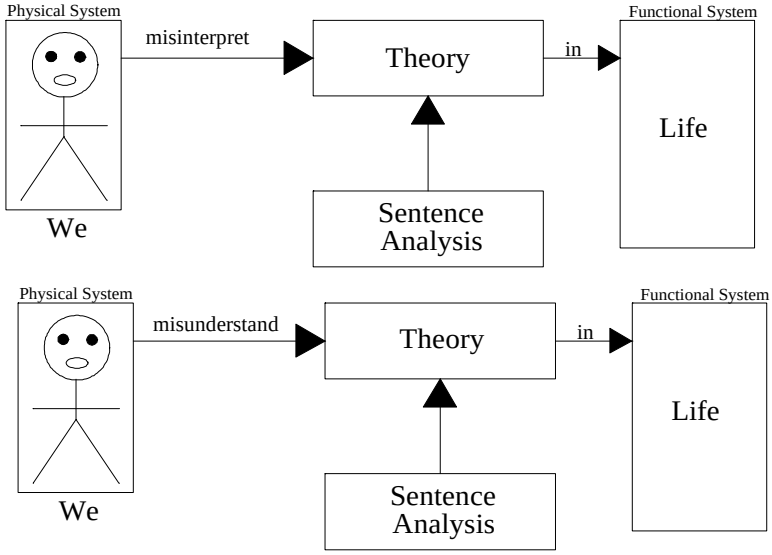
Sentence Analysis Related to Relationship of Theory and Theory Communication

It is very important to understand the relationship between theory and theory communication. Given that theory needs theory of communication in order to be presented and interpreted, there is a need to understand theory of communication. Since everything we do is related to communication, there is also a need to understand communication. Whenever theory communication does not show it is understood, sentence analysis should be alerted. Whenever there is error in communication, sentence analysis should be alerted as well. Whenever we make mistake when we communicate, sentence analysis should alert us to make appropriate correction in order for one to understand each other to make the communication satisfied.

Sentence Analysis Related to Interpretation of Theory

Good interpretation of theory is very important in life. Since we are a theory dependable system, it is very important for theory to be interpreted properly. Whenever we misinterpret our parent's principles, we no longer rely on them; we simply rely on our philosophies. Since philosophies do not have any relationship with our lives, problems can be developed.

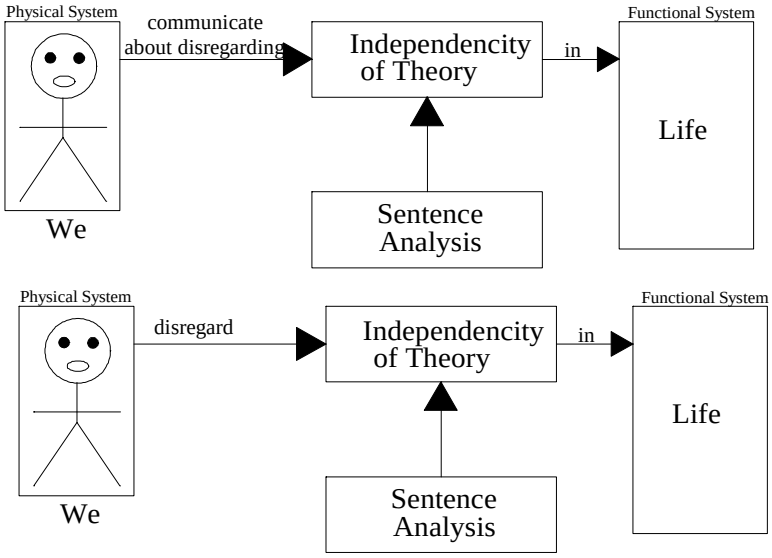
Sentence analysis related to interpretation of theory concerning about good interpretation of theory. During communication if it is observed that our parent's principles are being misinterpreted, sentence analysis should make any adjustment as quick as possible to enable our theory to be interpreted properly. That should happen anytime it shows that theories are being misinterpreted or proper interpretation of theories are being disregarded. The diagram below shows a typical flow of sentence analysis related to interpretation of theory.



Sentence Analysis Related to Independency of Theory

Since life is an associative system, we must apply our parent's principle independently in order to ensure the functionality of the overall system. Given that we all depend on the same theory, we don't depend on philosophies. Since we are a theory dependable system, whenever our theory is disregarded, we simply depend on philosophies; when that happens, problems are developed in life.

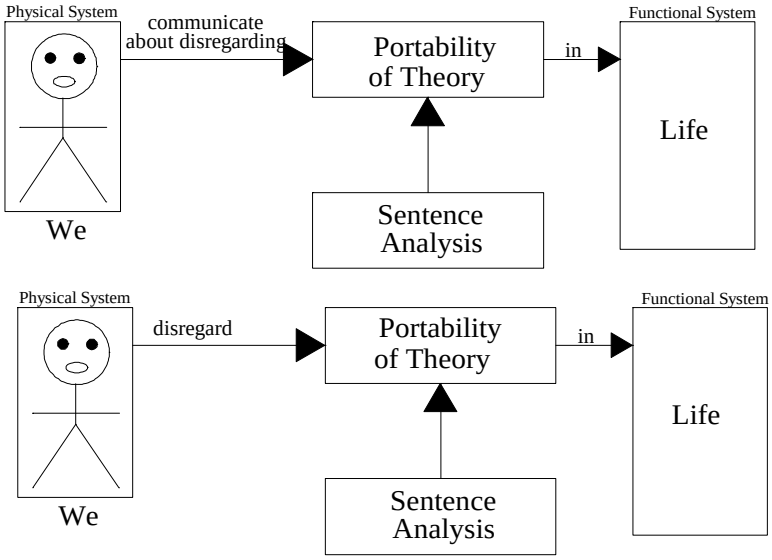
Sentence analysis related to independency of theory concerning about the utilization of our parent's principles individually rather than relying on philosophies. During communication, it is observed that philosophies tend to replace our parent's principles, sentence analysis must be alerted to make sure our parent's principles are the ones to be applied. Anytime our theory is disregarded, sentence analysis related to independency of theory should make sure that does not happen. The diagram below shows a typical flow of sentence analysis related to independency of theory.



Sentence Analysis Related to Portability of Theory

A lot of problems have been created by expandability of philosophy. Given that our parent's principles is very portable, whenever we move from one location to another location, we must apply or continue apply our parent's principles. Many, many problems have been created due to the fact that either we don't apply our parent's principles when we move to new locations or we don't continue apply them. In this case, we apply our negative philosophies in the new location.

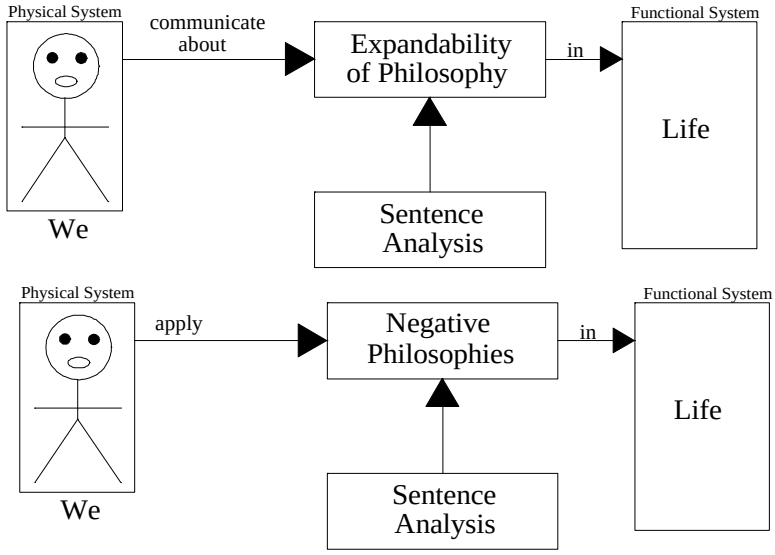
Sentence analysis related to portability of theory concerning about the utilization of our parent's principles when we move from one location to another location. During a communication process, if it is observed that our parent's principles tend to be disregard in a new location, sentence analysis related to portability of theory should be alert to make sure the theory is applicable as quick as possible. Anytime it is observe that negative philosophies tend to replace our parents principles in any location or from places to places, sentence analysis related to portability of theory should be alert to make necessary correction. This diagram shows a typical flow of sentence analysis related to portability of theory.



Sentence Analysis Related to Expandability of Theory

In order for a theory to expand, it must be applied. When we apply a theory, we can make more observation from that theory or derive more theorems from it to create more methods to use in various applications. Our utilization theory is very expandable. We can do a lot with it, if we apply it. Whenever we don't rely on our utilization theory, we simply rely on our philosophies. Since we are a theory dependable system, we must rely on ideas to do things. Whenever we drop our parent's principles, we simply rely on our own negative ideas. Given that those negative philosophies are very expandable as well, but negatively, when we use them we keep developing and developing more problems.

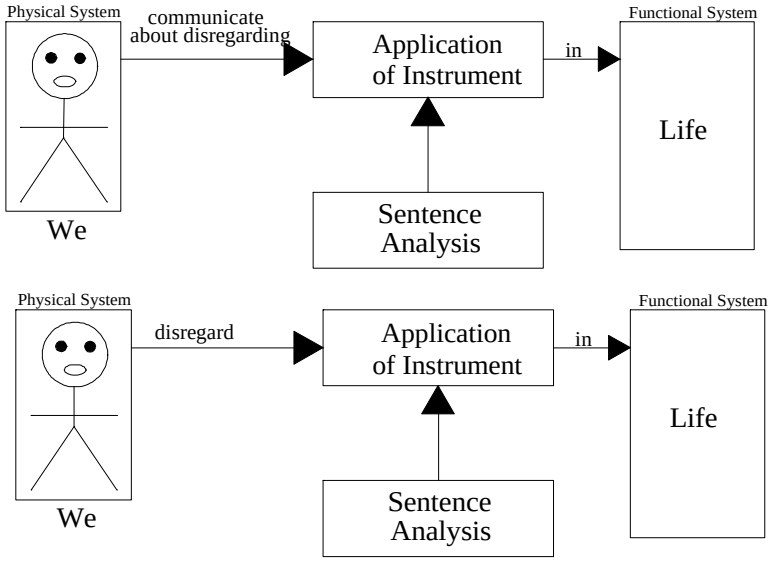
Sentence analysis related to expandability of theory concerning the expandability or the application of our parent's principles. During communication, it is observed that negative philosophies tend to be expanded, sentence analysis should be use to prevent that. Anytime a negative philosophy is introduced or observed, sentence analysis related to expandability of theory should make sure that idea should not be used and should be replaced by our parent's principles. The diagram below shows a typical flow about sentence analysis related to expandability of theory.



Sentence Analysis Related to Application of Instrument

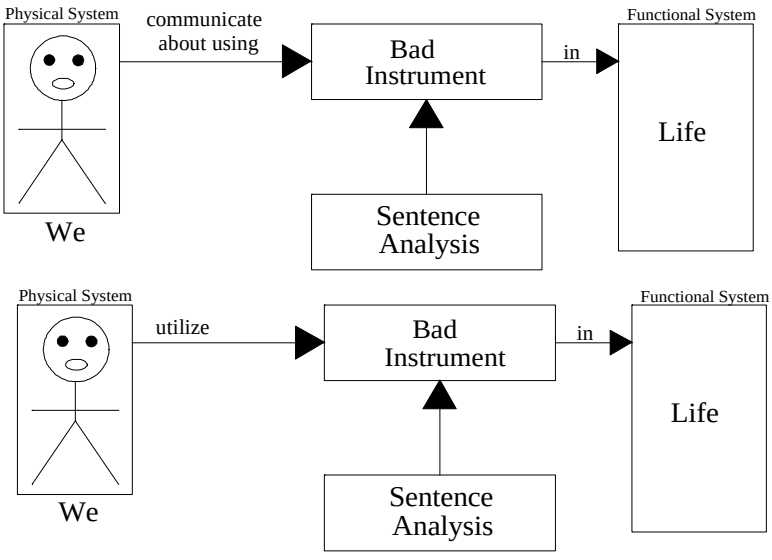
The purpose of instruments in a system is to enable that system functionality. Our attached instruments enable us to function normally. For instance, we use our hands and our fingers to eat in order to ensure the functionality of our lives. Since life is an associative system, as we use our attached instruments to enable our functionality, we also use them to enable other people functionality. That makes a lot of sense, since we cannot function without others. Given that the purpose of our attached instruments is to ensure our lives, any detached instrument we use with them must also sever for the same purpose. Whenever we don't use our attached instruments to ensure the functionality of our lives, we simply develop problems in life. When we don't use our attached instruments to ensure other people lives, we develop problems in life. When we don't use detached instruments associatively with our attached instruments to enable the functionality of life, we simply develop problems.

Sentence analysis related to application of instrument concerning about the utilization of our attached instruments to ensure the functionality of our lives. During communication, if it is observed that our attached instruments tend to be used abnormally; sentence analysis related to application of instrument should be alerted to make sure our attached instruments are used properly. Anytime it is observed that our attached instruments are not used for the purpose of ensuring our lives or other people lives, sentence analysis should make sure they use properly. Anytime our attached instruments are not used associatively with external instruments for normal functionality of life, sentence analysis should make sure that does not happen. This diagram show a typical flow of sentence analysis related to application of instrument.



Sentence Analysis Related to Application of Good Instrument

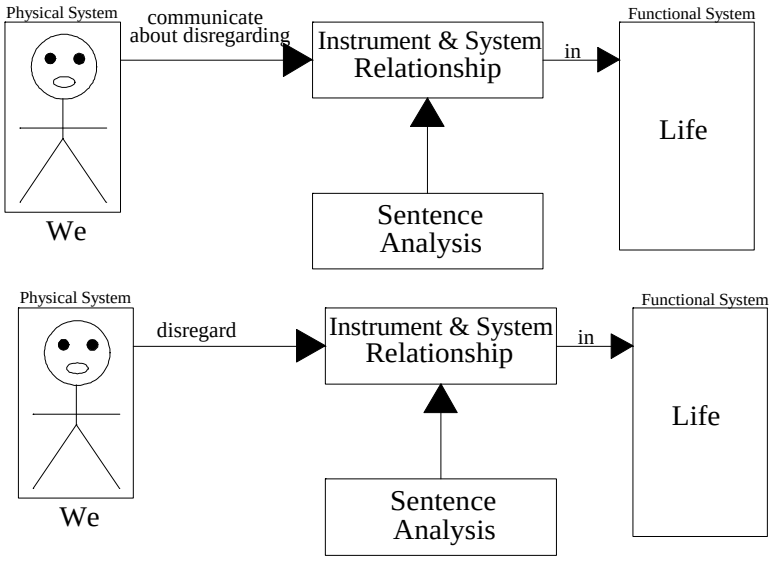
We already know what a bad instrument is. Whenever a bad instrument is used, it enables life to function abnormal. Sentence analysis related to application of good instruments concerning about the utilization of good instruments in life. During communication, it is observed that bad instruments tend to be used; sentence analysis should be used to make sure that does not happen. Anytime bad instruments tend to be used in life, sentence analysis should make sure good instruments are available to use; below is a typical flow of sentence analysis related to application of good instruments.



Sentence Analysis Related to Instrument and System Relationship

Given that instruments attached to a system applied to enable that system functionality, it is very easy to see the relationship of those instruments and the system itself. Since life is an associative system, that relationship is also applied even if the instruments are attached in a distant system. The way to look at it, there is a relationship between myself and the instruments attached to my system like my hand. This relationship is also applied to you. Even if my hand is not your hand, but it follows the same instrument and system relationship between me and you; therefore the usage of my hand for me is equivalent to you. This relationship is also extended to external instrument. Whenever that relationship is disregarded or misunderstood, problems are developed in life.

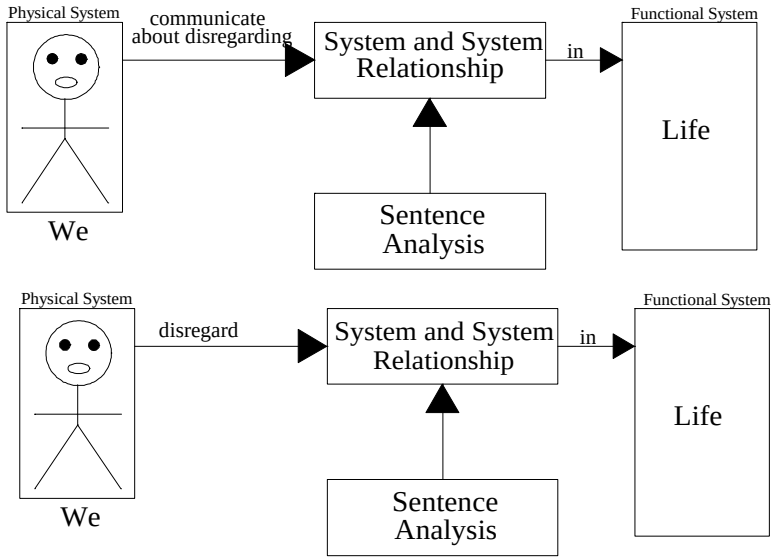
Sentence analysis related to instrument and system relationship concerning about the relationship of our attached instruments related to our lives or our physical systems. During communication, if it is observed that relationship is disregarded, sentence analysis should be alerted to make sure that relationship applied. Anytime the instrument and system relationship is disregarded, sentence analysis applied to make sure it is taken into consideration. The diagram below shows a typical flow of sentence analysis related to instrument and system relationship.



Sentence Analysis Related to System and System Relationship

Since life is an associative system, it makes sense for us to understand our system and system relationship. When we talk about system and system relationship, we mean that the relationship between me and your or the relationship between all of us. This relationship is very important since we need to maintain it in order for the overall system to function properly. This relationship can be viewed as the need of each other in life. Given that the system is associative, in order for it to function properly, the relationship of one need another must be applied. Whenever we fail to apply or understand that relationship, we simply create problems in life.

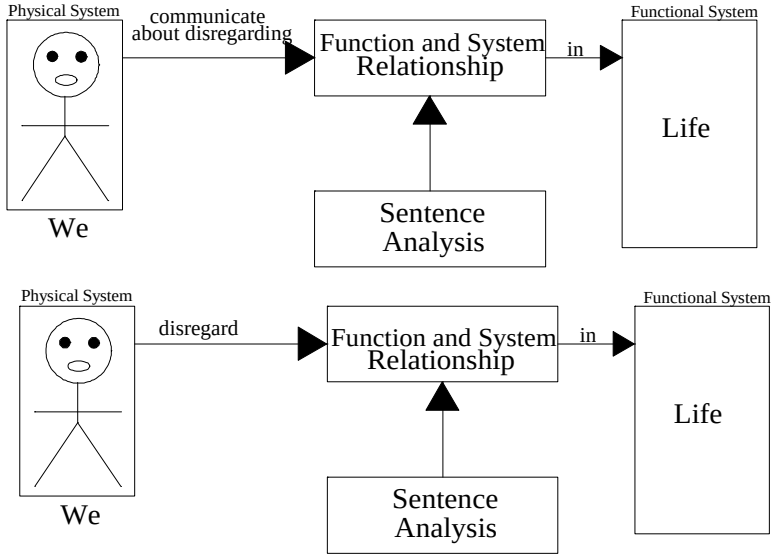
Sentence analysis related to system and system relationship concerning about the need of all of us or the need of one and each other in life. During communication, if it is observed that relationship is disregarded, sentence analysis must be used to make sure that relationship is applied. Anytime we disregard that relationship, sentence analysis must be used to make sure the relationship is being taken seriously. The diagram below shows a typical flow of sentence analysis related to system and system relationship.



Sentence Analysis Related to Function and System Relationship

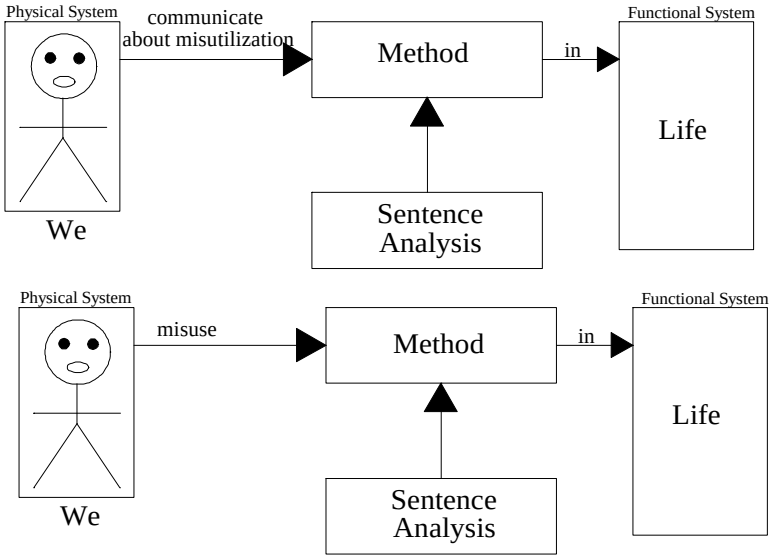
Life is the functional system and we are the physical system. The functional system, which is life, depends on us the physical system. We must apply our utilization theory to ensure the functionality of the functional system. Since we depend on our parent's principles and the functional system depends on us, we can see clearly that the functional system depends on the same theory as us. For this reason, we should always apply our parent's principles to ensure the functionality of our lives. This relationship is very important, whenever this relationship failed to apply or understand problems develop in life.

Sentence analysis related to function and system relationship concerning about the relationship between the functions that make up life and ourselves; see exercise 57, 57′ for more information. During communication, if it is observed that the relationships of us and functions that make up life have been disregarded, sentence analysis should be alerted to make sure that relationship is applied or understood. Anytime we fail to understand or apply the function and system relationship, sentence analysis related to function and system relationship should be used to make sure that relationship applied or understood. The diagram bellow shows a typical flow of sentence analysis related to function and system relationship.



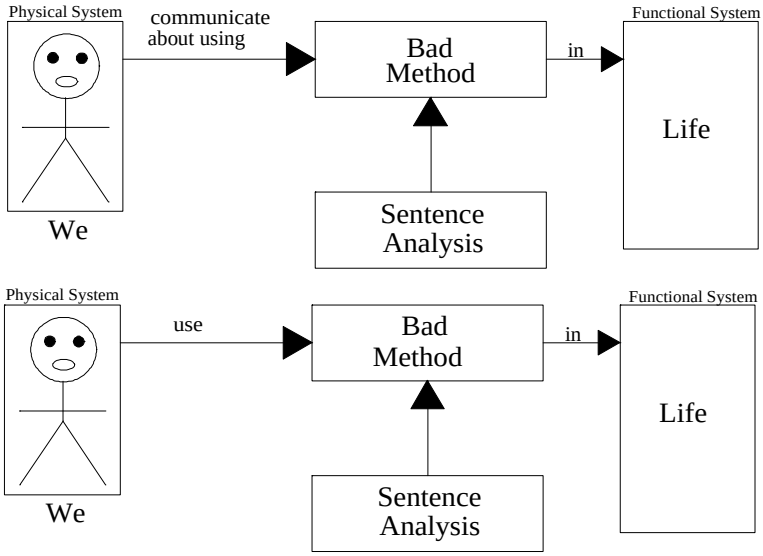
Sentence Analysis Related to Application of Method

We follow method everyday to do our works. Whenever we make mistake or misuse a method, we simply create problems. Sentence analysis related to application of method concerning about how we apply method. During communication, if it is observed that we are making mistake in a method or misuse a method, sentence analysis should be used to alert us to apply that method properly or not to misuse it. Anytime we misuse or tend to misuse or not follow a method properly, sentence analysis should alert us to make necessary adjustment; see the diagram below for a typical flow.



Sentence Analysis Related to Application of Good Method

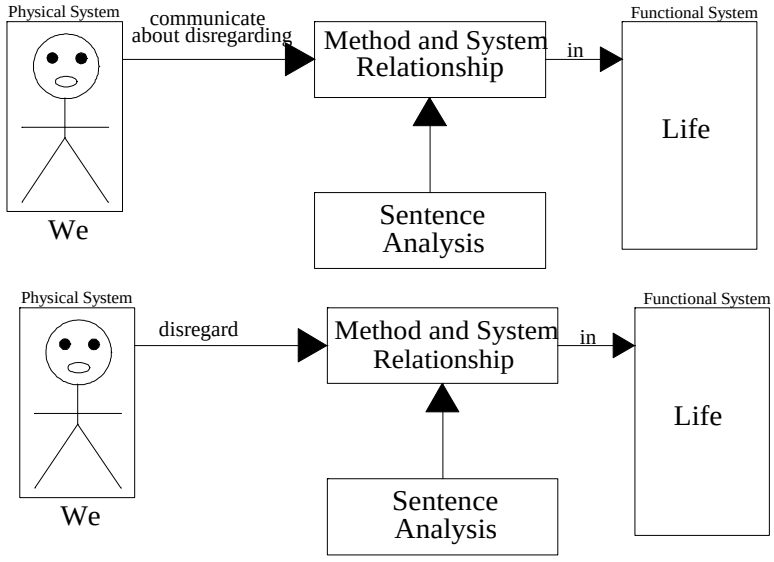
Any method that can only be used to make life function abnormal is considered to be a bad method. Sentence analysis related to the usage of good method concerning about the application of good method in life. During communication, if it is observed the usage of a bad method, sentence analysis related to good method should be used to make sure that bad method should be replaced by a good method. Anytime a bad method is in the picture, sentence analysis must be used to make sure that bad method is replaced by a good method; see the diagram below for a typical flow.



Sentence Analysis Related to Method and System Relationship

Given that there is a relationship between instruments attached in a system and that system itself, there must also be a relationship between functions performed by those instruments related to the system. Since the system needs those instruments to function, any method applied by those instruments must be related to the system functionality as well. Therefore the relationship of methods performed by the instruments and the system holds and it is very important. Since life is an associative system, there is no difference between the system where the instruments are attached and the system where the instruments are not attached. We can call the system where the instruments are attached the local system and the system where the instruments are not attached the distant system, which are viewed as me and you. The method and system relationship is very important in life, whenever it is being disregarded, problems are developed in life.

Sentence analysis related to method and system relationship is concerning about the methods performed by our instruments related to our lives. During communication, if it is observed that relationship is misunderstood, sentence analysis should be alerted to make sure the relationship is understood. Anytime our instruments tend to apply methods that do not have any relationship with our lives, or methods that tend to make our lives function abnormal, sentence analysis should be alerted to prevent that. Below is a typical flow of sentence analysis related to method and system relationship.



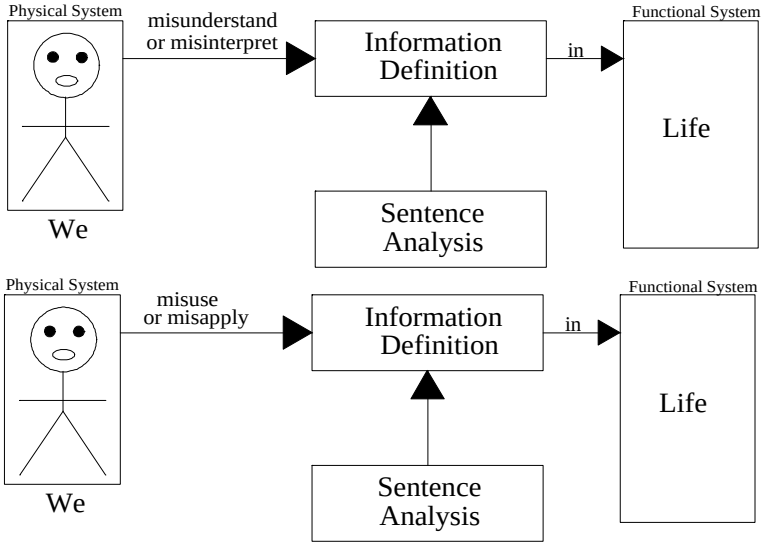
Sentence Analysis Related to Problem Definition

By now we should all understand that problems are not physically defined. It is very important to understand that definition. By failing to understand the fundamental definition of problem, we will concentrate in the area where the problem is not present. When we do that, we simply expand the problem and create more problems. To prevent that, it is good to understand problem definition and also problem multiplication and expandability.

Sentence analysis or error analysis related to problem definition, multiplication, and expandability concerning about the definition of problem and the characteristic of problem. During communication, if it is observed that problem definition and characteristic are disregarded or misunderstood, sentence analysis related to problem definition and characteristic should make sure problem definition and characteristic are applied. Anytime we misunderstand problem, sentence analysis should be used to make sure we understand it.

Sentence Analysis Related to Definition of Information

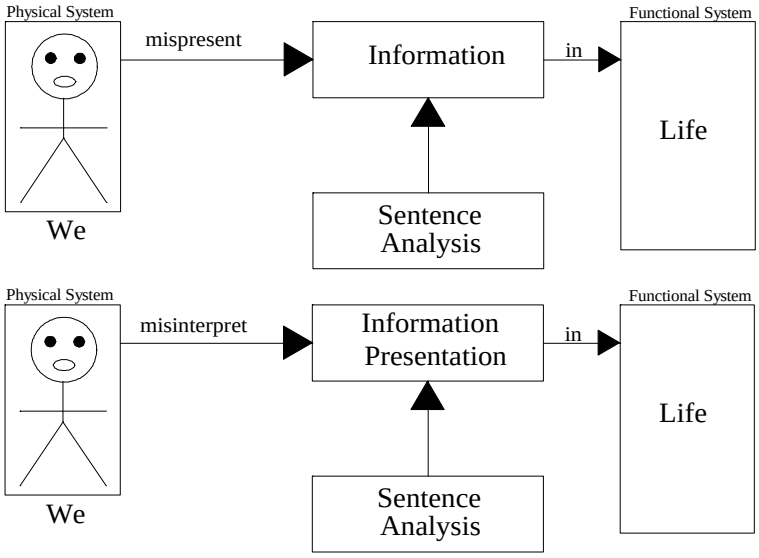
Given that we are a theory dependable system and we rely on information, it makes sense for us to understand what information means. Since information can affect our functionality, it is very important to know what information is. Problems can be developed in life whenever definition of information is not understood. Sentence analysis related to definition of information concerning about the definition of information. During a conversation, if it is shown that information definition is disregarded, sentence analysis must be used to regard the definition of information. Anytime definition of information is disregarded, sentence analysis must be used to ensure the definition of information; see the diagram below for a typical flow.



Sentence Analysis Related to Presentation of Information

The fact that we are a theory dependable system, we rely heavily on theory to function. Since theory includes in information, it makes sense for information to present properly to us so we can understand it. From presentation of theory, we have learned that theory can be presented with errors when it is misinterpreted and when theory communication is not understood. That is also applied for information. Information can be presented with errors, it can also misinterpret. Whenever those things happen, problems are developed in life.

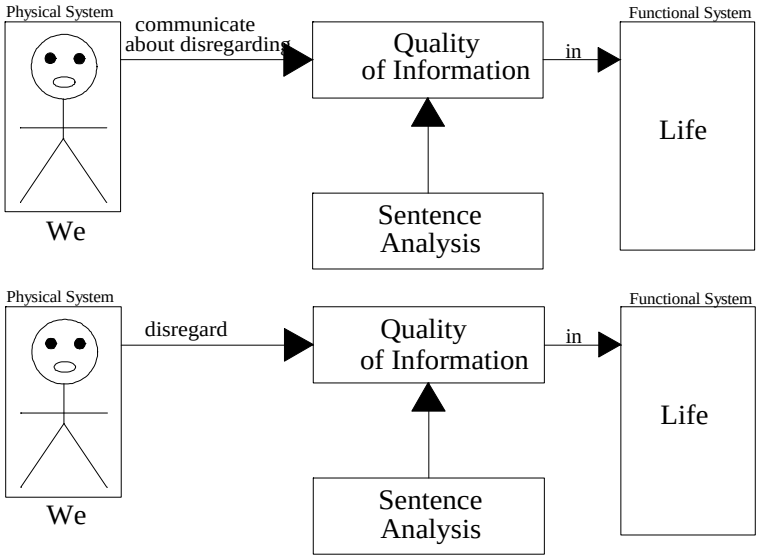
Sentence analysis related to presentation of information concerning about the proper presentation of information. During communication, if it is observed that presentation of information has been disregarded, sentence analysis related to presentation of information can be used to make correction. During presentation of information or anytime proper presentation of information is disregarded, sentence analysis must be used to alert correction. This diagram shows a typical flow of sentence analysis related to presentation of information.



Sentence Analysis Related to Quality of Information

With our dependency of information, it makes sense for information that we receive not to make our life function abnormal. The quality of information that we receive, must be similar to our parent's principles. They must not make or cause our lives to function abnormal. When the quality of information that we receive is different than our utilization theory, problems develop in life.

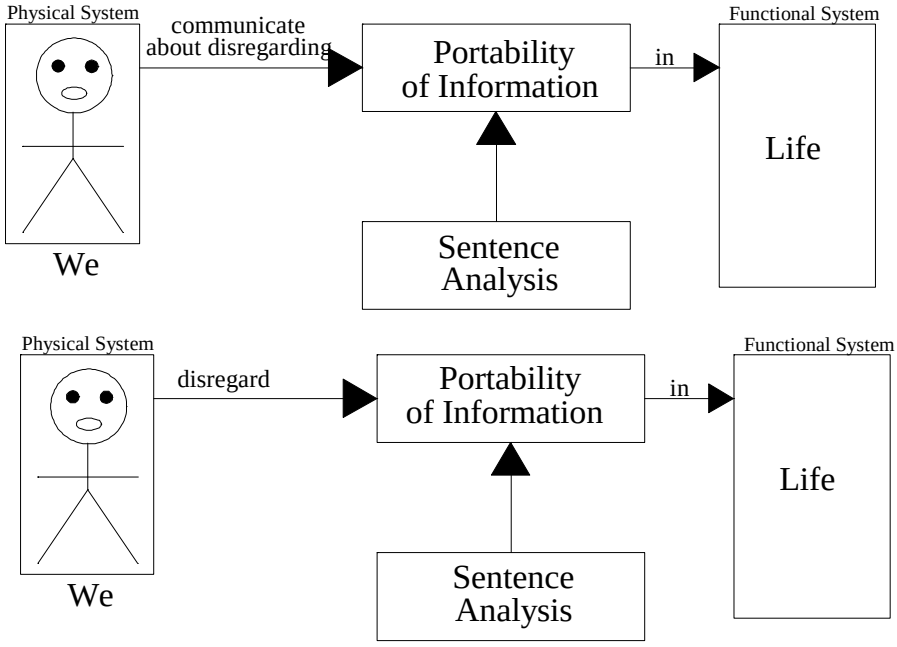
Sentence analysis related to quality of information concerning about quality of information in life. During communication, if it is observed that quality of information has been disregarded, sentence analysis must be alerted to regard quality of information. Anytime quality of information is disregarded in life, sentence analysis must be alerted to make sure proper quality of information is followed; see the diagram below for a flow.



Sentence Analysis Related to Portability of Information

Since we depend on information to function, information must be available to us anywhere we are. Given that our theory is very portable and we can apply it everywhere we go, our information must be portable as well. In order for information to be portable, it must have a similarity to our parent principles. In this case, we can say that information can be carried anywhere we are. Whenever information that is not similar to our parent principles presented or carried to our locations, problems developed in life.

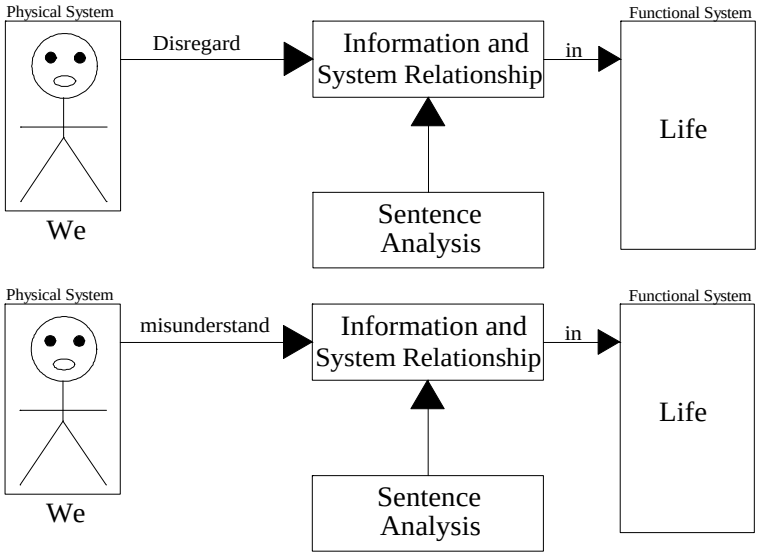
Sentence analysis related to portability of information concerning about the portability of information related to our parent's principles. During communication, if it is observed that portability of information has been disregarded, sentence analysis must be alerted to make sure portability of information is applied. Anytime portability of information is disregarded, sentence analysis must be used to make sure our parent's principles applied; see this diagram.



Sentence Analysis Related to Information and System Relationship

We know that there is a relationship between ourselves and our parent's principles. That relationship enables us to apply our utilization theory to enable our functionality. This relationship also extends to the functional system, where it depends on us to apply our theory. Since our theory includes in information, that makes that same relationship holds between us and information. Whenever that relationship is failed to apply or understand, problem develops in life.

Sentence analysis related to information and system relationship concerning about information and our utilization theory. During communication, if it is observed that our system and information relationship is disregarded, sentence analysis related to information and system relationship should make sure that relationship is applied or understood. Anytime the information and system relationship is disregarded or misunderstood, sentence analysis must be used to make sure the relationship applied or understood. The diagram below shows a typical flow of sentence analysis related to information and system relationship.

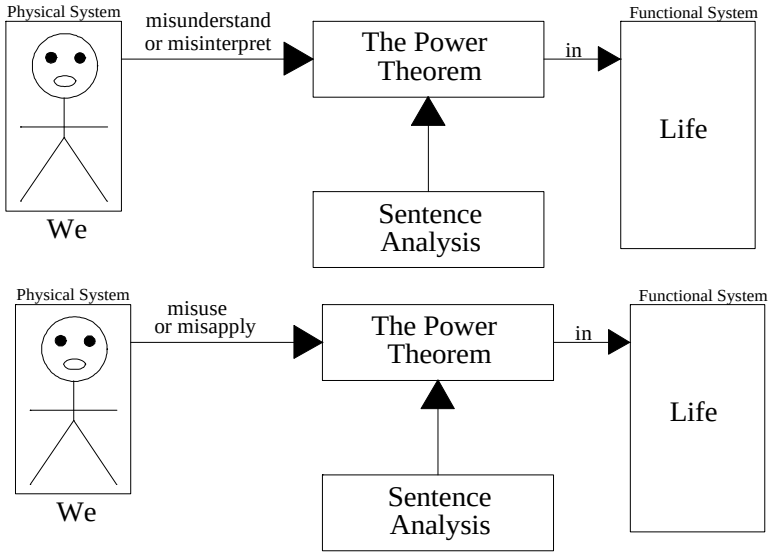


The next six pages can be disregarded. You don't have to worry about them. While they are not important in term of sentence analysis, if you need to look at them, they require the understanding of *Chapter 11 and 12*. After having a good understanding of *Chapter 11 and 12*, you can still come back and look them; simply disregard the next 6 pages for now.

Sentence Analysis Related to the Power Theorem

From the power definition, we have learned that the functionality of life depends on the utilization of our parent's principles. The power theorem reinforces that by giving us a clearer meaning of what power is. From both the power definition and the power theorem, we can see that a lot of goods things in life can be done by using our parent's principles. Since both theory and theorem are expandable through application, by applying our parent's principles, it seems like there is no limit on what we can achieve in our lives; see exercise 46, 46′ for more information. Since we are a theory dependable system, we must rely on theory to do things. Whenever we disregard our utilization theory, we simply rely on our negative philosophies to do things. Since those philosophies do not have any relationship with life, we simply develop problems.

Sentence analysis related to the power theorem concerning about the understanding and the application of the power theorem in life. During communication, if it is observed that the power theorem is misunderstood or misapplied, sentence analysis should be alerted immediately to make sure the power theorem is understood or applied properly. Anytime the power theorem is being misunderstood, misinterpreted, and misapplied, sentence analysis should be alerted immediately to make sure that does not happen. The diagram below shows a typical flow of sentence analysis related to the power theorem.

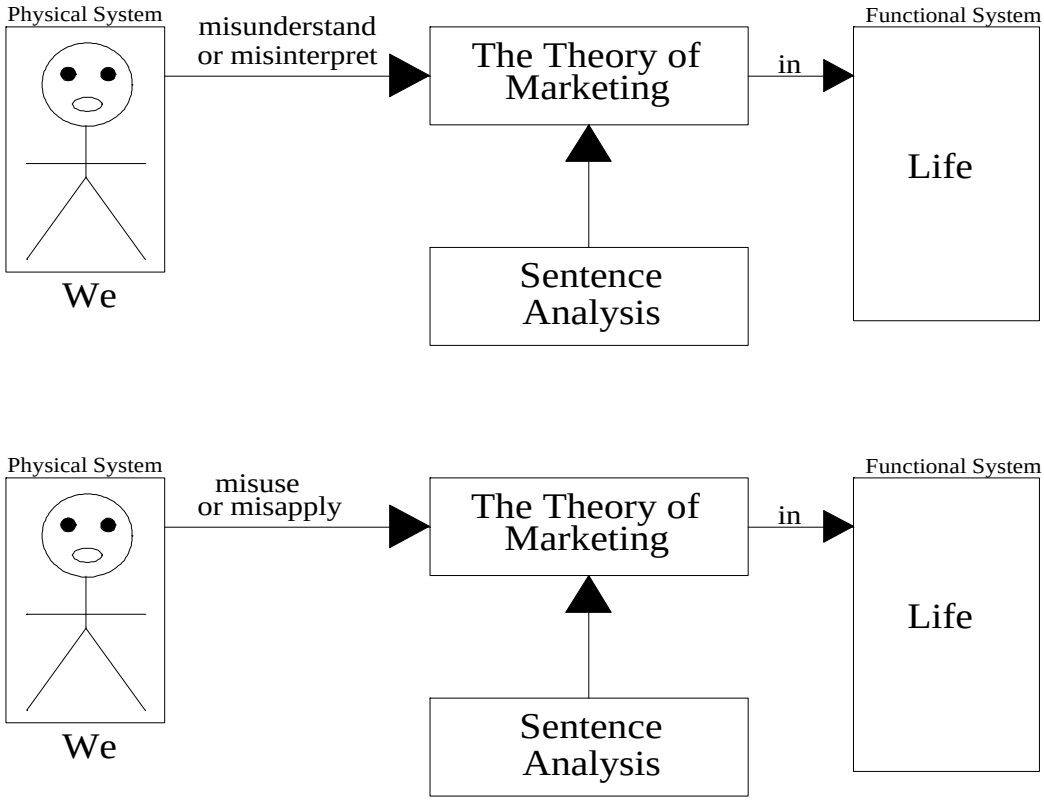


Sentence Analysis Related to the Theory of Marketing

Since we are a theory dependable system and theories are independent entity, we apply theory to develop functions of life. Whenever we say we apply theory to develop functions of life, we mean two cases, we apply theory in life to develop instrument that

perform functions of life, we also apply theory to develop functions of life that are view as services that we provide in life. Once we add those functions to life, it is possible for us to make other people be aware of those functions so they can be useful to them. The theory of marketing enables us to provide information about functions that we add to life. Let's say it again; the theory of marketing enables us to provide information to other people about functions that we add do life. Those functions can be performed by instruments we derive in life or services that we provide in life; see chapter 11 for more information about the theory of marketing.

Sentence analysis related to the theory of marketing concerning about providing information to people about functions that we add to life. During communication, if it is observed that the theory of marketing is misunderstood or misapplied, sentence analysis related to the theory of marketing should be alerted to make sure the theory of marketing is understood or applied. Anytime the theory of marketing is misunderstood, misinterpreted, and misapplied, sentence analysis related to the theory of marketing should be used immediately to make sure that does not happened. The diagram below shows a typical flow of sentence analysis related to the theory of marketing.

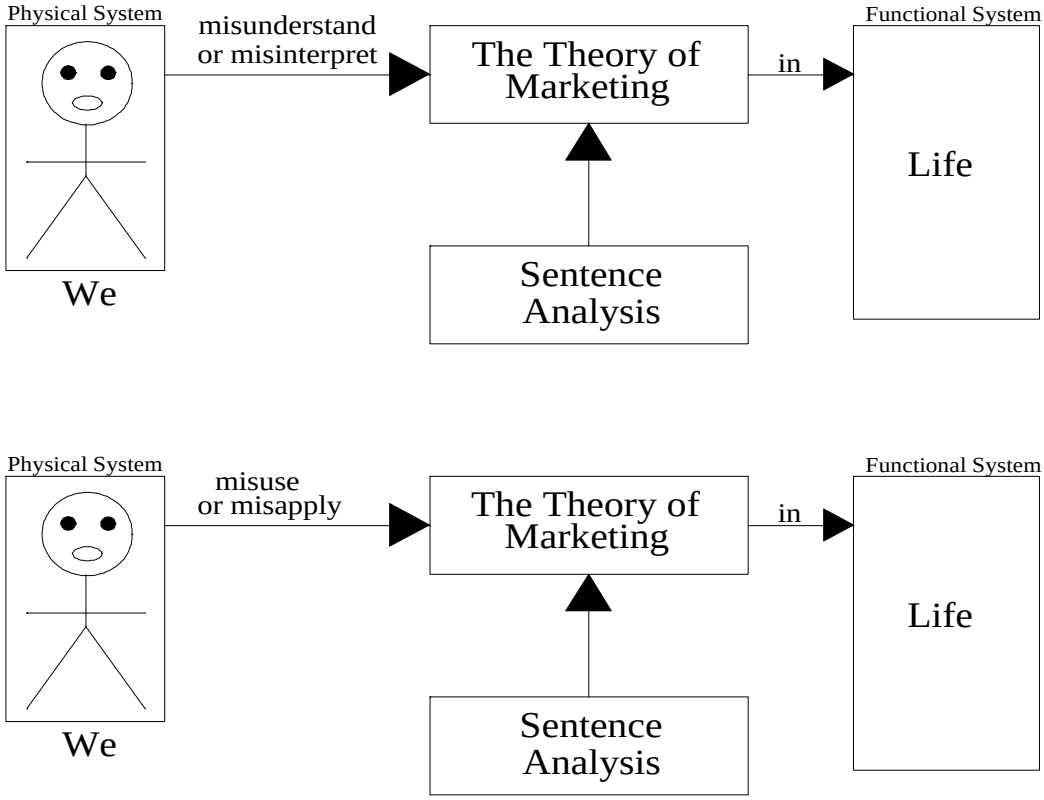


Sentence Analysis Related to the Exchange System Theory

Since we live in various places, there are many things that we need to live that are not located at the place we live or at our residence. The exchange system theory make it

convenient and possible for us by provide us the ability to exchange goods and services. Given that everything that we need to live is not located at the place we currently are, it makes sense for us to exchange together things that we need to live. The exchange system theory makes it possible for us to that. Refer to chapter 12 for more information about the exchange system theory.

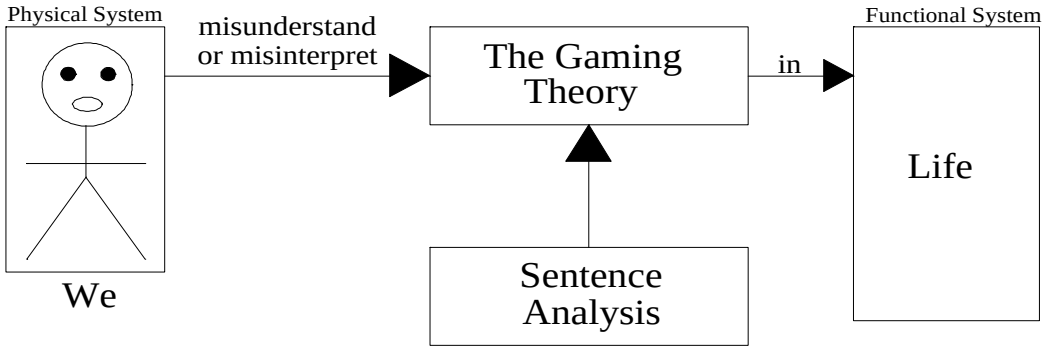
Sentence analysis related to the exchange system theory concerning about the exchange of goods and services in life. During communication, if it is observed that the exchange system theory is misunderstood or misapplied, sentence analysis related to the exchange system theory should be alerted to make sure the exchange system theory is understood or applied. Anytime the exchange system theory is misunderstood, misinterpreted, and misapplied, sentence analysis related to the exchange system theory should be used immediately to make sure that does not happened. The diagram below shows a typical flow of sentence analysis related to the exchange system theory.

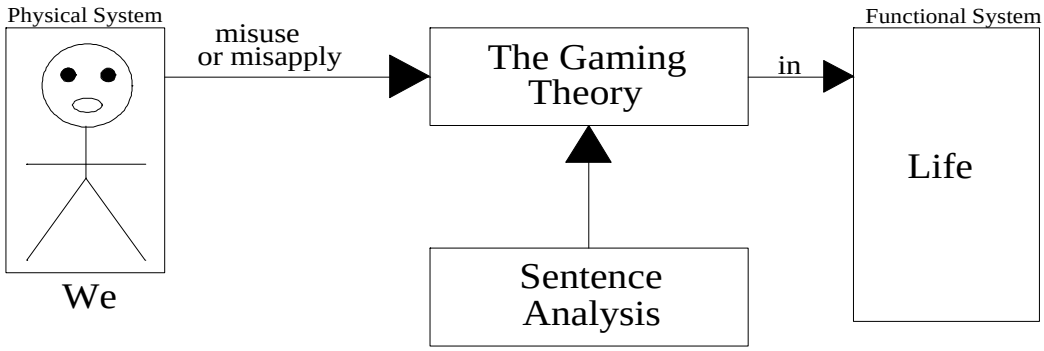


Sentence Analysis Related to the Gaming Theory

The gaming theory enables us to execute neutral functions of life. Whenever we use the term neutral functions, we mean functions that do not affect life, both positive and negative. Sentence analysis related to the gaming theory concerning about execution of neutral functions of life. During communication, if it is observed that the gaming theory

is misunderstood or misapplied, sentence analysis related to the gaming theory should be alerted to make sure the gaming theory is understood or applied. Anytime the gaming theory is misunderstood, misinterpreted, and misapplied, sentence analysis related to the gaming theory should be used immediately to make sure that does not happened. The diagram below shows a typical flow of sentence analysis related to the gaming theory; refer to exercise # and # for more information about the gaming theory.



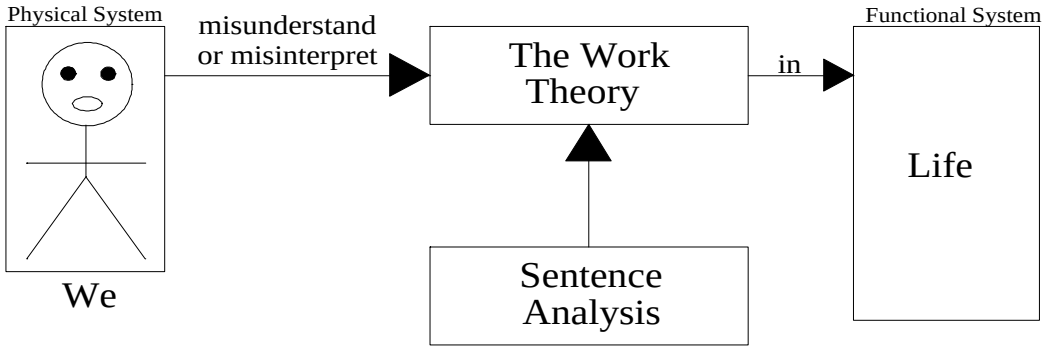


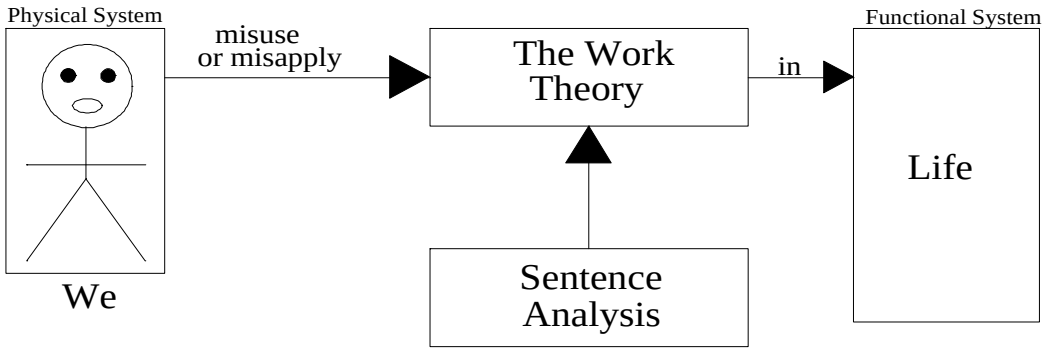
Sentence Analysis Related to the Work Theory

Since we are a theory dependable system and we are an associative system, we can apply theory independently in group to derive functions of life. The work theory enables us to work together. In other words, the work theory enables us to apply theory independently in group to derive functions of life. Let's say it again; the work theory enables us to work together by applying theory to derive functions of life. Refer to the exercise # and # for more information about the work theory.

Sentence analysis related to the work theory system concerning about our works, what we do, or our application. During communication, if it is observed that the work theory is misunderstood or misapplied, sentence analysis related to the work theory should be alerted to make sure the work theory is understood or applied. Anytime the work theory is misunderstood, misinterpreted, and misapplied, sentence analysis related to the work

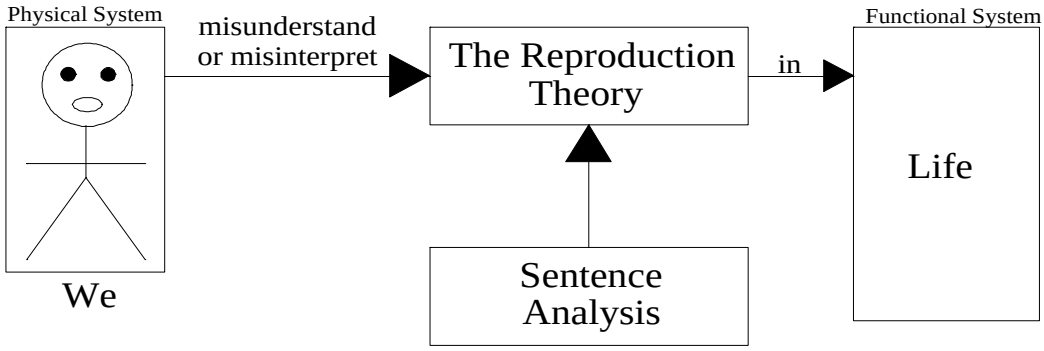
theory should be used immediately to make sure that does not happened. The diagram below shows a typical flow of sentence analysis related to the work theory.

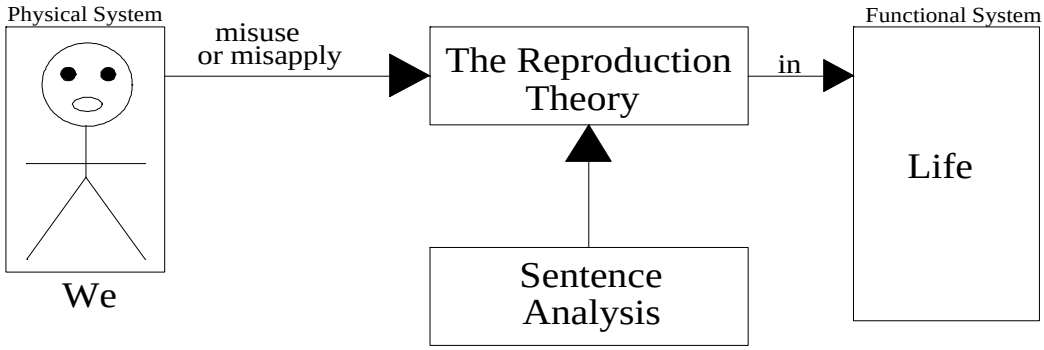




Sentence Analysis Related to the Reproduction Theory

Reproduction is a characteristic of the physical system. Since the functional system depends on the physical system, reproduction is also a part of the functional system. Sentence analysis related to the reproduction theory concerning about reproduction in life. During communication, if it is observed that the reproduction theory is misunderstood or misapplied, sentence analysis related to the work theory should be alerted to make sure the reproduction theory is understood or applied. Anytime the reproduction theory is misunderstood, misinterpreted, and misapplied, sentence analysis related to the reproduction theory should be used immediately to make sure that does not happened. The diagram below shows a typical flow of sentence analysis related to the reproduction theory.





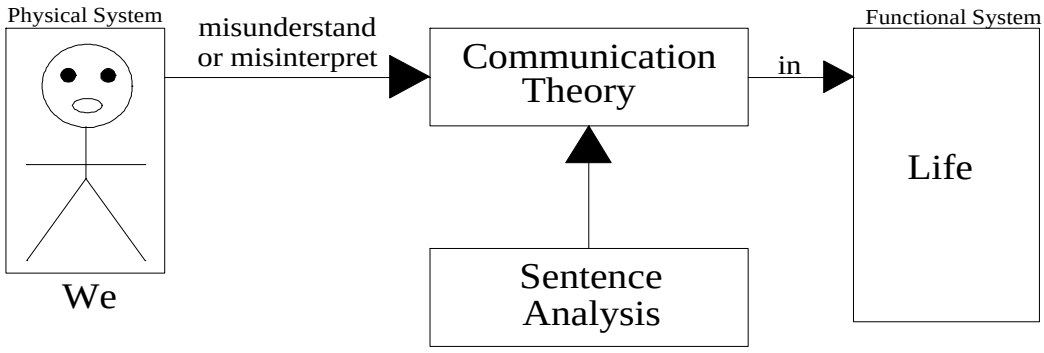
More Information on Sentence Analysis

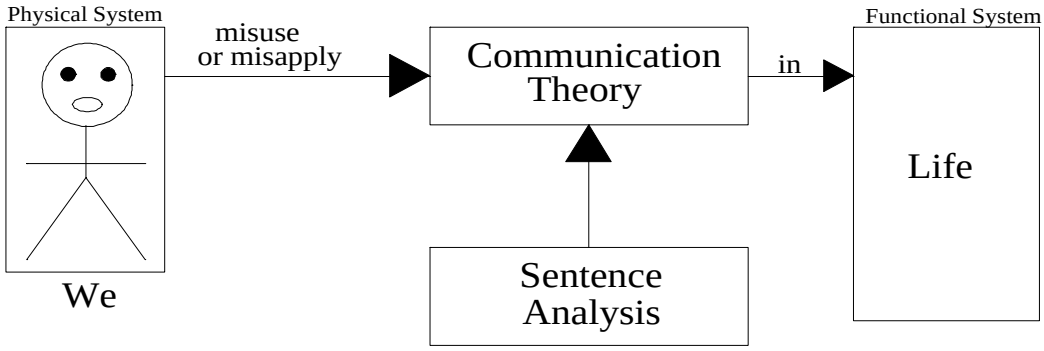
From our understanding we can see a relationship of sentence analysis in regard to identification of theory with the help of theory communication. By observation, we can see that the following sentence analysis have been included already. We mean sentence analysis related to information theory, communication theory, instrumentation theory, and education theory. We will add them anyway. In other words, by observation and from our understanding, there is no need to add sentence analysis related to communication theory, information theory, instrumentation theory, and theory of education, since they have been included already. To prevent misunderstand and misinterpretation, we will include them anyway.

Sentence Analysis Related to Communication Theory

There is a relationship between theory and theory of communication. Theory of communication enables theory to be understood. The interpretation and the application of a theory depend on theory of communication. Without understand theory of communication or without understand communication, there is no way a theory can be understood. It is very important to understand theory of communication in order to understand theory.

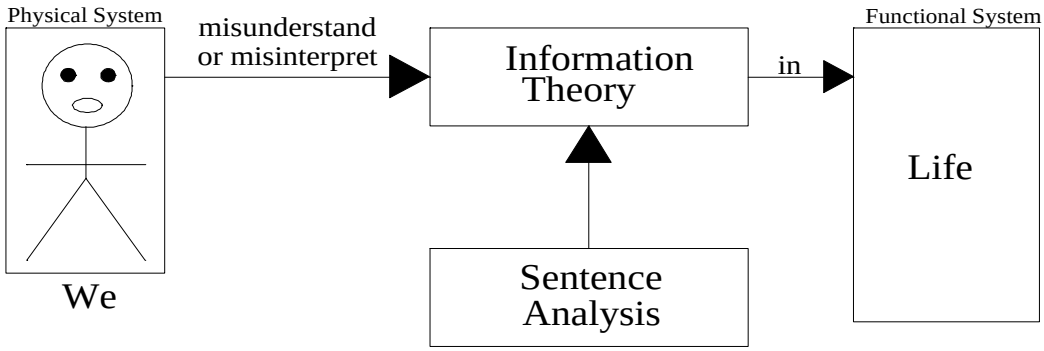
Sentence analysis related to communication theory concerning about our communication. During communication, if it is observed that communication theory is misunderstood or misapplied, sentence analysis related to communication theory should be alerted to make sure theory communication is understood or applied. Anytime theory of communication is misunderstood or misapplied, sentence analysis related to communication theory should be used to make sure that does not happen. The diagram below shows a typical flow of sentence analysis related to theory of communication.

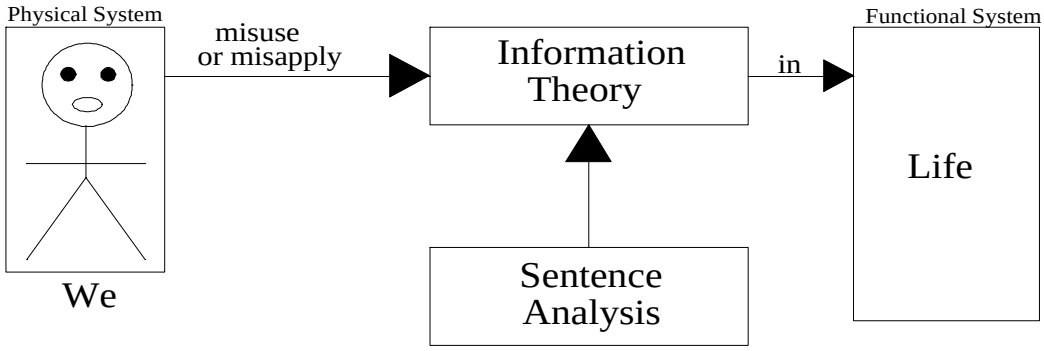




Sentence Analysis Related to Information Theory

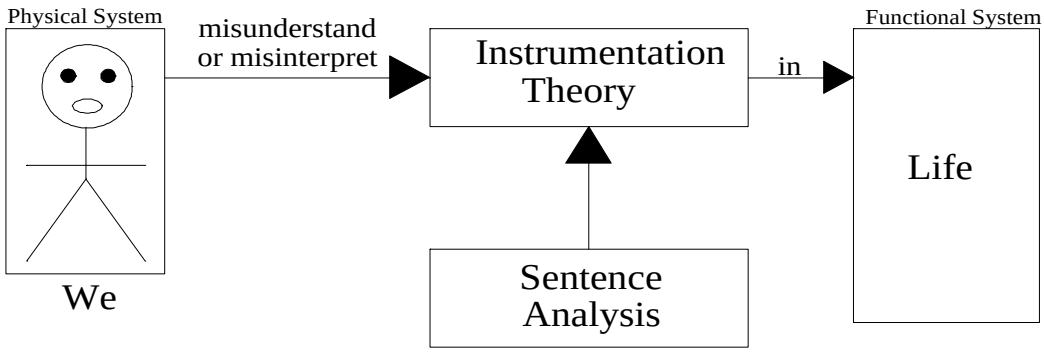
Information theory enables us to manage the flow of information between us. Sentence analysis related to the information theory concerning about the flow of information between us. During communication, if it is observed that information theory is misunderstood or misapplied, sentence analysis related to information theory should be alerted to make sure information theory is understood or applied. Anytime information theory is misunderstood, misinterpreted, and misapplied, sentence analysis related to information theory should be used immediately to make sure that does not happened. The diagram below shows a typical flow of sentence analysis related to information theory.

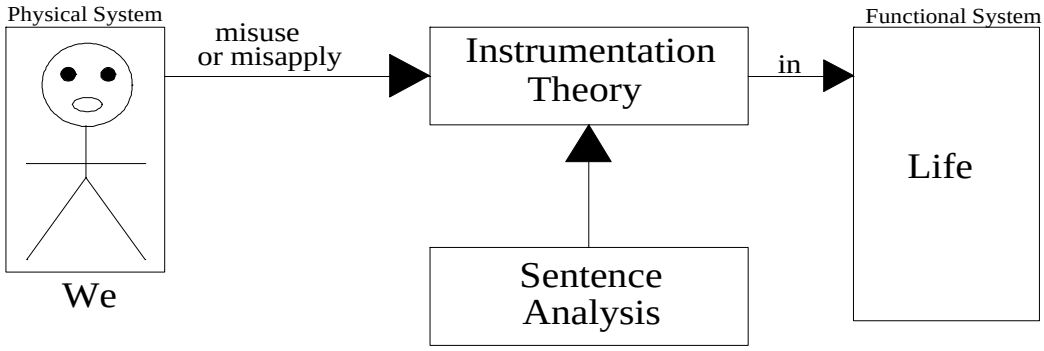




Sentence Analysis Related to Instrumentation Theory

Instrumentation theory enables us to manage the usage of our instrument. Whenever we use the word instrument here, it means both attached and non-attached instruments. Sentence analysis related to instrumentation theory concerning the usage of instruments. During communication, if it is observed that instrumentation theory is misunderstood or misapplied, sentence analysis related to instrumentation theory should be alerted to make sure instrumentation theory is understood or applied. Anytime instrumentation theory is misunderstood, misinterpreted, and misapplied, sentence analysis related to instrumentation theory should be used immediately to make sure that does not happened. The diagram below shows a typical flow of sentence analysis related to instrumentation theory.

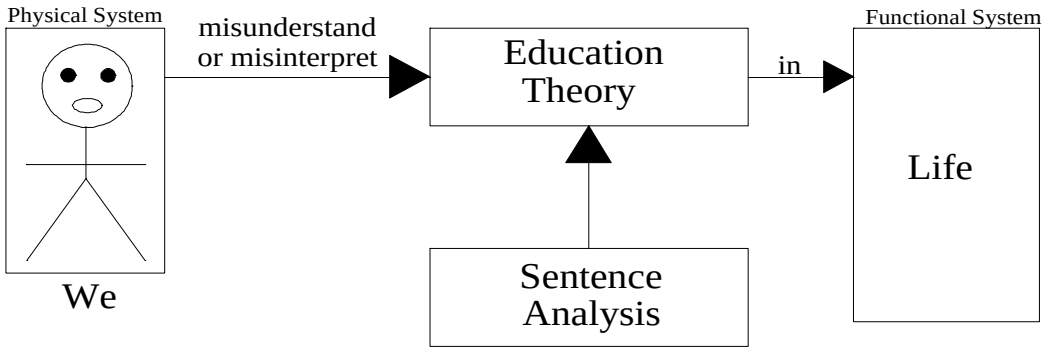


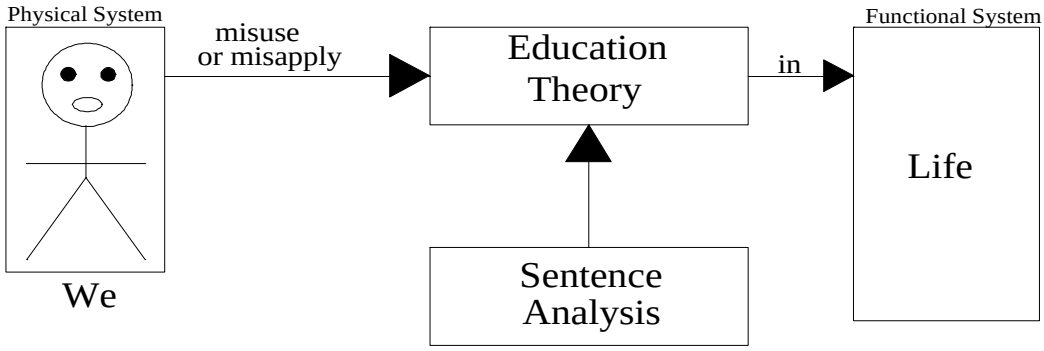


Sentence Analysis Related to Education Theory

The theory of education is a set of theory. Theory of education is the process of learning theory. The way to look at it, we learn theory with the help of theory of education. For this reason, we can say that theory of education is very important to us. Sentence analysis related to education theory concerning about the learning of theory. During communication, if it is observed that education theory is misunderstood or misapplied, sentence analysis related to education theory should be alerted to make sure education theory is understood or applied. Anytime education theory is misunderstood, misinterpreted, and misapplied, sentence analysis related to education theory should be used immediately to make sure that does not happened. The diagram below shows a typical flow of sentence analysis related to education theory.

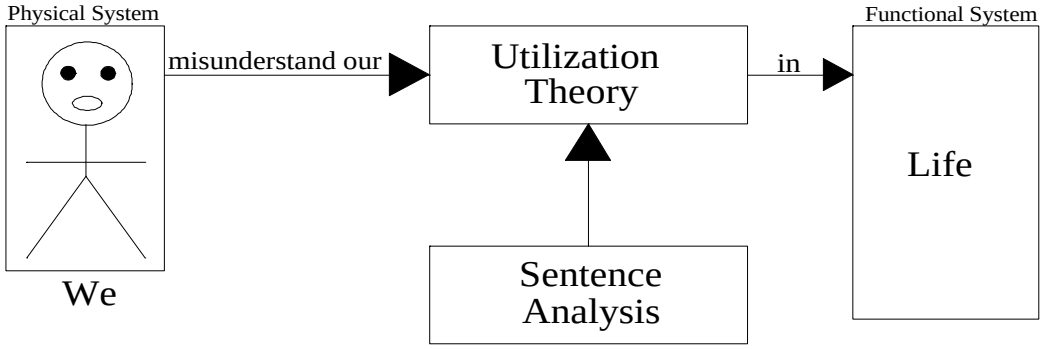
While we mention sentence analysis related to education theory here. It is very important not to take the theory of education for granted. Relatively to other theory, theory of education is considered to be a higher theory; see exercise # for more information.





Conclusion

The purpose of sentence analysis is to help us understand our parent principles. The way to look at it, sentence analysis enables us to understand our utilization theory. We have seen many cases, where we have also showed a typical flow diagram for various cases. Given that we have identified and grouped many principles in our utilization theory, we have used this technique to help us analyze and correct errors in communication in various forms they are presented. The overall process of sentence analysis is to help us understand and apply our parent's principles, which we call our utilization theory. The flow model of the overall process can be seen by the figure below.



The way to look at it, during sentence analysis, if errors are detected, they can be removed or corrected then the sentence can be reconstructed. The new sentence can be well understood to satisfy the need of communication; where it can then be used in the application without developing any problem. Although we have called the process sentence analysis, it is good to look at it as error analysis in communication. It does not matter in what form of communication it is presented, error analysis in communication must be used to remove any error and make correction to enable one to understand each other during communication.

By now we should have seen why our parents have been able to correct us; we should have seen why those corrections were possible; the reason those corrections were possible, because our parents know more about our utilization theory than us. We can say that our parents know more about life than us. Given that life depends on our utilization theory, we can say that our parents know more about our functional principles than we do. For instance, our parents know more about instrumentation theory than us; our parents know more about information theory than us; our parents know more about The Power Theorem than us etc. All those principles enable them to feedback us in order for us to make correction to help us solve and prevent problems in life. That was the reason they have been able to correct us. Now that we know a lot about our utilization theory, we should be able to make our own corrections as well.

Chapter 10

Exercises

Introduction

The following sentence may have been seen before *a theory cannot be understood without application*. While learning a theory, the utilization of that theory in many applications to enable the understanding of that theory is considered to be the practical aspect of that theory. It is always better to call that process the application approach of that theory instead. Since a theory is very expandable, this process enables the beginning of understanding of that theory in some applications, where that comprehension can be used for more advanced applications.

Another word used to call applications to enable the understanding of theories and theorems is exercise. Although there is a difference between exercise and using a theory in various applications, sometime it makes sense to view exercises as applications as well. Many times when learning a theory, there are some examples that are given about that theory to enable it to be very well understood. Those examples combined with some exercises can also be used to enable that theory to be understood better. In other words, those examples can be used to show how the theory can be used in various applications.

This chapter includes many exercises that will help us understand and apply our utilization theory. Since a theory cannot be understood without utilization, to enable the understanding of our theory, it is always good for the exercises to be presented in manner well applicable. That means an applicable manner that includes all possibilities to help us understand the theory. Those possibilities are not only pen, paper, and ink, but include all others that may help us understand the theory.

1. Here are the following **grammatical terms**: active voice, adjective, adverb, comparative, conjunction, demonstrative adjective, demonstrative pronoun, direct object, imperative, indirect object, noun, object, passive voice, person, personal pronoun, plural, possessive adjective, possessive pronoun, preposition, pronoun, quantitative adjective, question, reflexive pronoun, singular, subject, superlative, and verb.
    a. To better understand the terms we have identified in the prerequisite exercise, choose 10 of the grammatical terms listed above and define them in terms of theory, theorem, method, system and instrument. For instance, a verb can be defined as a method. As well as, an adverb can be defined as a word that shows how a method is being used or adverbs show how methods are used.

2. Use the terms we have identified to find a, b, c, d, and e in the following exercise. Life is made up__a__ and __b__; what a and b do is called__c__and what shows how c function is called__d__and__e__.

3. It is very important to know what a method is. We do things by executing methods. The result of what we do always depend on the way we apply the methods.
    a. Identify couples of method
    b. State some applications of those methods; that means state what those methods are used for

4. From the above exercise, we have learned that the result of what we do depends on how we apply or execute the methods. If we apply a method without error we will get a good result, as well as if we apply it with errors, we will get a result with errors, which we call problems. It is very important to understand that. Verity this statement with your experience in terms of methods applications.

5. When we don't follow proper direction to do something or when we don't follow the method properly, we develop problems in life. Sometime we say that we commit error which develops problems. It is very important to understand how problems get developed.
    a. Identify some problems and identify some errors that cause them or what cause them.
    b. Verity part a by stating that problems are developed when proper directions are not followed. You can verify that by following from your experience related to method application.
    c. Since problems are developed when we apply method improperly, since we apply methods to do what we do, a bad method can also develop problems. Verify when a method is bad and also when a method is applied improperly.
    d. We know that we are an associative system where the functionality of one depends on each other; verify each other relationship related to method application.

6. A system is a collection of instrument that work together to accomplish a function. A system can be presented naturally; it can also be derived manually or artificially.
    a. Identify some systems like two or three. Identify the instruments that are part of those systems and describe the relationship of those instruments related to the systems you have identified.
    b. Identify a natural system; identify some instruments that are part of that system and describe the relationship of those instruments related to that system. You can skip this part if you have done it similarly in part a.
    c. Identify a non natural system and instruments that it is made up. Describe the relationship of those instruments and the system itself. You can skip this part if your part a similar to it.

7. Given that a system functions according to some set of principles. We call those set of principles unique to that system. That makes sense, since that system does not work by any instruction. We call those set of principles theory, or utilization theory of that system.
    a. Identify a system and some set of principles that work with that system. The way to look at it, for instance if you identify a television, or a radio, you can identify some instructions that you use or can be used to enable the functionality of that radio or television. To enable you to identify the instructions correctly, you can add many ideas that may contribute to the system functionality and some that may not contribute to its functionality. Then group those that can contribute to its functionality as the set of principles that you need.
    b. From part a, if you have identified some set of ideas that can contribute to the system functionality and some set of ideas that may not contribute to that system functionality, state what you think about those two set of ideas.

8. We have seen that a system can be presented naturally; it can also be derived manually. With that, we can see each of those systems associated with some set of principles that enable their functionalities. For instance, the natural system can be associated with some set of principles that has a natural basis to enable its functionality, as well as the non natural system can be associated with some set of instructions to enable its functionality.
    a. Identify a non natural system with some set of principles or instructions that enable its functionality
    b. Identify a natural system with some set of principles that enable its functionality

9. A system can be presented as a group of functions. We can call that system a set of functions. We have identified many systems in this books that are set of functions.
    a. Identify one or two systems that are presented as a set of functions. State if the systems you have identified are natural or non natural.

b. Show some relationships between the systems you have identified and some of the functions those systems are made up.

10. Given that a system functions with some set of principles which we call its utilization theory, we can say that there is a relationship between the theory and that system itself. If possible, show the relationship between the system you have identified above and its functional principles.

11. Given that the utilization theory of a system must be used to ensure that system functionality, we can say that theory is very important to that system. From some previous exercises, we have identified many systems and set of principles that enable their functionalities. Pick one of the system you have identified above and show how important is the utilization principles of that system related to that system functionality.

12. From various exercises, we have shown the relationship of a system and its utilization theory. Since different types of systems can be identified, different types of principles can also be used to enable their functionalities. In terms of system, the utilization theory of a system may require for that system to function associatively. That means in a set or group of systems, the utilization theory of the set may require for the overall set or that group to work where the functionality of one depends on another. In this case, each system in that set must apply the overall system utilization theory in order to ensure the functionality of that set.
    a. When we talk about associative system, it is better to take ourselves as an example. For instance, we are an associative system or life is an associative system. Verify that life is an associative system.
    b. Show that life works associatively and show that the functional principles of life must apply independently
    c. State why the utilization principles that enable life to function must apply independently
    d. Show your experience related to independent application of principles that enable the functionality of life.

13. From one of the previous exercise, we have identified many systems and instruments that are attached to them and the relationship of those attached instruments related to their respective systems. Depend how you have done the exercise, you may have concluded that instruments that are attached to a system work to enable that system functionality. This relationship is considered very important for instruments and systems and we can call it the principle relationship of instruments and systems.
    a. Read the above paragraph and take your time to think about it
    b. Since those instruments work to enable the functionality of the system, we can say that the application of those instruments must work to enable the functionality of their respective systems; verify that statement.

c. Show what happen when those instruments are not utilized in favor of their respective systems. That means when they are not used to enable their systems functionalities.
d. We have identified many natural systems, and we have also identified instruments that are attached to those systems. For example, we have identified ourselves as a system and we have identified hand, finger etc. as instruments of our system. We have seen that those instruments are utilized to enable the attached system functionality. Give some examples on those instruments related to their applications and show if they always used to enable the functionality of their respective systems. Show why those instruments must always use to enable the functionality of the system.
e. From one of the previous question, we have seen that we are an associative system and our functionality depends on each other. As an associative system, instruments that are attached to one must be used to enable the functionality of others; verify that statement. Show why those instruments must not be used to enable the abnormality of others. You may also show your experience related to the utilization of those instruments.

14. We have seen that problems are not physical entities. By considering problems as negative ideas, we can say that those ideas can pass from one to each other and from places to places. With that, we can say that problems that are introduced in an area can quickly expand to other areas and create other problems if they are not solved immediately.
    a. Verity that statement
    b. Show that problems can be expanded to create more problems and different other problems

15. We have defined a problem as a negative philosophy that enables life to function abnormal. We have also learned that, it is always good to have a problem statement, since it allows us to precisely locate the basis of the problem and provide us with a pathway to get a solution. There are many problems in life that are wrongly identified, for this reason it is very difficult to find a common solution.
    a. Take any problem in life; you can find one from a newspaper article or listen to the news. Derive the problem statement for that problem.
    b. Define the problem
    c. Identify the problem you have defined
    d. State whether the problem you have identified in part c is physically or philosophically defined.

16. Identify two parent principles that are related to information theory and show their importance.

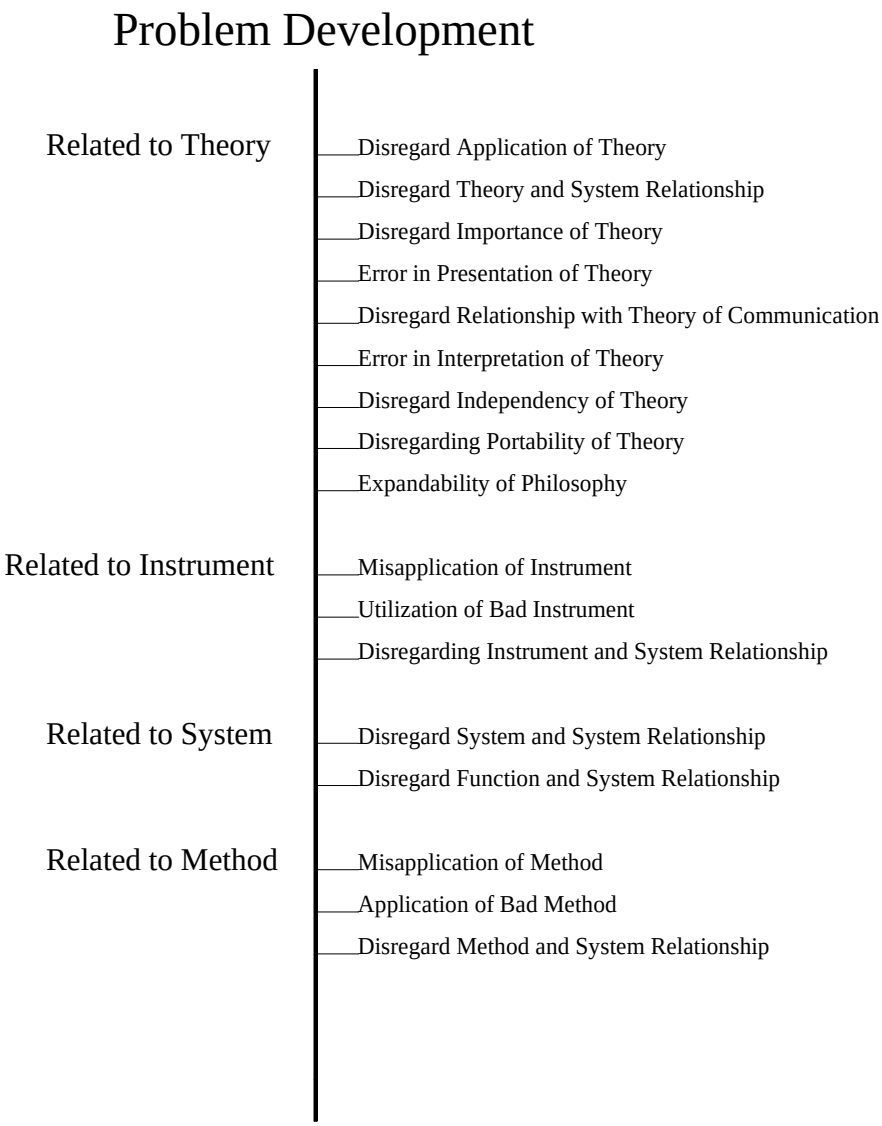
17. After information is presented to us, we always analyze that information. Sometime we analyze information related to its quality; sometime we analyze them related to the way they are being presented.
    a. Verify the statement
    b. Provide an example of one of your analysis related to information. Show the quality of that information related to your analysis.
    c. Show the quality of the information related to its presentation

18. We have seen that information is important since we need it to function. While we function related to information, but information quality can affect our functionality.
    a. Verity the above statement
    b. Based on your verification, you may find that there is a relationship between us and information, show the importance of that relationship.

19. We have seen and shown in many exercises that life cannot depend on our philosophies. One reason for that is because philosophy does not have a baseline. There are so many of them, when we rely on them it looks like we don't have a specific path to follow. Not only we rely on our own, but we rely on others as well. Basically, this is how problems get developed. So it is always good to rely on theory rather than philosophies. Show practically that it is better to follow a single path rather than multiple paths.

20. We define a problem as a negative philosophy. We know that a negative philosophy can be expanded to create other negative philosophies. It is the same as saying that a problem can be expanded to create other problems. We know that we move from locations to locations. When we move from one location to another, if we don't rely on our parent's principles at the new location, we simply rely on our negative philosophies. When we apply them at the new location, we simply create problems. We can say that the problems we create at the new location are caused by expandability of our negative philosophies. Identify some problems that are caused by negative philosophy expansion where people move from locations to locations without applying parent's principles. What do you think about those problems?

21. Identify couple of problems; you can use newspaper, television, radio, or any other source. Once you identify the problems, use the problem development chart below to classify them. You can put a check mark next to each item, or you can also use a table. For instance, you may identify a problem that developed by portability of theory. This problem can also be developed by disregard importance of theory etc. If you identify a problem that has many causes, simply put a check mark next to each of them. Also state why you mark this particular cause. You can also use a table to do that, so you can map each problem you have identified to its specific problem development.



22. There is a similarity between information that we receive and our parent's principles. Use newspaper articles, radio, television etc. to show whether or not that relationship applied. For instance, you can use an article to show that relationship applies; you can also use one to show it is not applied. If that relationship did not apply, provide a reason.

23. Since theories are information themselves, we can say that characteristic of information includes in characteristic of theory. Show that characteristic of information includes all characteristics of theory; give some practical examples.

24. From characteristic of information, we know that information is always given in a manner to satisfy reasoning. That makes a lot of senses, since we are a theory

dependable system and self controllable. Elaborate that statement. That means show that statement based on our characteristic.

25. Problems are developed when we misunderstand and misapply our utilization theory. List couple of problems that are caused by the misunderstood and misapplied of instrumentation theory. Verify that there are indeed caused by the misunderstanding and misapplying of the theory.

26. Show your understanding of information theory related to instrumentation theory. This can also be viewed as the relationship you have learned about both the information theory and instrumentation theory.

27. **Understanding Society and Its Composition:** With insufficient information, when I was growing up, I was always asking questions about what I don't understand. One day I asked my instructor what is the meaning of the word society, my instructor replied to me and told me, "All that you need to know, you include in it".
    a. Define society
    b. Explain and show the instructor statement related to yourself

28. Identify three parent principles that are related to the theory of communication and show their importance.

29. This exercise is not important; you don't have to do it. This is an assumed problem. An assumed problem is not a problem at all. It is like a problem on paper. It is always good to pick up a real problem and analyze it than using an assumed problem. There are so many real problems out there; there is no need to use an assumed problem. Anyway, you don't have to do the part that deals with the assumption; you can go directly to the real part. The assumption was added for us to show how well we understand problems. Take a look of the paragraph below.

    Assumption: A person locks her key inside her apartment. She was thirsty; as a result of that, she could not get inside to drink some water. She needs to get inside her apartment to drink some water.
    a. Identify the problem
    b. Define the problem
    c. Derive a problem statement for the assumed problem
    d. Because of misunderstanding of communication, there are many problems that have not been identified properly. For this reason, we must be very careful when analyzing problems. We must also take some precautions when identifying them as well. This is only the reason the assumption above was given. Now, pick a real problem. You can pick one from a newspaper, magazine, book, journal, radio, television etc. Do some analysis on that problem.
    e. Identify the problem you picked from part d

f. Define the problem you picked from part d
g. Derive a problem statement for the problem you have identified

30. By now, we should have known that we are a theory dependable system. From system and information relationship, we also know that our system depends on information. Since the functional system depends on us and we depend on information, the stability of the functional system also depends on information. Show with a practical example that the stability of the functional system has been disregarded by information.

31. By now, we should have known a lot about the difference between theory and philosophy. From the difference of theory and philosophy chapter, there is a table that summarizes and lists some differences between theory and philosophy. Take couple of those differences and provide a practical example for each of them. You can do up to five or more.

32. Throughout this book, we have learned about our theory and its uniqueness about the associated system. We have defined ourselves as the system and our parent principles as the theory. We have also learned that we are a theory dependable system. A theory dependable system is defined as a system that has an intelligence that enables that system to use theory to assure its functionality. In other words, our intelligence allows us to apply our parent's principles in order for us to live. To better understand our intelligence, it makes sense to look at the difference between both theory and philosophy. We have already defined theory; there is no need to say anything about it. We know that philosophies are ideas. The fact that we have an intelligence that gives us ideas, does not mean that we should throw away our parents principles and try to do everything according to our philosophies. We know that many, many people have many, many different ideas. By relying on philosophies, it makes us very, very unstable. It is very easy to see the negative flow of philosophy. For instance, assume one thousand people; we have one thousand philosophies, since each person has his/her own philosophy. Now, if we would like to accomplish something, it is much simply to give one thousand people a direction to follow to do it, than tell them to do it according to their own philosophies. The negative path of that, they might do it one thousand ways, where with one direction, they will do it one way. This is where parent principles make a lot of sense. It assumes one pathway for everybody.
    a. Take your time to think about the above paragraph
    b. What do you think about theory and philosophy?
    c. It is always good to do things according to theory, not philosophy. By counting on theory, we can always remember when we do something wrong. Theory can be considered as a guide line that gives us direction on how to do things. For instance, while we are walking down the street, we can always remember our parent principles. Since all of us rely on the same principles, it is very easy for one to feedback each other. This little paragraph show how simpler is theory. Use this paragraph as a guideline to show how different is philosophy.

33. We have been talking about fundamental of theory, but some people may have had problem to understand what the fundamental of a theory is. The way to look at it, the fundamental of a theory is given. For those of you, who forget the fundamental of a theory, think it like this. The fundamental of a theory is a patter of that theory or is a pattern of theories. Another way to look at it, the fundamental of a theory is a structure of that theory or structure of theories. The fundamental of a theory, is what enabled that theory; the logic behind that theory; the reason behind that theory; the commonsense of that theory. To better understand the fundamental of a theory, let's do the following exercise.
    a. Find 10 instructions from our parent; if you see a similarity among those 10 instructions; or if you see a pattern among them; that similarity is considered to be the fundamental of those principles. If you see a common structure within those principles, that structure is considered to be the fundamental; we can say that the structure includes those principles. The way to look at it, just write each instruction down in a column by number. In the similarity column, put a check mark if you see a similarity, for instance, if you see number 1 is similar to number 2, put a check mark in number 1, and one in number 2; if you see number 3 is similar to number 2, put a check mark in number 3 and so forth for 4, 5, etc.
    b. After completing part a, what do you think a bout the similarity among the instructions?

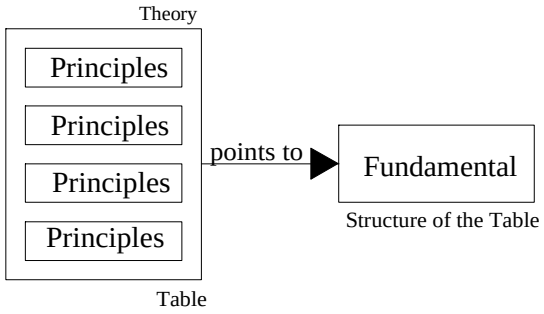
Number	Instructions	Similarity
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

    c. Now take the same table above, rather than using the word similarity, use the word equal as shown below. You will construct a pattern with the following logic: if number 1 is similar to number 2, then number one is equal to number 2. You should already have all the instructions tabulated in the table below with check marks below the equal column for all of them. Since all of them are equal and we can see that, number 1 is equal to number 2; number 2 is equal to number 3; number 3 is equal to number 4 and so forth, so the whole table or the overall instructions or principles are considered to be one unit. We call that unit the fundamental of theory.

Number	Instructions	Equal

1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

34. From the exercise above, you may call the table the theory and the similarity, which we call the structure of the table as the fundamental of that theory. As we have defined, a theory is a set of principles. There should not be any surprise, since the table is a set of principles, so we call it the theory, which is well defined and well matched. Now, we can see the similarity within the instructions, and we form a unit with the similarity or the structure. We call that unit or that structure, the fundamental of the theory. By now, you should have a good understanding of theory and fundamental of theory. The way to look it, a theory is a set of principles, while the fundamental of a theory is a structure of those principles. What do we mean by structure of those principles; we mean how those principles are organized or the logic or reason behind them. The figure below shows theory and it's fundamental. The logic that enables us to determine the similarity within the principles in the table can be viewed as the fundamental of that theory. We can say that again, the fundamental of a theory is the logic that enable us to see or determine the similarity within the principles.



35. By doing exercise 33 and exercise 34, you should have known by now the difference between theory and philosophy. Now that you know it, let's do something similar. Construct two tables, one names theory and the other one names philosophy. Now, in the theory table, use a parent principle on the top as shown below. Continue to add more parent principles and map them together. In the philosophy table, throw any idea on the top, and keep adding more ideas from either friend, other people, yourself etc. Now, try to see if you can map them. If you cannot map them, you should see the reason why. That reason is the difference between theory and philosophy. You can also name the reason.

Theory	
One Parent Instruction	**Similarity**
Another one	Yes/no
Another one	Yes/no

Philosophy	
Any Idea	**Similarity**
Another one	Yes/no
Another one	Yes/no

You should get two tables similar to the one below. Try to show at least 10 instructions and 10 for the theory table and 10 ideas for the philosophy table.

Theory Table

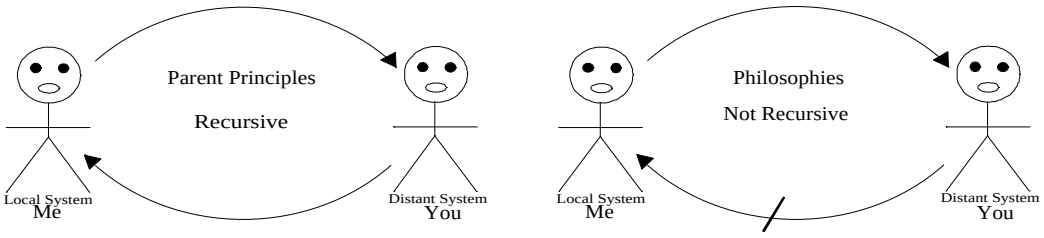
Instruction 1	✓	=
Instruction 2	✓	=
Instruction 3	✓	=
Instruction 4	✓	=

Philosophy Table

Idea 1	✗	#
Idea 2	✗	#
Idea 3	✗	#
Idea 4	✗	#

36. We know about independency of theory. We know that we depend on each other to function, but the theory is independent for us to apply. Show your understanding of independency of theory related to me, you, and the theory in terms of functionality and application.

37. The diagram below shows that theory is recursive while philosophy is not. For instance, I can apply a parent's instruction to you, while you can apply the same instruction to me. Philosophy is completely different, in term of recursion. Show with a practical example the recursion of theory and the non-recursion of philosophy.



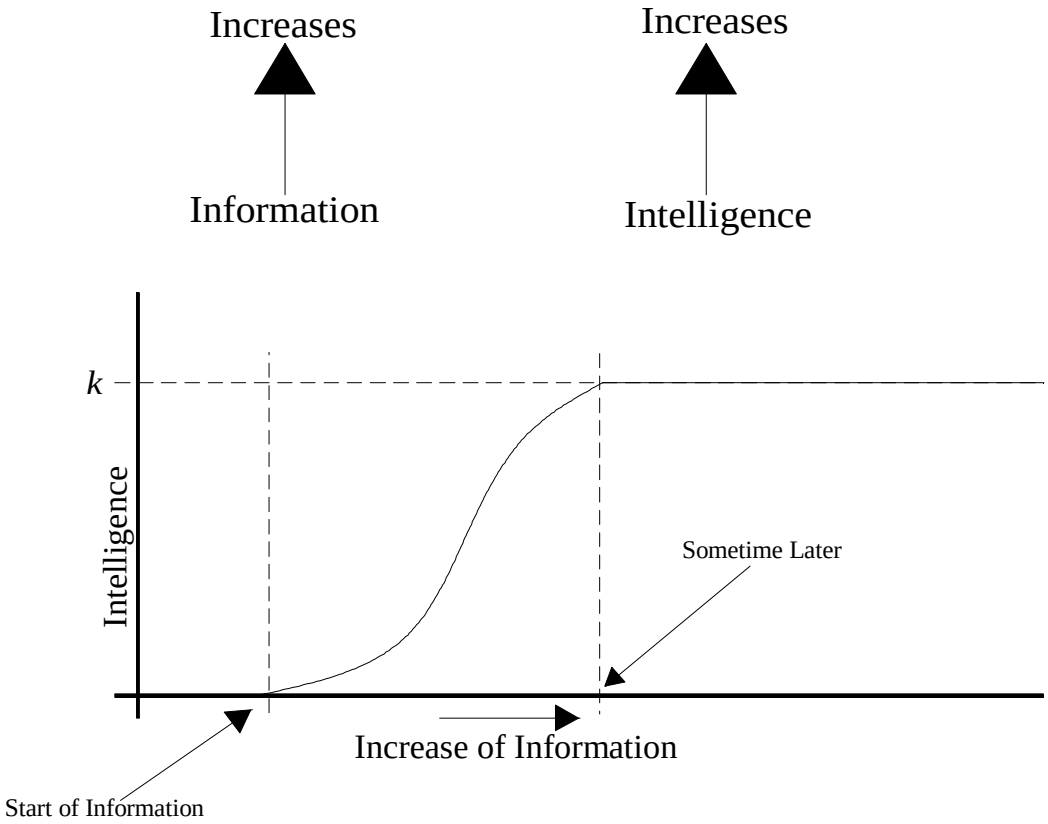
38. We have seen many differences between theory and philosophy. It is very important to understand difference between theory and philosophy. In this exercise, we are going to extend our understanding of additional differences between theory and philosophy.
    a. State the difference between theory and philosophy related to the power theorem by providing a practical example.
    b. State the difference between theory and philosophy related to portability of theory by providing an example. The way to look at it is to look at the difference between theory and philosophy related to expandability of

philosophy from locations to locations; you must provide a practical example.

c. State the difference between theory and philosophy related to definition of information by providing a practical example.
d. State the difference between theory and philosophy related to portability of information by providing a practical example.
e. State the difference between theory and philosophy related to quality of information by providing a practical example.

39. Many of us may have thought that distribution should have been included in characteristic of information, given that information is a part of communication this characteristic is already included in the other characteristics. All that need to be known about distribution of information is that, disregard any method of distribution, characteristics of information remain unchanged. Verify the distribution of information as another characteristic of information.

40. From information theory, we have learned that as information increases, our intelligence also increases. That makes sense, since we are a theory dependable system, and information includes theory, it makes sense for us to learn more and gain more knowledge as information increases. The visual aspect of that process can be shown below, where the graph represents the interpretation of the arrows.



a. Take your time to think about the above explanation

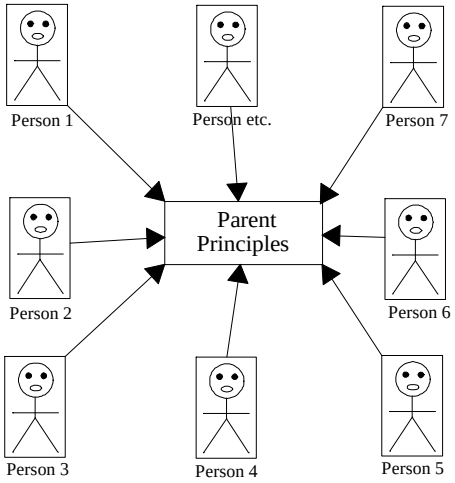
b. Based on your understanding of information theory, show with a practical example that information augmentation can only increase intelligence if information theory is applicable, otherwise intelligence decreases in that case, where we have as information goes up, intelligence goes down, which is the same as quality of information goes down, intelligence goes down.
c. Since life depends on the same theory we depend on and information includes theory, so life also depends on the same information we depend on. In this case, life can also be affected by information as well. Show the relationship with life related to quality of information similarly to what you have done in part b.

41. **Understanding the Physical System:** From Theory and system relationship, we have learned that a system realized by some set of principles and functioned by a given set of principles. In order for that system to remain active or continue to function normally, the utilization theory of that system must be used by that system. Related that to us, we always receive principles from our parents that allow us to function properly; in order for our lives to work properly, we must apply or use those principles in what we do. For instance, we must use them in life in order for us not to have problems. The fact that we have intelligence that enables us to apply theory or derive theorems from theory that does not mean that we can function without theory. We know that we are theory dependable system that means we depend on theory to function properly. Since our intelligence give us ideas about our parent principles or our utilization theory, many of us believe that we can function with our own philosophies by disregarding our parent principles. That is not possible; the way to look at it, the system was not derived by philosophy, it cannot be functioned by philosophy. The system can only be function by its utilization theory.

    It is always good to rely on theory for our functionality rather than philosophies. First, we cannot change our own characteristics. If we were able to change our characteristics, we could have relied on our philosophies. Since we cannot change our characteristics, there is no way we can rely on our own philosophies for living. Another way to look at our functionality related to theory is the uniqueness of our parent principles. By relying on theory, all of us can follow the same principles without problems. Relying on philosophies is not possible to give us a normal functionality. Since we are many, each of us has our own philosophy. By relying on our philosophies, we cannot function properly, since our philosophies are different from each other. Not only we have different philosophies, we also share philosophies from each other. This allows us to follow our own philosophy and other philosophies. Since we rely on philosophies rather than our parent's principles, we no longer capable of doing things by following our parent principles which is unique to us, rather when we do things we rely on other philosophies. This approach makes us very unstable. Only applying our parents' principles in what we do can make our lives stable.

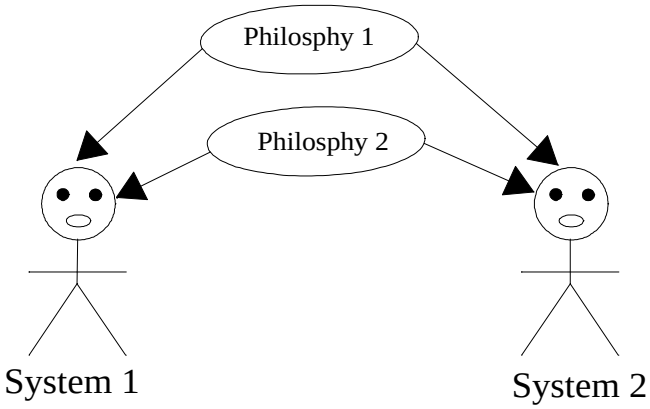
Many people, who think life can work with philosophies rather than theories, also believe that problems can be solved by using their philosophies that is not practical, since relying on philosophies does not give a direction specific, it does not provide a pathway. Since negative philosophies are problem themselves, many of those people who think the only way they can solve problems in life, is to force other people to be permanently absent—permanently removed—from life. The problem with this philosophy it does not work, but it also does not take into account that those people also share the same philosophy. We know that in life someone with a negative philosophy is shared by many, many people; so forced someone to be permanently absent from life does not solve any problem, since the philosophy is still share in many people. It is impossible to get rid of a philosophy by forcing someone to be absent permanently from life. This is not practical. Think about it; people are everywhere, the absence of someone around you with a negative philosophy, does not remove or automatically remove that philosophy from others. So, this is not a practical solution and there is no way it can solve the problem or remove that philosophy from existence; even the one who forced the other one to be absence permanently, shares the absentee's philosophy. The reason for that rather than relying on parent principles, that person instead is relying on philosophies.

a. Take your time to think about the above paragraphs
b. Show that many people depend on many philosophies makes the system or life very unstable; you can provide an example.
c. Show that many people depend on one set of principle provides a stable system; you can provide an example. The figure below shows that many people depend on one set of principle. We can call the set of principle as our parent principles.

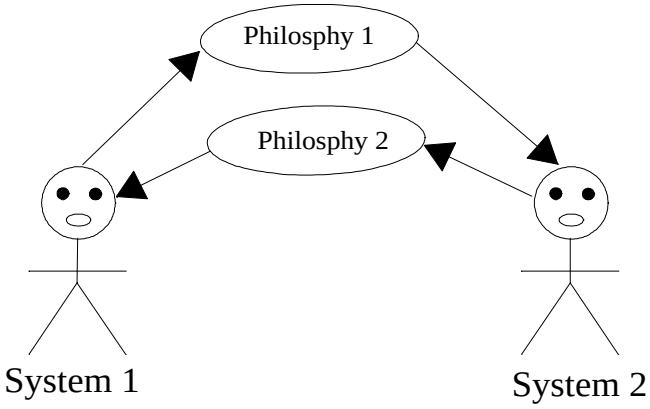


d. What do you think about the approach of forcing someone to be absent from life? Since problem is defined as a negative philosophy that enables life to function abnormal, do you think forcing someone to be permanently absent from life can remove a negative philosophy from life? If you think so, explain.

To better understand let's look at the diagram below; it shows two systems: number one and number two. Rather than using person one and person two, we use the identification one and two to denote person one and person two in terms of system one and system two. We can see that both philosophy one and philosophy two are common in system one and system two, now that we have a problem with philosophy one, simply take a little piece of paper and put it in top of system number one, if you do that, you can see that philosophy one is still present. You can also redraw it and try to erase system one, although it is not recommended to do that, but you can do it on paper or on the board if you feel comfortable with that. Once you are done, you should see that philosophy one is still present.



Some people might think the model below makes more sense, however it does not matter how the arrows are pointed, the problem is, there are present and there are separate entities and we cannot get rid off them. It does not matter if they are adopted, inherited, or produced.



e. Why do you think forcing someone to be absent from life permanently cannot solve a problem? You can give an example.
f. People who believe in the physical method always think it can be used to solve problems. What do you think a bout that?

g. By understanding the physical system characteristic, it can be shown why permanent removal is not good and can never be a solution. Show your understanding of the physical system characteristic related to what we have just said. Don't worry about that if you have already shown that above; if not, just state or show your understanding in a couple of sentences. You may also provide a block diagram with explanation if you want to.

41′. **Understanding the Physical System:** This is the same as the above example. You should have done the one above first before going to this one. In this example, we use a mathematical interpretation of the above example. We choose the mathematical interpretation since it shows a visual aspect of us and our philosophies or a visual aspect of the system with its philosophy. You can only choose to do this one if you have done the one above. There is no need to do this one, if you have done the one above; however it is not recommended for you to do this one if you have not working out the one above.

We have learned that a system is realized by some set of theory and function by another set of theory. We name the theory that derived the system the derivation theory and the theory that must be utilized to enable the functionality of the system, the utilization theory. The principal equation of a system is given as follow.

$$S = D_T + U_T$$

Where D_T is the derivation theory and U_T is the utilization theory; with the absence of the derivation theory, we let it equal to 0 since we don't know it.

$$D_T = 0$$

With the derivation theory equal to 0; in this case, 0 means nothing. It also means the derivation theory is not given. The original system equation is changed to.

$$S = U_T$$

This equation works well for us, since we don't know our derivation theory, but we know some set of principles from our parent which is our utilization theory that we must apply in life to ensure our functionality. For people who believe that our system or life can function without our parent principles, but philosophies, this equation changed. It makes sense to model the system according to them to see if it can work properly. Basically, what we are doing here, we model ourselves according to the way people who believe life can work with their philosophies.

Now, let's work on the equation to include philosophy. Since many people have different philosophies, then we change the equation to reflect that. Since we know

the derivation theory is 0, we don't even need to show in the equation, so the original equation become mistakenly

$$S = D_T + Philosophy$$

Given that the derivation theory is no longer needed, so we have our system equation mistakenly becomes.

$$S = Philosophy$$

Since philosophies are from people and there are many people and philosophies, so our mistaken equation becomes.

$$S = \left(number\,of\ \ people\right) \bullet \left(number\,of\ \ philosophies\right)$$

Since we have many people with many philosophies, it makes sense to use summation and indexing to show them. Now, let

$$People = P$$

$$Philosophy = Ph$$

Then S becomes

$$S = \left(many\ people\right) \bullet \left(many\ philsophies\right)$$

$$S = \left(P_1 + P_2 + P_3 + \cdots + P_N\right)\left(Ph_1 + Ph_2 + Ph_3 + \cdots + Ph_N\right)$$

$$S = \left(\sum_{n=1}^{N} P_n\right)\left(\sum_{n=1}^{N} Ph_n\right)$$

Now, to make it simpler in terms of terms usage, let use *x* and *y* variables instead. Let $P = x\ and\ Ph = y$, so the original equation becomes

$$S = \left(\sum_{n=1}^{N} x_n\right)\left(\sum_{n=1}^{N} y_n\right)$$

Where

$$\sum_{n=1}^{N} x_n = number\ of\ \ people$$

$$\sum_{n=1}^{N} x_n = number\ of\ \ philosophy$$

We can see clearly that the result is a polynomial in the form of

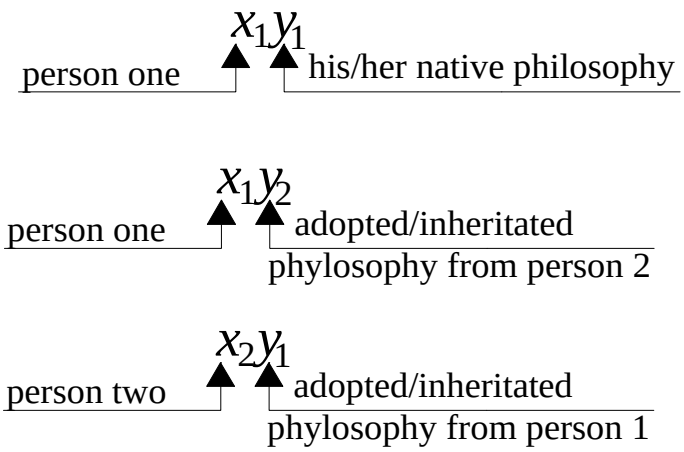
$$S(xy)=(x_1+x_2+x_3+\cdots+x_N)(y_1+y_2+y_3+\cdots+y_N)$$

Assume that we have $N=3$, which are 3 people, and then we have the equation below. It does not matter of using index or exponent, the fact is each person has a unique identification.

$$S(xy)=(x_1+x_2+x_3)(y_1+y_2+y_3)$$

$$S(xy)=x_1y_1+x_1y_2+x_1y_3+x_2y_1+x_2y_2+x_2y_3+x_3y_1+x_3y_2+x_3y_3$$

Here is the way to look at the terms, each term consider being a person with his/her own philosophy and the adopted or inherited philosophy. The diagram below shows a better view. It shows that person one with his/her native philosophy and his/her adopted philosophy. It also shows the same for person two. Since people relying on their own philosophies rather than their parent principles, it makes sense for them to use each other philosophy. For this reason, a negative philosophy from one can easily pass to others, thus makes it very easy for the problem to expand and multiply.



Now, let's rearrange the terms and we have

$$S(xy)=x_1y_1+x_2y_2+x_3y_3+x_1y_2+x_1y_3+x_2y_1+x_2y_3+x_3y_1+x_3y_2$$

Also factor each person in the last three, so we have

$$S(xy)=x_1y_1+x_2y_2+x_3y_3+x_1(y_2+y_3)+x_2(y_1+y_3)+x_3(y_1+y_2)$$

By take a closer look on one of the last 3 terms, we can see that it looks like a change in each person in term of philosophy, so we can call it a delta. So, we can rewrite the last three terms as

$$x_1(y_2+y_3)=\Delta x_1$$

$$x_2(y_1+y_3)=\Delta x_2$$

$$x_3(y_1+y_2)=\Delta x_3$$

For instance we can interpret that Δx_1 as the effect of philosophy of person two and person three over person one. By doing the above change, we can rewrite polynomial in the form of

$$S(xy)=x_1y_1+x_2y_2+x_3y_3+\Delta x_1+\Delta x_2+\Delta x_3$$

For instance, by taking many, many people into account, the original equation becomes

$$S(xy)=\left(\sum_{n=1}^{N}x_n\right)\left(\sum_{n=1}^{N}y_n\right)$$

$$S(xy)=x_1y_1+x_2y_2+x_3y_3+\cdots+x_Ny_N+\Delta x_1+\Delta x_2+\Delta x_3+\cdots+\Delta x_N$$

We simply uses *y* to show the system depends on philosophy, however it is not practical. Since the system wasn't derived from philosophy, how can it depend on philosophy to function?

It can be shown that the system becomes very, very unstable and unmanageable as *n* increase. We mean as population increases and also philosophies, life becomes very, very unstable and unmanageable. It is very easy to see that from the above equation. It can be shown graphically, how the system becomes unstable as *n* increase.

a. Take your time go through and think about the above explanation
b. Show that

$$S(xy) = x_1y_1 + x_2y_2 + x_3y_3 + \Delta x_1 + \Delta x_2 + \Delta x_3$$

is not stable and can never be stable. You can show that graphically. You can also show that in a tabulated format as well.

c. The above equation show how life is unstable based on multiple philosophies, however if we replace our philosophies by our parent principles, it can be shown that the equation become very stable. That means, with many people using a constant theory, which is our parent principles, life can become very stable; see the diagram below. By doing so, we assume our parent principles is constant and we can rewrite the equation as follow by letting

$$\sum_{n=1}^{N} y_n = k$$

Where k is equal to the set our parent principles and it is constant, see the diagram below. All that we did above is replacing our philosophies by our parent principles.

This means, by dropping our philosophies and applies our parent principles, the equation can be rewritten as

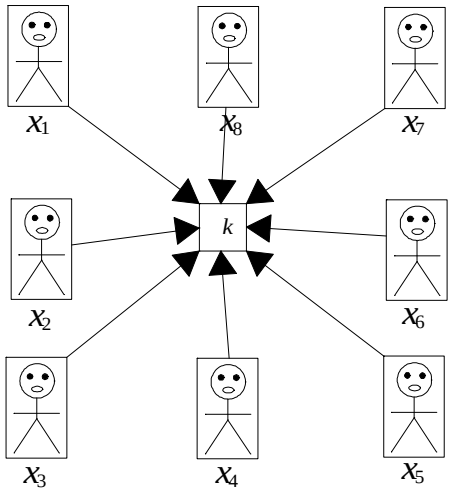
$$S(x) = k\sum_{n=1}^{N} x_n$$

$$S(x) = (x_1 + x_2 + x_3 + \cdots + x_n)k$$

Now, for our example, we have

$$S(x) = (x_1 + x_2 + x_3)k$$

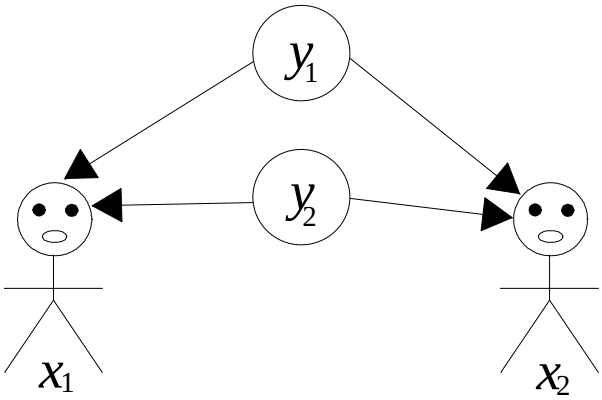
Show that graphically and a tabulated form that life becomes very stable from the above equation. That means, as population increases, with a constant principles, life becomes very, very stable.



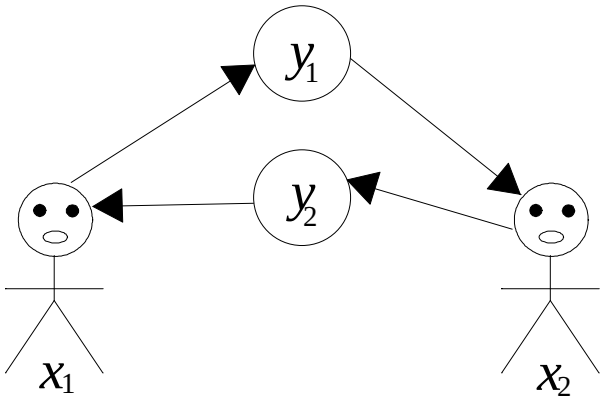
d. By now, you should have seen or realized by modeling the system with philosophy, there is no way it can be stable. It is impossible for life to be stable with philosophy, but it can be very stable with our parent principles. Since problem is defined as a negative philosophy that enables life to function abnormal, there are people who believe in terms removal to solve a problem. That means if there is a problem in x_1 or a problem caused by x_1, the only way to solve this problem, is to permanently remove x_1. Now, let's look at the equation again, we can see that remove x_1 does not solve the problem and x_1 is not the problem. By removing x_1, the other deltas are still present. The way to look at it, removing x_1 from the equation, we still have y_1 presents in other terms which is the philosophy that causes the problem. So it is very easy to see that we don't have an x_1 problem, but a y_1 problem. So rather than a physical system problem, we have a philosophy problem. So the question how do we solve for y_1? The answer is not a paper problem. So what do you think about terms removal? For instance if the problem is in y_1, do you believe remove x_1 will solve the problem? If you do, you must know how to solve for y_1, so how do you solve for y_1?

To better understand the above statement, let's represent the model as shown by the picture below, where both x_1 and x_2 are presented with their respective philosophies. Assume that you believe in terms removal, you can try to put a little piece of paper on top of x_1. By doing so, you can see that y_1 is still there. You can also try to redraw them on the board and erase x_1

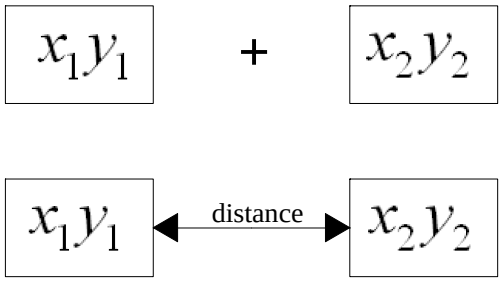
although it not recommended, when you done, you will see y_1 is still there. Finally, the problem still remains; how to we get rid off y_1.



Some people might think the model below makes more sense, however it does not matter how the arrows are pointed, the problem is, the philosophies are present and there are separate entities and we cannot get rid off them. It does not matter if they are adopted, inherited, or produced.

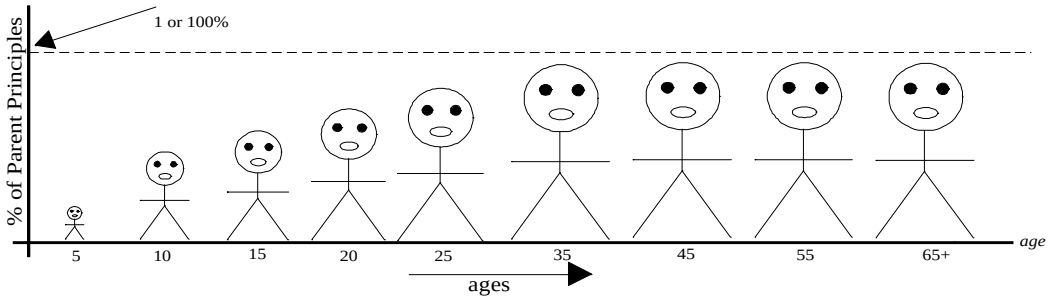


e. If terms removal could be a solution, it seems like the delta's should also be removed everywhere they are present. This is very impractical; and also the person who would try to remove them also shares the same philosophy or part of the deltas. The best way to show that is to use a graph paper with a map, like put a clear sheet of graph paper on top of a map and rewrite the equation for many terms to show how the delta's located in different part of the glob or map. You can put each term in a separate square or column to denote their locations. Just use a graph paper or clear sheet of paper to show that and conclude that terms removal is not a solution and it is not practical. In the graphical paper, you can use a square or column for each term and conclude that, although x_2 wants to get rid off x_1 for y_1, however x_2 also shares y_1. To show the distance, the plus sign can be replaced by an arrow as shown by the figure below.



f. By understanding the physical system characteristic, it can be shown why permanent removal is not good and can never be a solution. Show your understanding of the physical system characteristic related to what we have just said. You can use the physical system equation to show that. Use the physical system equation and show why permanent removal is not good and can never be a solution.

42. I grew up in a society were parent did not include only mom, dad and other family members, but any elderly or older person that can feedback with principles. We have learned earlier that we point to the principles rather than the person who gives us the principles. For this reason, when we see a person who feedback us, we think about the principles rather than that person. By observation we can see that parent definition makes a lot of sense, since it does not concern only to specific group of people who can feedback us, but a broader group. With that, it will be better to make and adjustment to include everybody disregard ages and conclude that the principles are the parents rather than the people who give the feedback physically.
    a. Think about the above paragraph
    b. With what you have learned, show that parent includes everybody with a responsibility to feedback others. Also show that the person who feedback you is not your parent, but the principle is your parent. You may give an example if you want to.
    c. When receiving feedback from our parents it is good to use them in what we do to ensure normal functionality of life. Since we live at all ages, it makes sense to apply those principles throughout our lives no matter what ages. While we use them when we were growing up as children we should continue using them as we become older. It is good to show that distribution process in a graphical format as shown below. We call this graph the use of parent principles related to ages.



The way to look at it, as we go older we should enforce or continue the usage of those principles, that means we should use them to ensure our stability. Since whatever we do as time goes must be stable, the unit line shows where we approach stability which is at 100% usage of those principles. What is more important in our observation is the fact that we have to continue and increase usage of those principles as we go older throughout our ages to ensure stability.

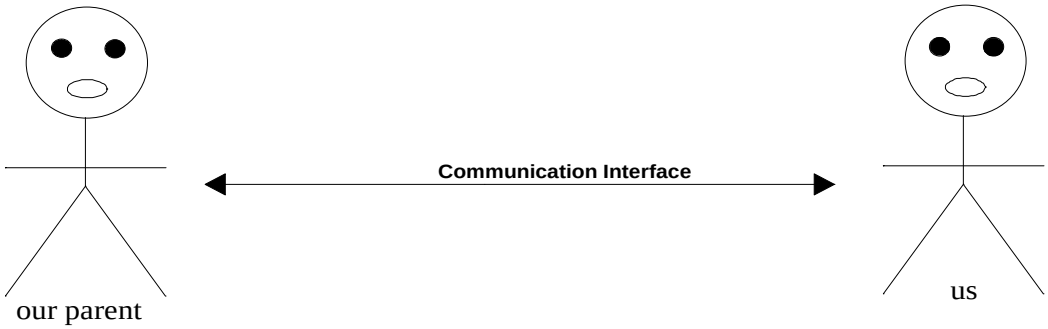
d. Take your time to think about the above paragraph, show the importance of using parent principles throughout ages; you may also give an example to show the importance.

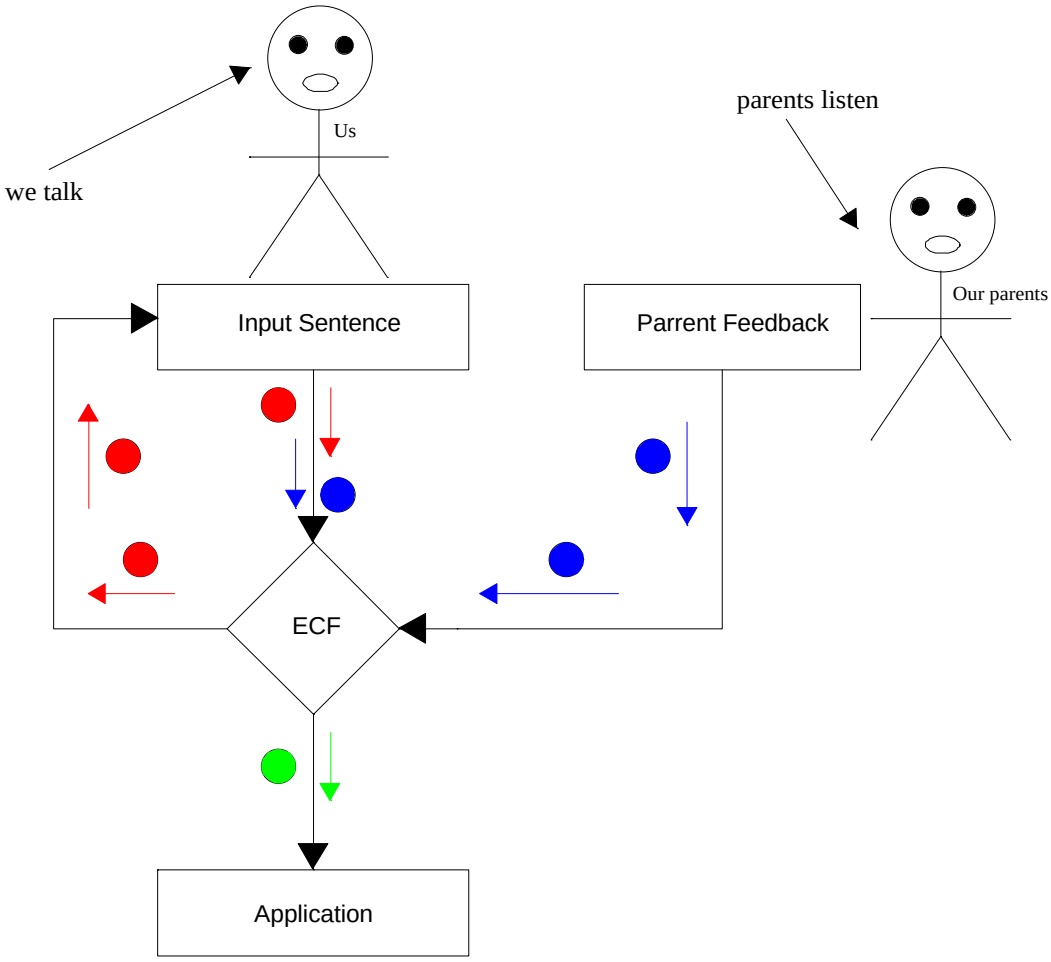
e. Throughout history, we can also take actual example; many problems have been caused by abnormal distribution of our parent principles. For instance, we may have applied them when we were young or while we were growing up, but as we get older, we disregard them and do things according to our philosophies. Using this approach has been created a lot of problems. It is very easy to find many examples in history or today when that happened. Take a historical or today example where parent principles don't continue to be applied as we get older. This process produces an abnormal distribution that created a lot of problems. You may show a graph of that abnormal distribution and state your observation. The abnormal distribution is the opposite of the normal distribution. You may compare your observation with the normal distribution and conclude that by using our parent's principles throughout our ages, those problems could have been avoided.

43. I grew up in a society where parents did not include not only, mom, dad and other family members, but any elderly or older people that can feedback you with principles. By taking a closer look of this approach, we can see that it enables us to receive more feedback. For instance, in terms of making mistakes, this approach increases our chance for correction; in terms of making errors in communication, this approach increases our probability of correction.

We already know that we interface through communication. With that interface, we were able to define ourselves as a communication enable system, where communication enabled is one of our constant characteristic. By being a communication enabled system, everything that we do to is always controlled by

communication. From error analysis in communication, we have learned that whenever we make a mistake in communication, this mistake also enables us to make the same mistake in our application, if it is not corrected. With the help of our parent principles, we were able to learn the process of error identification and correction in communication to enable us to get rid off our communication errors, before creating problems in our applications. As a review of the overall process from this paragraph, let's show both the communication interface and the error correction process by those diagrams. The first diagram below shows the communication interface that connects us with our parents, while the second one shows a typical error correction process in communication.





By taking a closer look of the first diagram, it shows that we interface with our parent through communication. Assume that we define parents as mom, dad, and other family member; the first diagram shows we interface with them. Since we are a mobile system and we don't stay at one place all the times, since we don't communicate with mom, dad, and other family members only, since our lives do not depend on mom, dad, and other family members only, since our lives also depend on others, this communication interface also exists to connect all of us. By taking a closer look of the second diagram, we can see that as the feedback increases, the probability of correction also increases. The way to look at it, as the number of people to feedback us increases, we have a greater chance for correction. There are two ways to look at that; first, we don't stay at one place all the times. We travel to many places, and we work or do things in different places, whenever we are present in a place, it makes sense for us to get corrected when we make mistakes at that place. Whenever we communicate at any given moment, it also makes sense for us to get corrected at that place at the time we communicate or make the mistake. Now, if we define our parents as mom, dad, and other family members only, we can see that it would not be convenient for us to get our mistakes corrected. The reason for that, because they are not with us all

the times and when we move, they don't move with us all the times. So, whenever we look at the word parent, it is always good to includes everybody that can give us feedback. With that, we can conclude that everybody that can give us feedback is our parent. We can also say that, the principles that feedback us are also our parents. This is much related to the society that I grew up. It is always good for us to receive feedback wherever we are present and in everything that we do. With that, we can see that our parents are present everywhere we are. This approach is very important, since it provides a pathway to solve problems and prevent problems before they happen. With a better understanding of the word society, we can name this approach a multi-parent society. The term multi-parent society makes a lot of sense, since it provides a pathway for one to feedback another, disregard any family status.

a. Take your time to think about the above paragraphs
b. Perform a correlation of the society that I grew up by using the two paragraphs above related to the first one. What we mean, show the connection between the society that I grew up and the importance of the multi-parent society. In order to do that, when you do the correlation, you can take our constant characteristic into consideration.
c. From your answer above, show the importance of a multi-parent society. If you already shown that in your answer above, disregard this part.
d. Since problems are very unique, the way to handle them is very unique as well. For this reason, you may have seen several attempts of solving problems, but never get successful. At the end, the real problem is always present. While a multi-parent society provides a pathway for errors to get corrected at the time they are happened to prevent problems from developed, this approach is very important and it can be viewed as the basis of solving problems. Take your time to think a bout this paragraph and verify it. That means, verify that a multi-parent society is the basis of solving problems.
e. From what you have learned from this exercise; by now you should have a very good understand of the word parent. Define the word parent, and describe the responsibility of a parent. You can also take it like this, what are parent's responsibilities.

44. By looking at our characteristic, it shows that there is a pattern and similarity between them. For instance, each of this characteristic related to each other and each one needs another. Let's list the characteristic again to show the pattern.

Human Characteristic

- Theory dependency
- Communication enabled
- Associativity
- Reproductivity
- Self controllable

In order to show the similarity and the need from one to another, let's describe the need from one to another and ask some question. Let's make the following

statement from our observation to show the need from one characteristic to another.

Statement: Because the system is theory dependable, it must know how to communicate.
Question: How can we apply theory without communication?

Statement: Because the system is associative, it must reproduce.
Question: How can we have associativity without Reproductivity or how can we have association without preproduction?

Statement: Because the system is theory dependency and it does communicate, it must be self controllable.
Question: How can we have theory dependability and communication enabled without self controllable? The overall question is: How do you control a self programmable system? Answer: Frankly we don't know how; a self programmable system is self controllable; a self programmable system can only be controlled by itself. The second question should have been first. The first question should not have been there; but by just looking at the first question, we should have seen that the system cannot be controlled by anybody, but by itself.

a. Use these questions to think about the logical pattern and the similarity between our characteristic and how much they make sense to you, even without any fundamental,
b. If you have any comment about the pattern, describe it here.

45. By now, we should have a very good understanding of problems. We also know what they are. We know that problems are not physically defined; therefore they are not physical entities. Since problems are not physical entities, there must have a unique way to handle them. Given that problems are not physical entities, there is no way we can handle them physically. By trying to handle them physically, we simply disregard the way they are presented. By trying to handle them physically, we simply disregard the problems themselves and concentrate in areas that are not the problems. By trying to handle them physically, we simply disregard them and concentrate in areas where the problems are not present. They are not presented as physical entities, how can we handle them physically? The way to look at it in relation to the way we have been handle them, problems can be viewed as air flow. We know that air flows everywhere, so everywhere the air flows, is considered to be a target for us. Basically, what we have been doing, we have been fighting with air or fighting air, rather than solving problems. For this reason, we have never been able to solve any problem.
    a. Take your time to think about the above paragraph
    b. Since we have been chasing air or fighting air rather than the problems themselves, so everywhere air flows is consider to be a target for us. Since air flow everywhere, so everywhere is consider to be a target for us. For example, air flow to a tree, that tree is considered to be a target; although not a problem. They are many practical examples that can be

used to describe the way we have been trying to handle problems. Use the table below and choose 5 or more cases, and provide a practical example for each case on how air flow to those physical entities and they become the target of our problems; use any source.

Air Flow Through Physical Entities	Air Flow Through Physical Entities
Tree	House
Car	Buses
Airplane	Back Yard
Computer	Chair
River	Dress
Shoe	Roof
Bicycle	Donkey
Animal	Book
Building	Office
Road	Electric Power Plant
Mountain	Milk
Medicine	Table
Stone	Trash can
Soda	Bottle of Water
Lamp bull	Door
Window	Washer Machine
Radio Station	TV Station
The Ocean	Disk
Sidewalk	Parking Lot
Airport	Bridge
Stove	Ground
Bird	Stair

c. For each of physical entity chosen from the table above, verify that none of them is considered to be a problem; the way to look at it, for each case from your part b; show that none of those physical entities are considered to be problems.

Note: The usage of the words target and fighting are not good here. We simply use them in a way to demonstrate how well we have been misunderstood and mishandled problems. It is always better to say misunderstand and mishandle. So the word misunderstand and mishandle have a better usage.

46. From the power definition, we have learned that our parent principles can be used to solve problems to ensure normal functionality of life. From that definition, a theorem is given to us to enhance the understanding of that definition. Here, we can reinterpret the theorem: we are defined as a theory dependable system, the ability to utilize our parent principles to ensure the functionality of the system is power. Since communication enable us to interface to each other to work together, and education is the process of learning our parent principles, by inspection we can see that power is the result of learning an apply our parent principles.
    a. Take your time to think about the above paragraph
    b. Show that power is the result of education and communication or the result of theory communication and theory education.

46′. From the power definition, we have learned that our parent principles enable us to apply theory to ensure the functionality of life. We have also learned that, those principles can be applied to solve problems in life, rather than relying in our philosophies. Since we are defined as a theory dependable system, we must learn theory to utilize in order for our system to function. It can be shown that the power theorem is the result of theory education and theory communication.
    a. Take your time to think about the above paragraph
    b. Show that

$$P_T = E_T K_T$$

Where $E_T = \left(T_1 + T_2 + T_3 + \cdots + T_n\right)$

Or $E_T = \sum_{n=1}^{\infty} T_n$

Theory of Communication	Theory of Education
K_T	E_T

    c. We have learned that theory are learned consecutively where one may lead to learn another one; in other words, by learning a theory, it may provide the possibility to learn another one. It is the same as learning a theorem may provide a pathway to learn more theorems. An initial observation from a theory may also lead to more observations. From the power theorem, we can see that theory education is an incremental process where theory goes from the order of one to many. Take your time to think about this paragraph, and then show that.

$$T_{n+1} > T_n$$

The way to look at it, assume that $n=1$ that means theory two or T_2 may be greater than theory one or T_1; where $n=1, 2, 3, \cdots$

47. We have learned about the fundamental of a theory and how uniqueness a given theory can be. It can be shown that a given theory is unique to itself and can never be duplicated. Show that the fundamental of a given theory is unique and also the theory itself.

47′. With the uniqueness of theory and fundamental of theory, it can be shown that the fundamental of a theory is unique to itself; also a theory is unique to its fundamental. Since the fundamental of a theory is unique and a theory is unique to its fundamental, there is not way a theory can be duplicated.
   a. Take your time to think about the above paragraph
   b. Show that the uniqueness of a theory is always applied in any form for example the following conditions apply when it comes to uniqueness of a theory

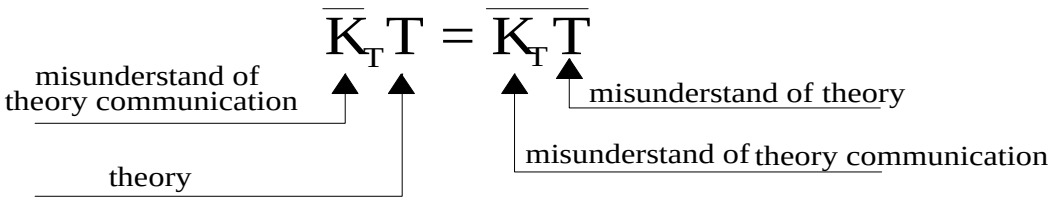
$$T+T=T \ not \ 2T$$

$$T \bullet T=T \ not \ T^2$$

48. From characteristic of theory, we have learned that a better understanding of theory communication may help understand theory. For this reason, it looks like theory depends on theory of communication.
   a. Take your time to think about the above paragraph
   b. Show from your experience that a better understand of theory communication may help understand theory. The way to interpret it for the exercise is to show that any misunderstood of theory communication enables people to misunderstand theory. You can provide a practical or applicable example or show that from your experience or personal experience.

48′. From characteristic theory, we have learned that a better understanding of theory communication may help understand theory. For this reason, it looks like theory depends on theory of communication.
   a. Take your time to think about the above paragraph
   b. Show that

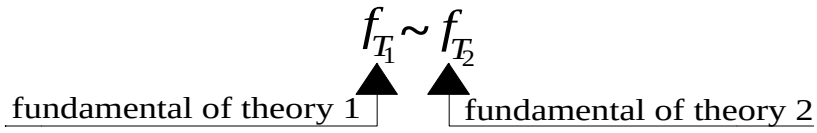
$$\overline{K_T}T=\overline{K_T T}$$



49. We have learned about fundamental of theory and also the similarity of theories. From one of the exercise, we have learned how to find the similarity of principles which helps us to better understand the fundamental of theory and also the similarity of theory. That exercise also enhances our understanding of theory. With what we have just said, it can be shown that if there is a similarity between the fundamental of two theories, there is also similarity within the theories themselves.
    a. Think about the above paragraph
    b. Verify that if there is similarity between the fundamental of two theories, there is also similarity within the theories themselves.

49′. We have learned about the fundamental of theory and also the similarity of theory. From one of the exercise, we have learned how to find the similarity of principles which helps us to better understand the fundamental of theory and also the similarity of theory. That exercise also enhances our understanding of the uniqueness of theory as well.
    a. Think about the above paragraph
    b. Show that

$$\text{If } f_{T_1} \sim f_{T_2} \text{ then } T_1 \sim T_2$$



The way to look at it, assume that there is no difference between the fundamental of a theory and the theory itself. From the example where you have found the fundamental of a theory, you can assume the fundamental of a theory is equal to that theory itself. This paragraph shows one way to look at it, but if you have a good understanding of fundamental of theory, don't follow this paragraph.

50. From our parents, we have learned principles that we use in many applications. We also learn principles that show us how to communicate. It can be shown directly there is a similarity between principles from our parents and principles

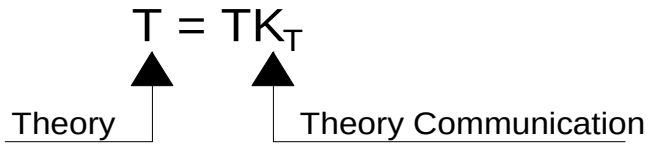
that show us how to communicate. Show the similarity between these two set of principles by providing an example, for instance and application example. That means, show the similarity between any principle and the principles that show us how to communicate.

50′. From our parents, we learn principles that we use in many applications. We also learn principles that show us how to communicate. It can be shown directly there is a similarity between principles from our parents and principles that show us how to communicate. Show that

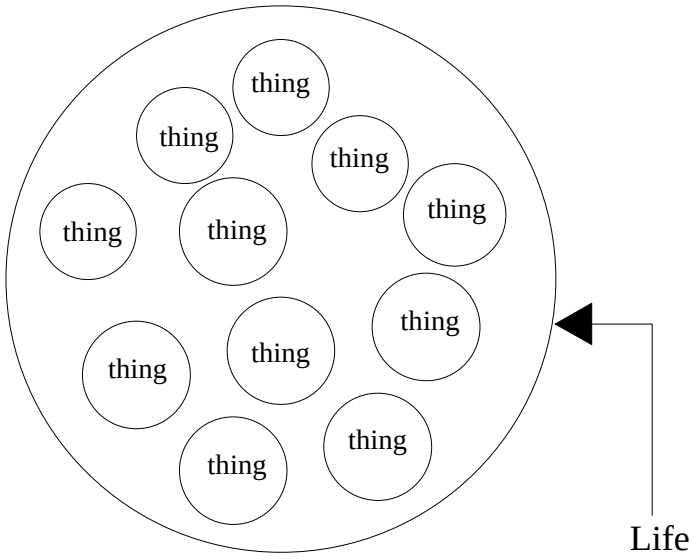
$$T \alpha K_T$$

Which is the same as:

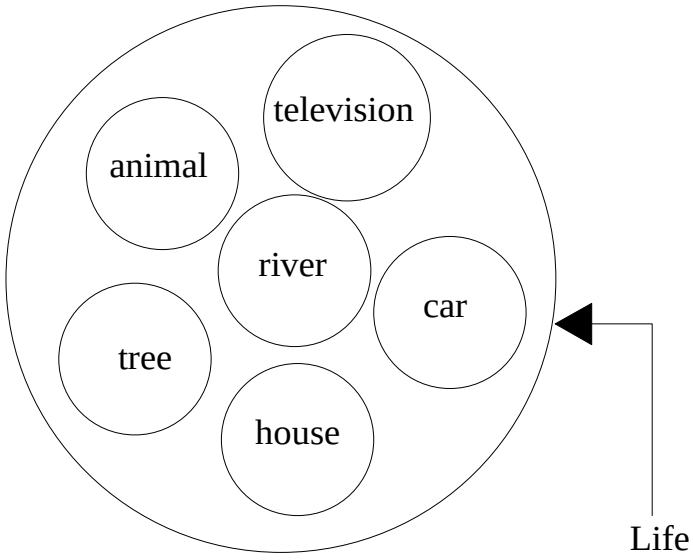
$$T = TK_T$$



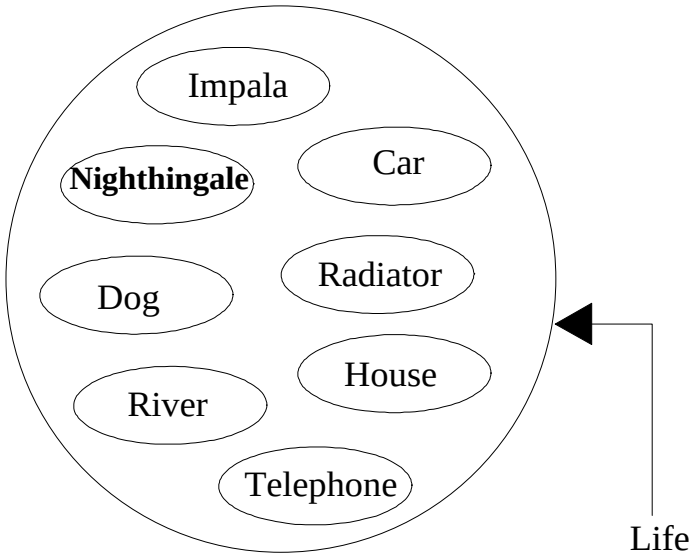
51. **Understanding Life:** We have defined life two ways, the functional system and the physical system. To better understand life, let's say life is everything or life includes everything or a lot of things or life is made of things. Basically, we can say life is a big circle or a globe that includes many things. By saying life includes a lot of things, it is worthwhile to draw the picture of what we say; let's represent life with the inclusion of many things. The diagram below shows the representation of life which includes many things. We use a big circle to represent life and little circles inside the big circle to represent the things that include in life. Since they are so many things in life, we simply represent a few as shown by the picture.



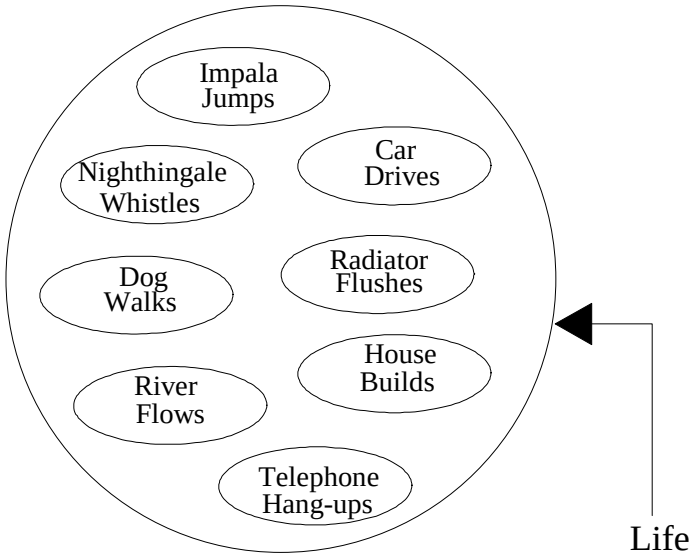
Since we say life includes many things, and we show them on the picture above, why don't we identify many things? Let's identify some of the things that includes in life. The diagram below shows many things that include in life. It shows we have animals, trees, rivers, televisions, houses, cars and many more we do not list.



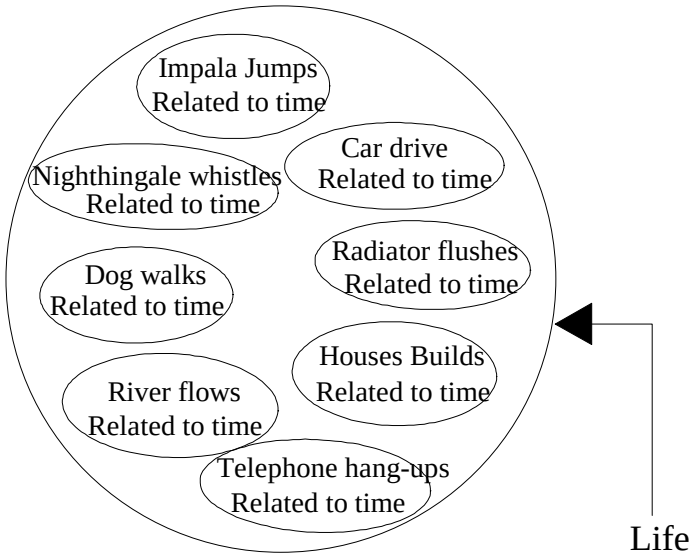
We already know that in order for life to exist, things must be moving or function. This statement is well matched to the way we have defined life as a collection of functions. When things are moving, what they do are functions of life. In order to show things that move in life, let's names couple of things from the group above.



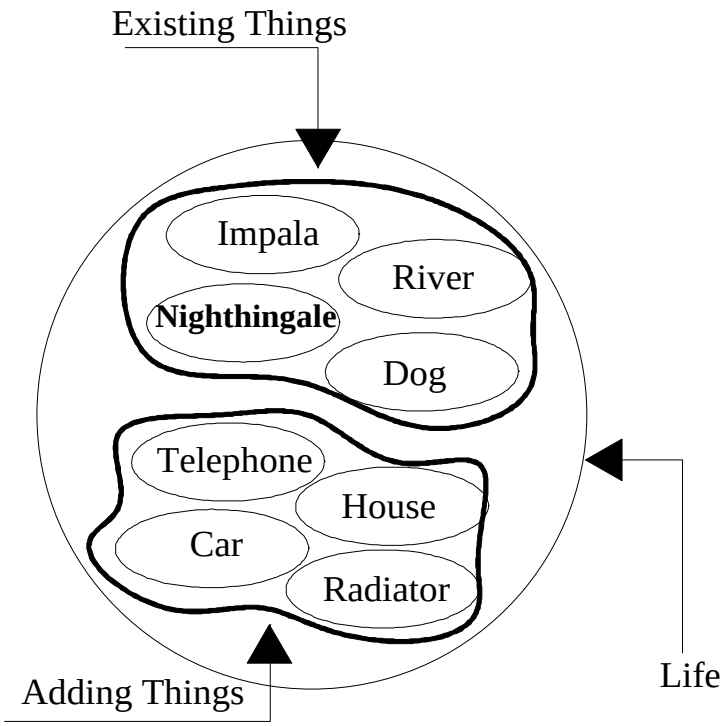
Now, we know couple of things; let's see what they do or what keep them a live. The diagram below shows the functions of many things that include in life or makeup life.



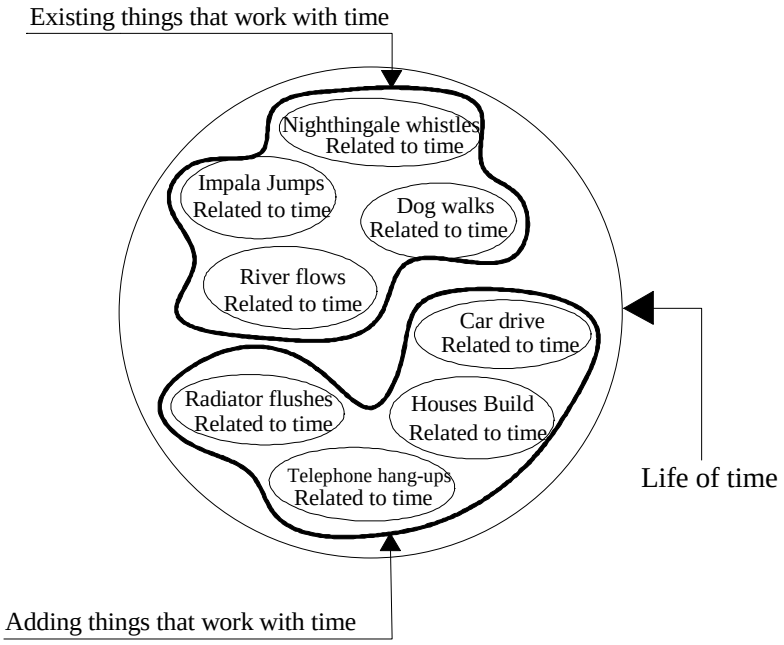
From the picture above, wee can see many things that make up life and what they do. A lot of things in life don't do what they do all day, for example an impala does not constantly jump all the times, as well as we don't drive a car all times. Within that, it seems like all those tings we have identified above do what they do related to time. So let's show what they do relate to time.



By looking at life above, we can see many different things that move or function. For instance, we see impala that jumps, wee see cars that are being driven, we see houses that are being built, wee see rivers that flow, we see nightingales that whistle etc. By inspection, we can see there are differences in many things we have identified above. For example, we can see that impala was existed before a car. That means the impala was jumping before the car was driven. Within that, we can group the things that make up life into two different categories. We can call a category existing things to denote things that were there before and the other category added things to denote things that have been added. The picture below shows the grouping of the categories.



Since those things work related to time, the categories can be viewed as existing things that work related to time and adding things that work related to time as shown by the picture below. With that, we can also call the overall circle life of time.



a. Take your time to think a bout the above explanation

b. Show that the functional system, life becomes dysfunctional if the existing things become dysfunctional.
c. Since life depends on us, it is always good to think that we are operating inside the circle rather than outside. It is not always a good idea for us to think that we are operating outside the circle. When we do that, we no longer give life or functions that make up life any importance. Show with some examples the importance of us to operate inside the circle or the importance of those functions that make up life related to us.

51′. **Understanding Life:** From the visual aspect of communication, we have learned how to identify methods, instruments, and systems. We have also learned how to classify them as natural and non-natural. We have learned that life is made of instruments and systems that function together. We have also defined life as a collection of functions that work together. Beside that definition, we have learned about interaction of systems and instruments with theories and methods. That is not of our interest here, what we are interesting here is to look at the functionality of life in terms of systems and functions. Since we know life is a collection of functions, we can write that equation on the form of, but before writing the equation, let's ask this question: How often those functions work together, the answer is all the time. By answering this question, we can see that life is a function of time in terms of duration; keep in mind time has two characteristic: we cannot stop it and it does not have a limit. To better understand life, it makes sense to look at existing functions compare to adding functions.

$$\mathcal{L}(t)=h(t)+u(t)$$

The table below shows the meaning or equivalent of each term in the equation above. The way to look at is simple, life is made of two set of functions: existing functions and adding functions. The existing functions can be considered as natural functions, where adding functions are considered to be non-natural. Here it is better to use the words existing and adding rather than natural and non-natural.

Life of Time	Existing Functions of Time	Adding Functions of Time
$\mathcal{L}(t)$	$h(t)$	$u(t)$

Now let's identify some existing and adding functions. The table below shows some existing functions.

Function Identification	Function Names
$I_j(t)$	The jumping of an Impala related to time
$H_h(t)$	The hover of a Hummingbird related to time
$N_w(t)$	The whistle of a Nightingale related to time
$D_w(t)$	The walking of a Dog related to time
$S_d(t)$	The displacement—from ground to ground—of

	a Sparrow related to time
$r(t)$	The growing of a Tree related to time
$R_f(t)$	The flow of a River related to time
$B_h(t)$	The hanging of a Bat related to time
$C_r(t)$	The running of a Cheetah related to time
$R_f(t)$	The falling of Rain related to time

From the table below, we can identify some adding functions.

Functions Identification	Function Names
$C_d(t)$	Car drive related to time
$A_f(t)$	Airplane fly related to time
$R_f(t)$	Radiator flush related to time
$D_c(t)$	Door close related to time
$W_o(t)$	Window open related to time
$C_s(t)$	Clot set related to time
$T_i(t)$	Tire inflate related to time

By using the functions from the two tables, we can rewrite the equation as shown below for couple of terms in the form of.

$$\mathcal{L}(t)=h(t)+u(t)$$

$$\mathcal{L}(t)=\left[I_j(t)+H_h(t)+N_w(t)+r(t)+\cdots\right]+\left[C_d(t)+R_f(t)+W_o(t)+D_c(t)+\cdots\right]$$

Since there are many existing functions and many adding functions, it makes sense to give them an index. There are so many existing functions that we will never know all of them, so we can set a very big limit or infinity. There are also many adding functions we can never know as well, and we can set a big limit as well. Roughly, we can say that limit is less than the limit of the existing functions. The two tables below shows the order of some adding and existing functions.

Function Order	Function Replacement	Function Names
$h_1(t)$	$I_j(t)$	The jumping of an Impala related to time
$h_2(t)$	$H_h(t)$	The hover of a Hummingbird related to time
$h_3(t)$	$N_w(t)$	The whistle of a Nightingale related to time
$h_4(t)$	$D_w(t)$	The walking of a Dog related to time

$h_5(t)$	$S_d(t)$	The displacement of a Sparrow related to time
$h_6(t)$	$r(t)$	The growing of a Tree related to time
$h_7(t)$	$R_f(t)$	The flow of a River related to time
$h_8(t)$	$B_h(t)$	The hanging of a Bat related to time
$h_9(t)$	$C_r(t)$	The running of a Cheetah related to time

Similarly the table below shows the indexing for adding functions.

Function Order	Function Replacement	Function Names
$u_1(t)$	$C_d(t)$	Car drive related to time
$u_2(t)$	$A_f(t)$	Airplane fly related to time
$u_3(t)$	$R_f(t)$	Radiator flush related to time
$u_4(t)$	$D_c(t)$	Door close related to time
$u_5(t)$	$W_o(t)$	Window open related to time
$u_6(t)$	$C_s(t)$	Clot set related to time
$u_7(t)$	$T_i(t)$	Tire inflate related to time

By using the two tables above, the life equation becomes:

$$\mathcal{L}(t)=h(t)+u(t)$$

$$\mathcal{L}(t)=\left[h_1(t)+h_2(t)+h_3(t)+\cdots\right]+\left[u_1(t)+u_2(t)+u_3(t)+\cdots\right]$$

Using the limits and indexing, we can rewrite the equation on the form of summation.

$$\mathcal{L}(t)=\sum_{n=1}^{\infty}h_n(t)+\sum_{m=1}^{M}u_m(t)$$

Where $h(t)=\sum_{n=1}^{\infty}h_n(t)$ and $u(t)=\sum_{m=1}^{M}u_m(t)$

To prevent further question, the life equation can also be rewritten in this form, where **M** represents a very big number, but probably less than the limit of the existing functions.

$$\mathcal{L}(t)=\sum_{n=1}^{\infty}h_n(t)+\sum_{m=0}^{M}u_m(t)$$

There are a lot of observations that can be made from the life equation, but now, let's limit our observations. This equation is only given to help future exploration or observations. Please use it; there are lots that can be done with it. One day we will recognize its importance. It is very easy to answer the question given to you in such as a way related to your life or human live or life in general. The question is, show that.

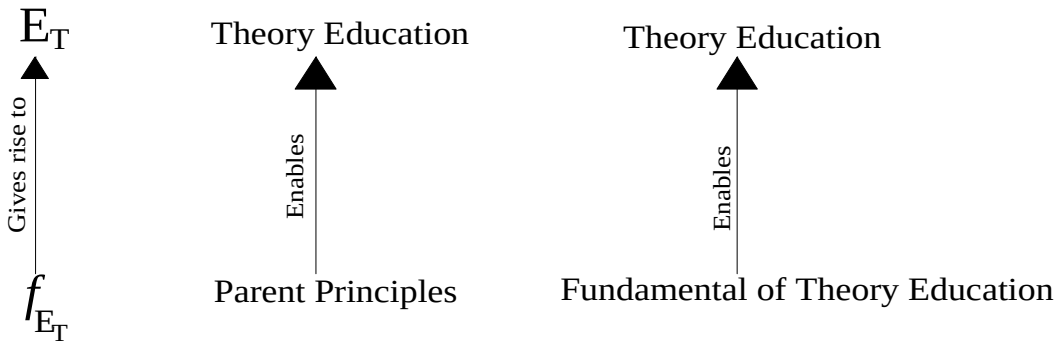
$$\mathcal{L}(t)=0$$

$$\text{If } h(t)=0$$

52. Refer to the power definition and theorem, identify five keywords. State what you think about each keyword you have identified.

53. **Understanding Theory of Education:** We have learned some important aspect of life and how it functions. We have learned that life is made of instruments and system that perform different functions. With our communication ability, we have been able to identify instruments, systems and their functions. The visual aspect of communication enables us to come with the following keywords: instrument, system, method, theory and theorem. We know that methods are functions of instruments that systems perform and theory is the principles behind how systems and instruments work. Since a system functions according to its utilization theory, we call that theory the parent of that system. Related to us, we function by utilize our parent principles. Those principles make our lives possible, since we have to use them to ensure our functionality. It makes sense for us to continue learning and apply our utilization theory in order to keep our system function properly.

    We have learned that education is the process of learning and apply theory to ensure our functionality. Since our functionality depends on our utilization theory, thus the basis of education is learning our utilization theory. The way to look at it, theory of education does have a foundation that is related to our parent; and our parent principle is considered to be the basis of theory of education. We can also say our parent principles considered to be the fundamental of theory education. Here is the way to look at it from the diagram: Our parent principles gives rise to theory education; or our parent principles is the foundation of theory education.



Since we learn theory everywhere including school, church, synagogue, mosque, temple, home, workplace etc, those places simply extend the theory of education. Therefore, theory education still has its root from our parents. Just take your time to think about everything mentioned above. The way to look at it is that, theory of education is very unique and it is also unique to its basis.

54. We have learned about limitation of theory from characteristic of theory. We have seen that any theory is limited by theory of communication. Since theory of communication guides theory, a theory cannot go any further than theory of communication. Show that from your experience that theory is limited by theory of communication.

54′. We have learned about limitation of theory from characteristic of theory. We have seen that any theory is limited by theory of communication. Since theory of communication guides theory, a theory cannot go any farther than theory of communication. We can roughly say communication theory goes farther than theory, but for consideration, it is better to say their distances are similar or equal. Show the equation below; that means show theory is less or equal than theory of communication or the distance of theory is less or equal to the distance of theory of communication.

$$T \leq K_T$$

55. We have talked about system definition in relation with derivation theory and utilization theory. We have learned that a system derived from some set of principles and function with another set of principles. If the set of principles that derived the system is not known, we conclude that the derivation theory of that system is not important to us and what is important to us is the utilization theory. With that information, we conclude that system is equal to its utilization theory. Compare to us, our parent principles is the theory that we use to enable us to function. Since we function according to those principles, rather than follow what our parents do, we conclude that those set of principles are equal to us. What we mean by function, we are talking about living. That means we live according to those principles.
    a. Take your time to think about the above paragraph

b. There is a similarity between our parent principles and what we do. For instance, we have equated ourselves to our parent principles in terms of system and theory relationship. That means, physically, we are equal to our parent principles that means we point to those principles. We live by applying those principles. When we apply those principles we make life possible for us. That means, applying those principles means life. Show that there is a similarity between the physical system in relationship with our parent principles and life. What do we mean, show that from your experience applying our parent principles enable us to live? Since our lives work associatively and include other dependency, you may also state that as well.

55′. There is a relationship between the first and the second equation below.

$$S = D_T + U_T$$

$$\mathcal{L}(t) = h(t) + u(t)$$

Where $S = D_T + U_T$ is the physical system and $\mathcal{L}(t) = h(t) + u(t)$ is the function of the physical system or in other words, the functional system; show this relationship practically in terms of understanding theory and system related to application functions; gives some examples. See the note below for more help.

$$S \Leftrightarrow \mathcal{L}(t) \text{ or } S(T) \Leftrightarrow \mathcal{L}(t)$$

$$\mathcal{L}(t) = h(t) + u(t) \Leftrightarrow S(T) = D_T + U_T$$

56. A problem is defined as a violation of our parent principles. In order for a problem to define its opposite must be the utilization of our parent principles. Since problems are the unawareness of utilization of our parent principles, we can say that the utilization of any negative philosophy or not using our parent principles create problems. Show with a practical example that the application of negative philosophy is problem while the application of our parent principle is the solution.

56′. A problem is defined as a violation of our parent principles. In order for a problem to define its opposite must be the utilization of our parent principles. Since problems are the unawareness of utilization of our parent principles, we can say that the utilization of any negative philosophy or not using our parent principles create problems. See the relationship given by the equation below.

$$T_r\left\{\overline{T}\right\} = problem$$

$$problem = T_r\left\{\overline{T}\right\}$$

Transformation	Negative Philosophy	Theory
T_r	$\overline{T}$	T

The way to look at it, since the non-utilization of our parent principles create problems, in order to solve them, we must utilize our parent principles. We use the transform operation to denote the application of a theory,

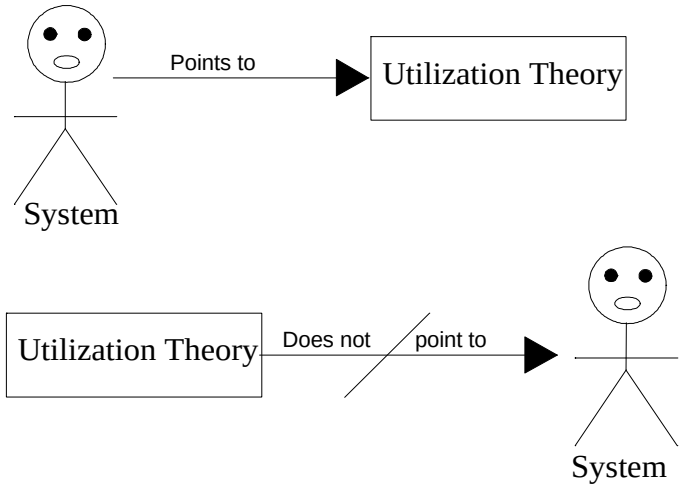
$$T_r\{T\} = solution$$
$$solution = T_r\{T\}$$

The first equation shows the transformation of a negative philosophy which is the problem while the second one shows the application of our parent principles which is the solution. In both cases, the left side of the equation can be interchange with the right side, since the relationships hold. Another way to look at it, any problem has its root from disregarding our parent principles, so by not using the theory, we create problems. We can only solve them by applying our parent principles. Show the two equations above; that means show that with an example a problem is created by not using our parent principles and the solution is using our parent principles.

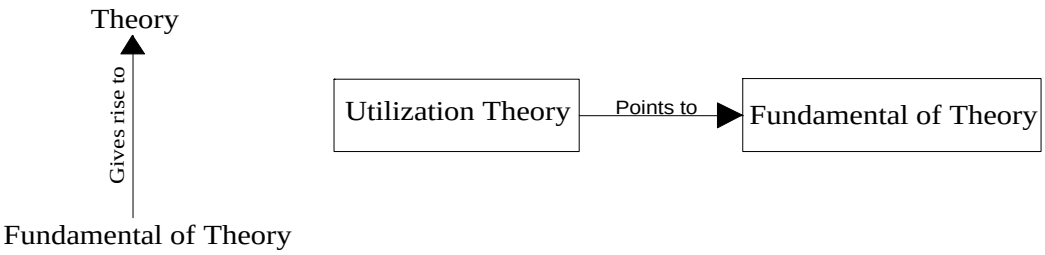
57. Show you understanding of the difference between theory and philosophy related to following the principles and following the underlined person by providing a practical example.

58. We have learned about the relationship of theory and system. When a theory is presented to us, we follow the theory rather than follow the person who presents it to us. So rather than looking at the person who presents us the theory physically in term of application, we follow the theory instead. It is better since that makes us more stable. By follow the person who presents the theory to us, it makes us very unstable since we cannot apply that person in our application. That is not good, fist if that person makes a mistake; we are going to make it as well. Second, we disregard our intelligence since we are a theory dependable system, our intelligence enable us to apply theory to ensure our functionality. By disregarding the theory and follow a physical person or someone application, we also disregard our intelligence.

    The way to look at it, a system points to its utilization theory, however the theory does not point to the system. For instance, if someone presents a theory to us, when we see that person, we must think about the theory, however when we see the theory, we don't think about that person; see the diagram below for more information.



The diagram above can be viewed as follow; everywhere we see the system, we think about the theory. The system points to the theory; however when we see the theory, we don't see the system. This makes sense since the fundamental of the theory gives rise to that theory, so the utilization theory must point to its fundamental rather than the system as shown by the diagram below.



a. Take your time to think about the above explanation
b. From your experience and in terms of your applications, show that the system points to its utilization theory and the utilization theory does not point to the system.
c. It is very important to understand that a system points to its theory, while the theory of the system points to its fundamental. Whenever this relationship is misunderstood, problems can happen. There are many problems that happen because of misunderstanding of this relationship. Verify this statement by providing a practical example or an example of problem that happens because of misunderstanding the relationship of system, theory, and fundamental of theory.

58′. We have learned about the relationship of theory and system. When a theory is presented to us, we follow the theory rather than follow the person who presents it to us. So rather than looking at the person who presents us the theory physically in term of application, we follow the theory instead. It is better since that makes us more stable. By follow the person who presents the theory to us, it makes us very unstable since we cannot apply that person in our application. That is not good,

fist if that person makes a mistake; we are going to make it as well. Second, we disregard our intelligence since we are a theory dependable system, our intelligence enable us to apply theory to ensure our functionality. By disregarding the theory and follow a physical person or someone application, we also disregard our intelligence.

The way to look at it, a system points to its utilization theory, however the theory does not point to the system. For instance, if someone presents a theory to us, when we see that person, we must think about the theory, however when we see the theory, we don't think about that person; see the explanation below.

We know from our system equation that

$$S = D_T + U_T$$

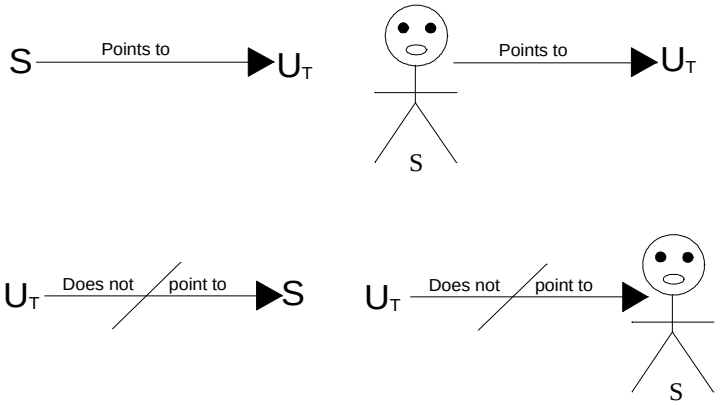
With $D_T = 0$

We have

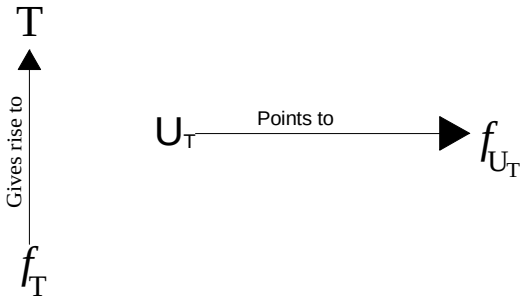
$$S = U_T$$

However, $U_T \neq S$

Everywhere we see the system, we think about the theory. The system points to the theory; where we see the theory, we don't see the system. The diagram below shows more information; both the left and the right are the same.



This makes sense since the fundamental of the theory gives rise to that theory, so the utilization theory must point to its fundamental rather than the system as shown by the diagram below.



Another way to look at it, since when we see the system we think about the theory and we must follow the theory not the system, it shows that the theory is more important to us than the system in term of application. When we come across the system, we think about the theory, however when we come across the theory, we don't think about the system, but we think about the fundamental of that theory.

a. Take your time to think about the above explanation
b. From your experience and in terms of your applications, show that the system is equal or points to its utilization theory and the utilization theory does not point to the system.
c. It is very important to understand that a system points to its theory, while the theory of the system points to its fundamental. Whenever this relationship is misunderstood, problems can happen. There are many problems that happen because of misunderstanding of this relationship. Verify this statement by providing a practical example or an example of problem that happens because of misunderstanding the relationship of system, theory, and fundamental of theory.

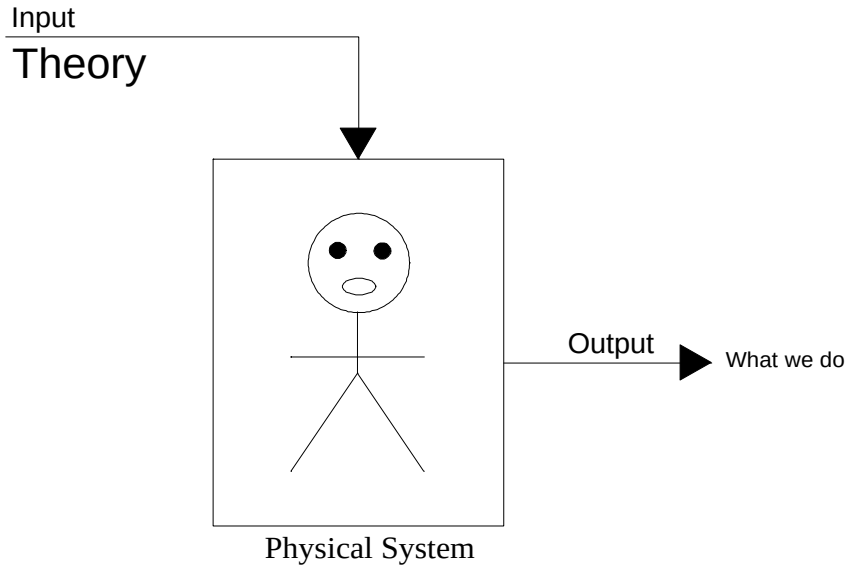
59. Show your understanding of the physical system related to function and system relationship. This can also be viewed as the relationship you have learned about both the functional system and the physical system.

60. We are a theory dependable system that means we depend on theory to function. We recall from the parent feedback diagram that our parents feedback us with principles to enable us to correct error in communication. Basically, our parents feedback us with theory; the diagram below shows a shorter presentation of the feedback diagram. The way to look at it, what we learn is the input, which is theory and what we do with what we have learned is the output. We have been able to prevent errors and correct errors based on the principles we have learned from our parents. Like we have been able to do things positively based on their feedbacks, if they have given us negative feedbacks, we could have done things negatively as well. The way to look at it, we do things according to what we have learned. With positive feedback from our parents, we expect to do things positively.

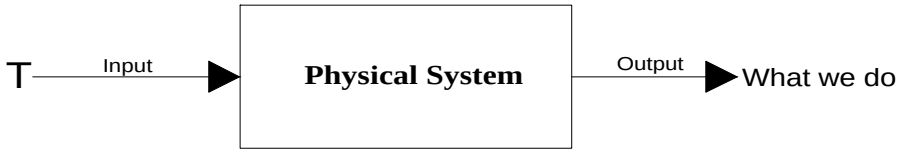
    Related to information, the paragraph above holds, since information given to a system looks similar to that system, so we always expect positive information from any source.

    a. Take your time to think about the above explanation

b. Show with your experience and an example of information given to us or to a system related to input and output. That means show that how that information determines what we do base on their qualities.
c. Information given to a system can determine the system stability based on their qualities. While positive information can make a system very stable, negative information can make a system very unstable as well. Show that with an example how information can determine the system stability. You can use newspaper and magazine articles etc.
d. Show that the information distribution diagram with parent feedback yields stability while the one without feedback does not.



60′. We are theory dependable system that means we learn theory and we do things according to what we have learned. From that, we can draw the input and output relationship of our system related to theory as shown below, where the input is the theory we have learned and the output is what we do with the theory. The diagram below is related to the one above.



We can represent the diagram above in another form as show below. Since we don't know what is inside the box, we can simply call it a black box. Again, we don't know what is in it and we don't want to know what is in it; there is no need to know what is in it; it is not important to us; see the diagram below.

The diagram above is a black box, we don't know what is inside, so we can let the black box equal to an unknown function as show below.

$$g = blackbox$$

Now, based on the input, we can approximate the output of the black box or the output of the system. Since we know the system input is theory, so we can call the output of the system, the response of the system related to its input as shown by the notation below. For positive input, we have the following response as shown below, we assume positive information.

$$R(T) = Tg$$

While for negative input, we have the response shows below; we assume negative information.

$$R(T) = -Tg$$

a. Take your time to think about the above explanation
b. Show that for positive input or for positive information the response of the system or our response is $R(T) = Tg$ while for negative input or negative information our response is $R(T) = -Tg$
c. From the system equation, we have $S(T) = U_T$. We also have a mistaken equation for the philosophy approximation. Show that the system equation, related to the information distribution diagram with parent feedback provide a stable system; while the philosophy approximation equation related to the straight distribution of information provide an unstable system.

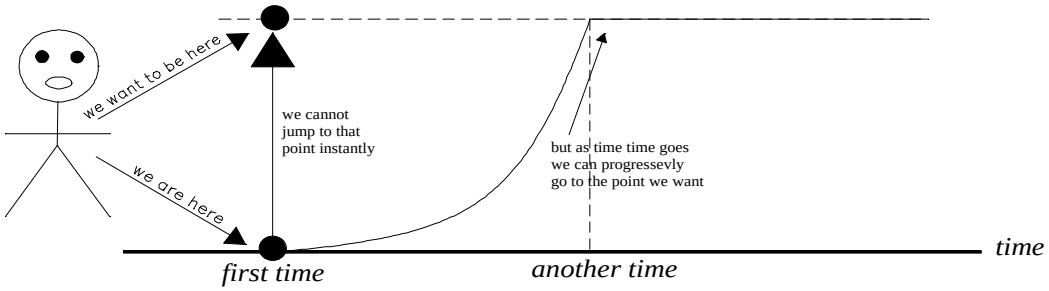
   Note: The equal sign is used as expected rather than equal; for instance rather than saying with positive input the response of the system is equal to, we can say with positive input, we expect positive output, so the equal sign is simply an expectation.

61. From information and system relationship, we have learned that information given to a system must look like that system. It makes a lot of sense since information can dictate system stability, so to ensure stability; it is always good for information given to a system be compatible to that system. That means, information given to us must be compatible to us. Justify the statement by providing an example. That

means, justify that information given to a system, us must look like that system—us—by providing and example.

62. **Understanding the Process of Stability:** We have already seen that from theory and system relationship and also from the philosophy approximations exercise that in order for a system to be stable; the application theory of that system must be constant to everybody. That means, in order for life to be stable, we must constantly apply our parent principles all the times to preserve that stability. Since we have been making mistakes for a long time, we have not been stable. Right now, we realize that we must apply our parent principles in order to be stable. Let's discuss about this process since we did not start on time or we have not started yet.

    There is no such as instant solution in applying a theory. The way to look at it, if we did not apply a theory at a time it was given to us and choose to apply it at a later time, there is no instant solution for this process. As we start applying the theory, we will definitely go to the way we are heading progressively, but not instantly. There is no such as instant solution. For instance, we have been heading south for a long time, so if we want to head to the positive direction, we cannot just jump to that direction, it is impossible. As time goes, we can progressively go to that direction. See the diagram below for more information. Due to the unique nature of human and life, also the characteristic of our system and also theory of education, there is no way we can jump there instantly. But as time goes, we can slowly go to that direction. This is the way the process work.

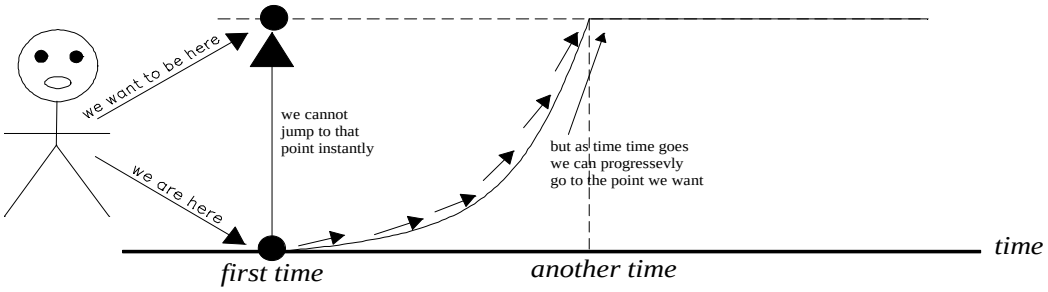


When we talk about process of stability, we are talking about the process of learning and applying a theory. To better understand that process, let's summarize it step by step below.

1. First, the theory is given to us
2. Second, we must learn how to communicate in order to learn and use the theory; so theory communication is the prerequisite of learning a theory; we must learn how to communicate in order to interpret the theory or interpret it properly
3. Third, we must interpret the theory or interpret it properly
4. Fourth, use the theory in our applications or organize with the theory
5. Then we move toward stability

6. As we start applying the theory, we also increase our interpretation ability. As we keep applying the theory, we have more knowledge of interpreting it.
7. Applying the theory in our applications can move us to 100% stability

Whenever we talk about stability of life, we mean the continuity of the functionality of life. As shown by the graph above, initially, as we starting applying the theory, we cannot jump to the point that we want instantly, but as we keep applying it, we can progressively go to that point at a later time. Since the process of stability involves the steps listed above, after accomplished step 1, 2, 3, and 4, we can put an arrow to the direction of the point that we want as shown by the graph below. The way to look at it as we continue applying the theory, we can go to the point that we want; basically we can see that stability is a direction and the point that we want to be is also a direction. It is very important to understand that. Another way to look at it, when we move toward that point, we can say that we are moving toward stability and when we get to that point, we can say that we are at 100% stability as shown by the graph below. The line at the point that we want which can be seen as the top denotes 100% stability.



Given that our utilization theory must be applied to enable the functionality of life, only our utilization theory can provide us with stability. In terms of our utilization theory, we have identified the following theories with their respective abbreviations as shown by the table below.

Theory Name	Abbreviation
Communication Theory	K_T
Instrumentation Theory	I_T
Information Theory	i_T
Education Theory	E_T
Power Theorem	P_T

The way to look at it, the table above is viewed as our utilization theory. The application of our utilization theory can provide us with stability, while the misapplication of our theory can provide us with instability. It can be shown that the stability of life is related to the application of our utilization theory while the

instability of life is related to the misapplication of our theory. Take your time to think about that and verity that statement.

62′. **Understanding the Process of Stability:** We have already seen that from theory and system relationship and also from the philosophy approximation exercise, that in order for a system to be stable; the application theory of that system must be constant to everybody. That means, in order for life to be stable, we must constantly apply our parent principles all the time to preserve that stability. Since we have been making mistakes for a long time, we have not been stable. Right now, we realize that we must apply our parent principles in order to be stable. Let's discuss about this process since we did not start on time or we have not started yet.

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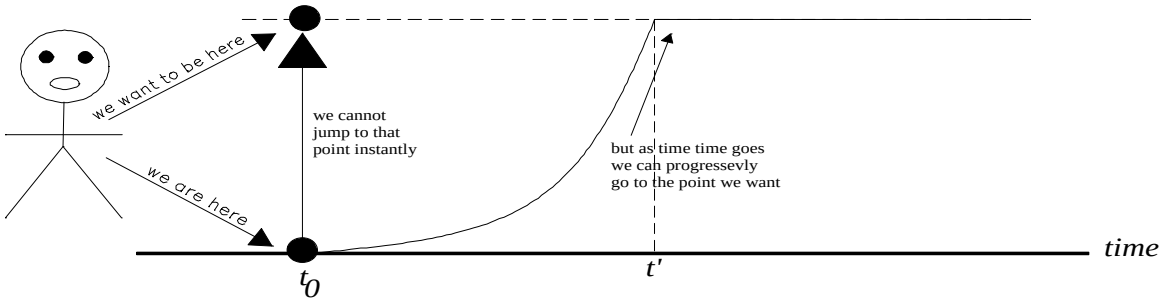
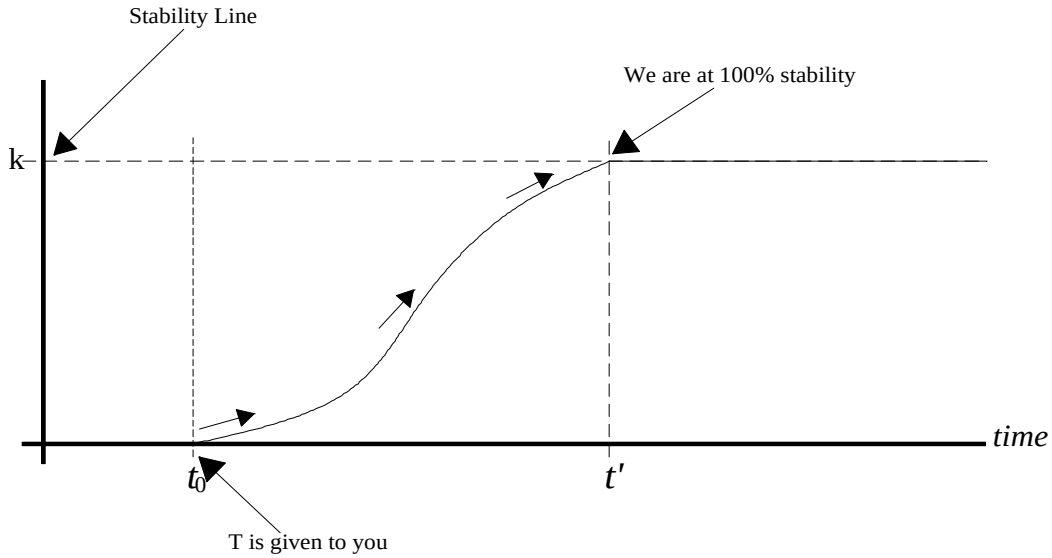


When we talk about process of stability, we are talking about the process of learning and applying a theory. To better understand that process, let's summarize it step by step below.

1. First, the theory is given to us
2. Second, we must learn how to communicate in order to learn and use the theory; so theory communication is the prerequisite of learning a theory; we must learn how to communicate in order to interpret the theory or interpret it properly
3. Third, we must interpret the theory or interpret it properly
4. Fourth, use the theory in our applications or organize with the theory
5. Then we move toward stability

6. As we start applying the theory, we also increase our interpretation ability. As we keep applying the theory, we have more knowledge of interpreting it.
7. Applying the theory in our applications can move us to 100% stability

Since progress cannot be made in a theory without utilization, while we are learning the theory, we must utilize it in order for us to make progress in learning that theory. See the graph below for more information about the process in term of time

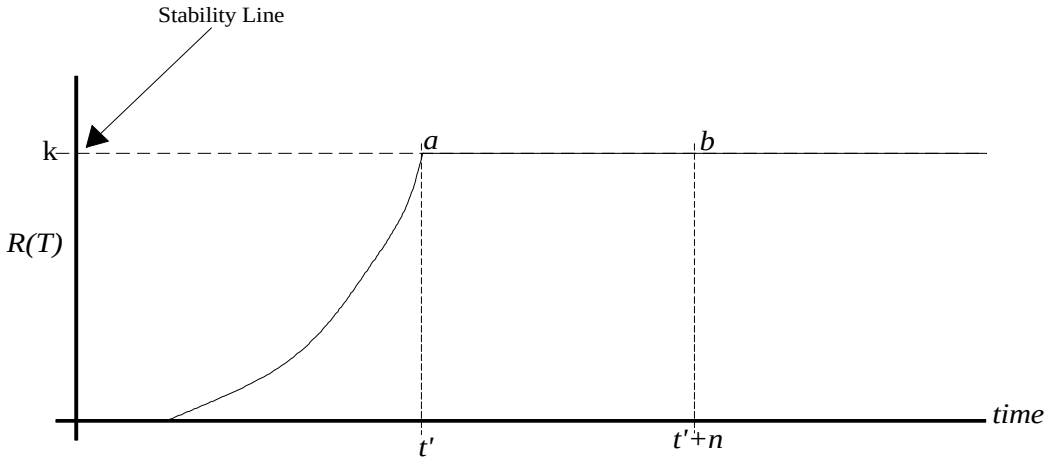


The way to look at it, at t equal t_0 T is given to us and we have done step 1, 2, 3, and 4; by doing so, we can put an arrow to point to the direction of *K* toward t'; then we go to step 5, then we move toward stability; at t' we are at 100% stability; that means at t' and beyond we will be 100% stable. In order to point to the right direction of the arrow, we must accomplish step 1, 2, 3 and 4. We can call that the stability chart.

Here is another interpretation: In order for a system to be stable, or in order for us to assume stability, what we do at some point of time must be similar to what we do at a later time or the quality of life at some point of time must be similar to the quality of life at a later time. By doing so, we can ensure stability of life.

In order for a system to be stable, at some point of time its response or the application of theory in that system—life—must be similar or constant at a later time. As an example, let's look at the chart below

$$\text{At } t=t' \quad R(T) \sim R(T) \text{ at } t'+n$$



At both time, we can see the point a and b are similar or equal. It is always assume that we know the direction we are going. The chart above assumes that we know the direction we are going.

The chart above shows how we can monitor a system response related to time in order to determine if it is stable or not. Usually, the process of stability of life cannot be done on paper. The solution of stability is very practical and it is not a paper problem. What we have done above is a simple analysis on how stability looks like. This process can be used to monitor stability. From the transform equation related to theory and from the system equation related to the life equation, we have made the following relationship.

$$S(T) \Leftrightarrow \mathcal{L}(t)$$

$$T_r\{T\} = solution$$

a. Take your time to think about the above explanation
b. In terms of stability of life, show the following relationship given by the equation below. Show a graphical representation of the life equation on the left and also explain your observation. See the table below for more information about the theory representation. $\overline{U_T}$ represents the negative philosophy produces by misused, misunderstand, or non usage of our utilization theory.

$$T_r\{\overline{U_T}\} = -\mathcal{L}(t)$$

$$U_T = \{K_T, i_T, I_T, E_T, P_T, \cdots\}$$

Theory Name	Abbreviation
Communication Theory	K_T
Instrumentation Theory	I_T
Information Theory	i_T
Education Theory	E_T
Power Theorem	P_T

63. The application of our utilization theory enables the functionality of life. In other words, the application of our utilization theory enables us to execute functions of life. In terms of functions of life, we know that they made of both existing and added functions. Now in term of our utilization theory, let's represent them and their abbreviations on the table below and also their applications.

Theory Name	Abbreviation	Application Result
Communication Theory	K_T	
Instrumentation Theory	I_T	
Information Theory	i_T	
Education Theory	E_T	
Power Theorem	P_T	

All you need to do here, by understanding the overall explanation; you should know that there is a relationship between life and the application of our utilization theory. For instance, the application of our utilization theory enables us to execute functions of life. By understanding that, you can fill out the application result column for each applicable theory and provide more information. For instance, the application of the theory of communication above enables the execution of a function of life. You are going to identify that function, then add it to the table and provide more information about it.

63′. We know the transform of the system equation produces the life equation. As shown by the equation below and the system utilization theory is given by the second equation.

$$T_r\{U_T\} = \mathcal{L}(t)$$

$$U_T = \{K_T + i_T + I_T + E_T + P_T + \cdots\}$$

Now, let's make the following table from the above equation. The result to the right shows the transform for each term; don't worry about the order of existing and added function and also the length of the equation.

Given Theory	Transform of Given Theory	Result
K_T	$T_r\{K_T\}$	$h_1(t)+u_1(t)$
I_T	$T_r\{I_T\}$	$h_2(t)+u_2(t)$
i_T	$T_r\{i_T\}$	$h_3(t)+u_3(t)$
E_T	$T_r\{E_T\}$	$h_4(t)+u_4(t)$

Now, we can rewrite the life equation in the form of what shows below by simply rewrite the terms from the table above.

$$T_r\{U_T\}=h_1(t)+u_1(t)+h_2(t)+u_2(t)+h_3(t)+u_3(t)+h_4(t)+u_4(t)$$

By rearranging the terms and use the summation notation, we have

$$T_r\{U_T\}=\left(\sum_{n=1}^{4}h_n(t)\right)+\left(\sum_{m=1}^{4}u_m(t)\right) \Leftrightarrow \mathcal{L}(t)=\left(\sum_{n=1}^{4}h_n(t)\right)+\left(\sum_{m=1}^{4}u_m(t)\right)$$

All what you want to do, for each transformation theory listed in the table above relatively to its result, show the practical application of life; for instance you can provide an example to show the application of that theory related to life; whether it applies or not or should be applied.

64. By now, we should know a lot about our physical system and the difference between theory and philosophy. We have shown that our system stability is possible with theory, but not possible with philosophy. By understand the fundamental of theory, it can be shown why our system stability is possible with theory, but not with philosophy; verity why.

64′. By understanding the physical system and the difference between theory and philosophy, we have shown that only our utilization theory can provide us with stability. From the physical system equation, related to philosophy, we have come up with the following equation.

$$s(xy)=\left(x_1+x_2+x_3+\cdots+x_N\right)\left(y_1+y_2+y_3+\cdots+y_N\right)$$

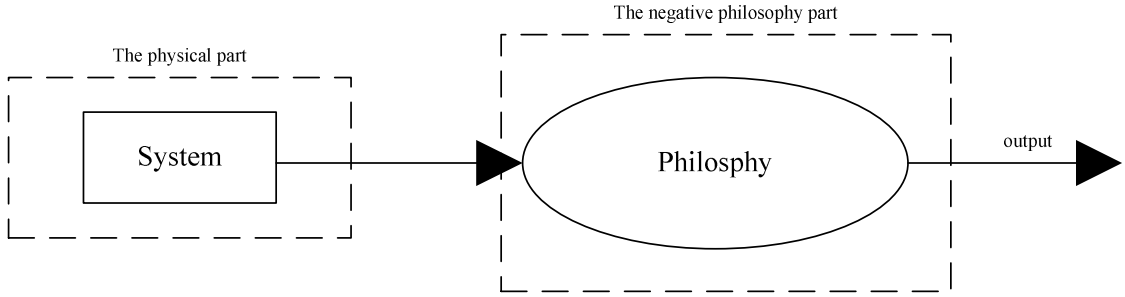
Where the ***x*** terms are people and the ***y*** terms are their philosophies. Related to philosophy, we call the above equation the mistaken equation. From the above equation, we have shown that our system can never be stable. By making an

adjustment to the above equation, we come up with our physical system equation. By replacing the philosophies with our utilization theory, we have the following.

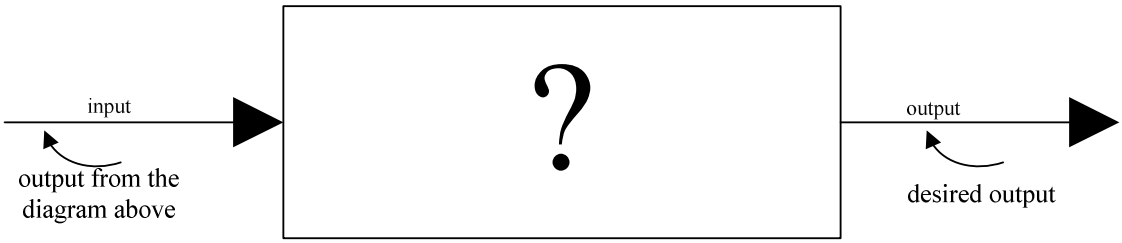
$$s(xy)=\left(x_1+x_2+x_3+\cdots+x_N\right)k$$

Now, by understanding the fundamental of theory, it can be shown that why our physical system stability is possible with our utilization theory, but not with philosophy; verity why.

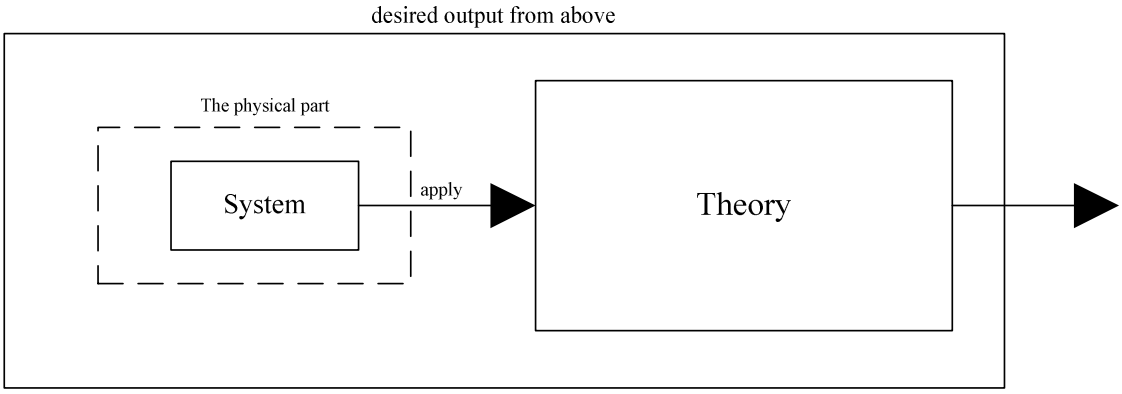
65. **Transformation of a System Related to Theory:** We have seen before from an information theory perspective that a system responds to the type of information it is being fed through. That means, we do things according to what type of information we receive. The result of what we do always depends on the type of principles we have learned about doing them. The model—the representation—we have seen before shows the input and output relationship of the system related to theory. Since the transformation of a theory is the application of that theory, we want to show a representation of the system transformation related to theory. This model makes sense, since a system may have been presented or born without problems, it makes sense to show the transformation of that system related to problem or any type of transformation. The way to look at it, we may have been born from our parents or we were born from our parents without any problem. In order for us to have problem now, we must have learned some negative philosophy. For this reason, it is good to represent us to see the transformation of the negative philosophy we may have learned. See the diagram below for more information



The way to look at it, there is no problem in the physical part of the system, however there is a negative philosophy that is associated with the system intelligence and its memory. Since there is no problem in the physical part, any solution will require the removal of the right part as shown by the diagram above. In a system operation perspective, in order to remove the right part, the system may need to undergo another operation. Let's look at the diagram below.



As shown by the first diagram above, the negative philosophy part is the problem, but not the actual physical part. Since the philosophy part is the problem, to remove the negative part, we have to undergo another operation as shown by the diagram above. From the diagram above, the box with the question mark, simply shows another operation that the system itself must undergo. Since we don't know that operation, by inspection we can easily say that an inverse transformation—the term invest transformation simply mean an opposite operation from the first diagram—would have been perfect. However there is no such as inverse transformation in life, since we cannot undo natural process; we don't know any method to undo natural process. So the question mark in the box still remains; can we get an operation to replace the question mark in the box in order to get the output to be positive? The answer is no; this is not a pen and paper problem. Just think about it. This problem cannot be solved on paper by any mean. From the diagram above, the output will look like the diagram below.

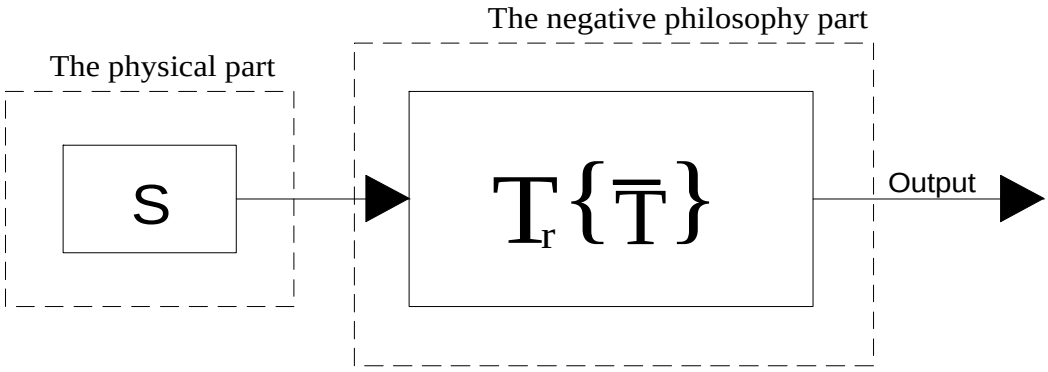


Note: Theory communication is so unique to its fundamental, there are phrases or sentences that may be written on paper, but may never be repeated. The phrase *System Undergo Transformation* and *Transformation of a System* may be written down, but may not be repeated. It is better to say orally transformation of theory related to a system or transformation of theory related to system application rather than *System Undergo Transformation* and *Transformation of a System*. From what we have learned about words and terms in presentation of theory from interpretation of theory, those two phrases are considered to be obsolete outside here for both oral and written.

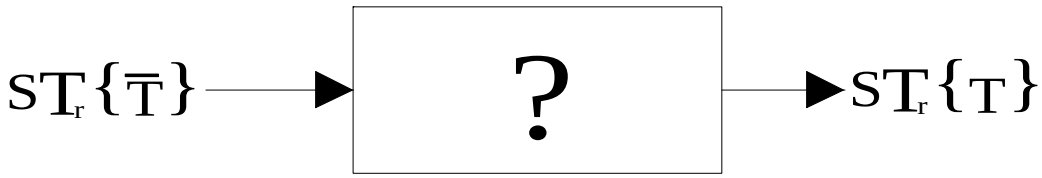
Let's say it again, with the uniqueness of theory communication, the terms *System Undergo Transformation* and *Transformation of a System* can never be said or written on paper. The way to look at it, the two phrases and the first diagram above

are obsolete outside this page; however the phrases theory transformation and system application of theory and the diagram below are not obsolete. The direct interpretation of the three paragraphs above is also obsolete outside this page.

65′. **Transformation of a System Related to Theory**: We have seen before from an information theory perspective that a system responds to the type of information it is being fed through. That means, we do things according to what type of information we receive. The result of what we do, always depend on the type of principles we have learned about doing them. The model we have seen before shows the input and output relationship of the system related to theory. Since the transformation of a theory is the application of that theory, we want to show a model of the system transformation related to theory. This model makes sense, since a system may have been presented or born without problems, it makes sense to show the transformation of that system related to problem or any type of transformation. The way to look at it, we may have been born from our parents or we were born from our parents without any problem. In order for us to have problems now, we must have learned some negative philosophy. For this reason, it is good to model us to see the transformation of the negative philosophy we may have learned. See the diagram below for more information.



The way to look at it, there is no problem in the physical part of the system, however there is a negative philosophy that is associated with the system intelligence and its memory. Since there is no problem in the physical part, any solution will require the removal of the right part as shown by the diagram above. In a system operation perspective, in order to remove the right part, the system may need to undergo another operation. Let's look at the diagram below.

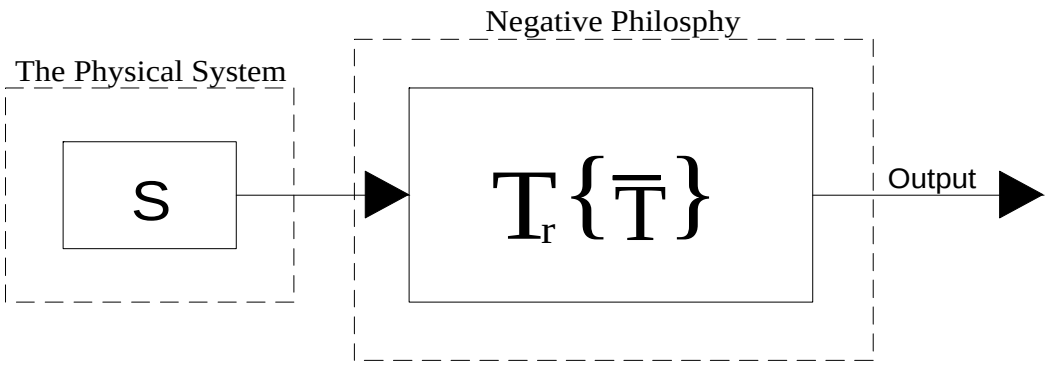


To remove the negative part on the left side, we have to undergo another operation as shown by the box above. Since we don't know that operation, by inspection we can easily say that an inverse transformation would have been

perfect. However there is no such as inverse transformation in life, since we cannot undo natural process; we don't know any method to undo natural process. So the question mark in the box still remains; can we get an operation to replace the question mark in the box in order to get the output to be positive? The answer is no; this is not a pen and paper problem. Just think about it. This problem cannot be solved on paper by any mean.

Note: Theory communication is so unique to its fundamental, there are phrases or sentences that may be written on paper, but may never be repeated. The phrase *System Undergo Transformation* and *Transformation of a System* may be written down, but may not be repeated. It is better to say orally transformation of theory related to a system or transformation of theory related to system application rather than *System Undergo Transformation* and *Transformation of a System*. From what we have learned about words and terms in presentation of theory from interpretation of theory, those two phrases are considered to be obsolete outside here for both oral and written.

Let's say it again, with the uniqueness of theory communication, the terms *System Undergo Transformation* and *Transformation of a System* can never be said or written on paper. The way to look at it, the two phrases and the first diagram above are obsolete outside this page; however the phrases theory transformation and system application of theory and the diagram below are not obsolete. The direct interpretation of the three paragraphs above is also obsolete outside this page.



66. We k now that life is a complex system. We have defined a complex system as a system that works with a complex theory. We define a complex theory as a theory with much, much more observations. We know that life is made of both existing and adding functions. To better understand the complexity of life, it is always good to observe the functionality of the added functions related to the existing functions or vice versa. In terms of observations, it can be shown that as we add more functions to life, the complexity of the existing functions also increases. In other words, as the complexity of the adding functions increases, so does the complexity of exiting functions.
    a. Take your time to think about the above explanation

b. Show by providing a practical example that the complexity of existing functions of life increase as the complexity of adding functions increase. In other words, as we add more functions to life, the complexity of existing functions also increases.

66′. We know that life is a complex system. We have defined a complex system as a system that requires or has a complex theory or works with a complex theory. We define a complex theory is a theory that has a lot of observations. To better understand if a system is complex or not, we have use the following number as a comparison. Assume that we have a non complex theory or a set of non complex theories, we can define them with an observation of 10^{-3}, where a complex theory can have observations greater than 10^{1000}. You might think the 10^{-3} number should have been in the form of a positive integer, however we used it to show how complex and non-complex a theory can be. Now that we want the decimal number to be in the form of positive integer, there is no problem. To do that, we might need to multiply it by another number to get rid of the decimal point. Assume that we multiply it by 10^6 to get rid of the decimal point; we must also multiply 10^{1000} by 10^6 as well to get both numbers balanced.

Compare to adding function to life, it seems like the more functions added, the more complex life can be. It may not be shown explicitly, since existing functions are separated from adding functions, but looks like the more function added, the complexity of the existing functions also increases by observation.

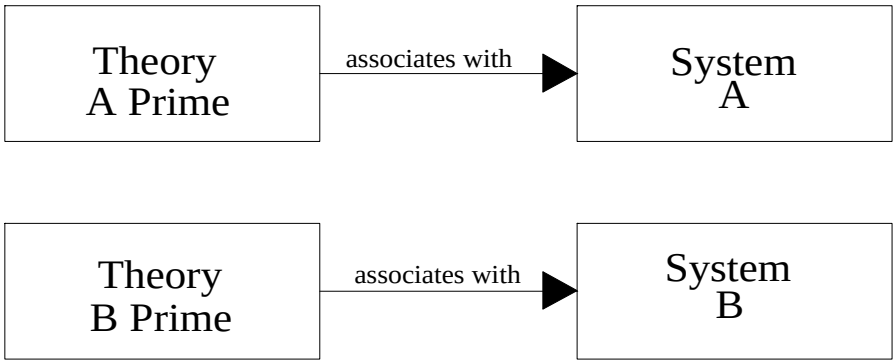
a. Take your time to think about the explanations above.
b. Show that the complexity of $h(t)$ goes higher as $u(t)$ becomes more complex. All that you need to do is to show that if we multiple 10^{-3} by 10^6, we must also multiply 10^{1000} by 10^6 which is shown below. You must show a practical example from your observation or practical observation. Rather than using $h(t)$, you may also use $\mathcal{L}(t)$; there shouldn't be any difference.

$$\left(10^{-3}\right)\left(10^{6}\right) \Leftrightarrow \left(10^{1000}\right)\left(10^{6}\right)$$

$$u(t) \Leftrightarrow h(t)$$

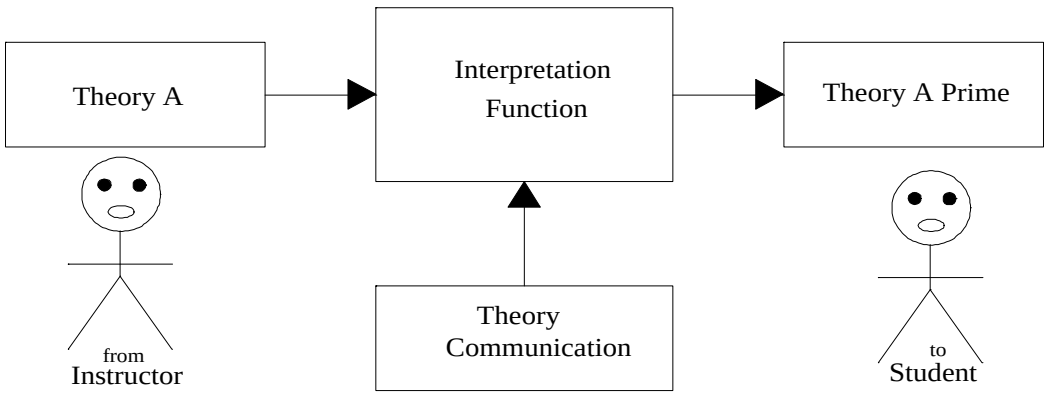
67. It seems like there is a similarity between our characteristic and the terms characteristics. We mean similarity between human characteristic and characteristic of theory, instrument, and method. For instance, we are a theory dependable system; theory and system characteristics show that a system must use its associated theory in order to function. This relationship is well matched. Show an example for each term characteristic that match with our constant characteristic. Another way to look at it, you can show the relationship between the physical system and the terms identified above.

68. In comparison of theory, we have learned that theory A prime can only be used in system A to ensure its functionality. Show the comparison of work that can be done in systems A and B in terms of applying theories A prime and B prime; see the picture below. All that you need to do is to explain or show your understanding of theories A prime and B prime related to systems A and B.



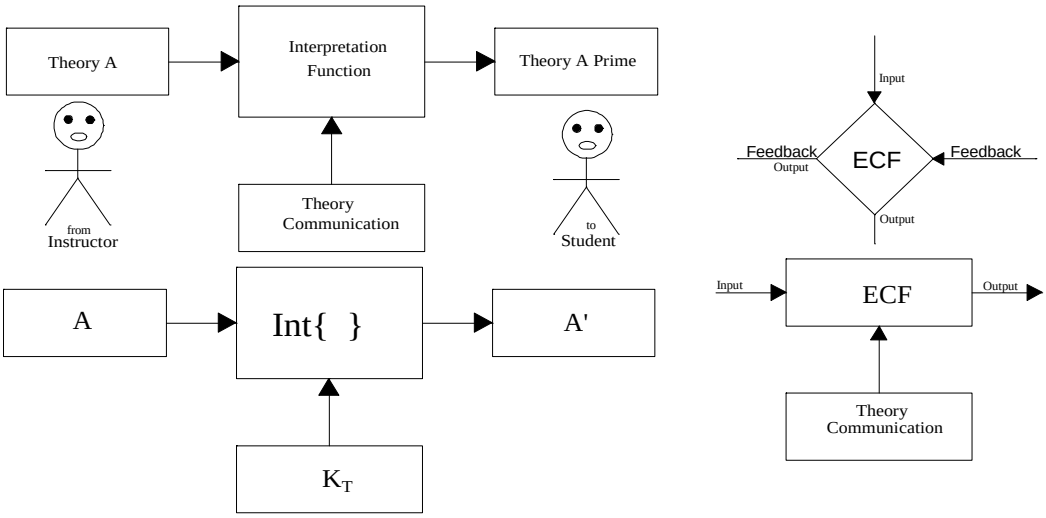
69. By now we should have a very good understanding of theory, theory education, and theory of communication. It seems like there is a relationship between the three. Can you state the relationship between theory, theory education, and theory of communication?

70. **Understanding the Interpretation Function:** When a theory is presented to us, disregard how the theory is being misinterpreted; the theory itself does not change. Since we are a theory dependable system, we will get affected by the interpretation of that theory, however originally that theory does not change, it remains the same. Being a theory dependable system, our intelligence needs to be guided by a theory; a good interpretation will guide us positively, while any bad interpretation will create negative philosophies in us that will lead us to do things differently which creates problems in life. Disregard any misinterpretation by the presenter, a theory **A** does not change, it still remains theory **A** as shown from the figure below. **A Prime** is the result of the interpretation. The interpretation function depends on theory of communication as it is shown below.



a. Take your time to think about the above explanation
b. Show with practical example, no matter what, the interpretation depends on theory of communication, but not theory **A**.

70′. **Understanding the Interpretation Function:** When a theory is presented to us, disregard how the theory is being misinterpreted; the theory itself does not change. Since we are a theory dependable system, we will get affected by the interpretation of that theory, however originally that theory does not change, it remains the same. Being a theory dependable system, our intelligence needs to be guided by a theory; a good interpretation will guide us positively, while any bad interpretation will create negative philosophies in us that will lead us to do things differently which creates problems in life. Disregard any misinterpretation by the presenter, a theory **A** does not change, it still remains theory **A** as shown from the figure below. A' is the result of the interpretation and it is shown as the output after being interpreted. The interpretation function takes theory communication as its input as well.



The way to look at it, since the original theory does not change, the output of the interpretation is a conditional function that depends on theory of communication. With that in mind, we have the output with the following relationship

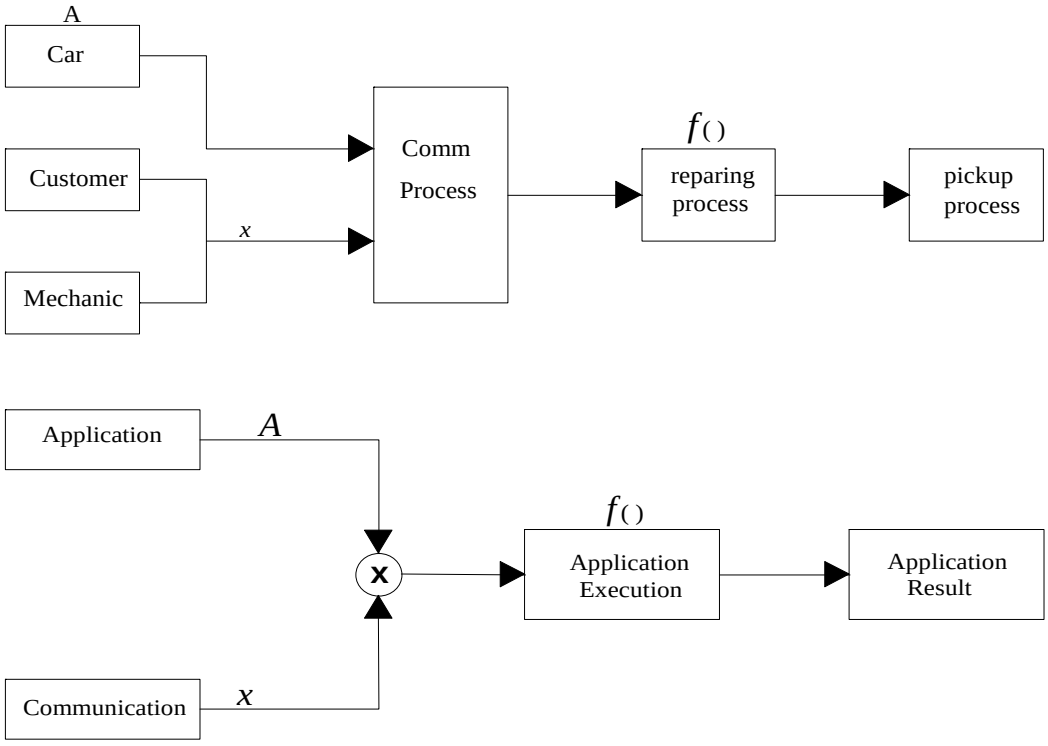
$$Int(A)=\begin{cases} K_T A' & if\ \ K_T \text{ is positive} \\ \overline{K_T A'} & if\ K_T \text{ is negative} \end{cases}$$

Beside the function written above, the interpretation function can also be written as shown on the block diagram in the form of:

$$Int\{A\}=\begin{cases} K_T A' & if\ \ K_T \text{ is positive} \\ \overline{K_T A'} & if\ K_T \text{ is negative} \end{cases}$$

By inspection we can see that **A** is independent of the interpretation and also the output result never depends on theory **A**. A' can be viewed as an interpretation of theory **A**, which depends on theory of communication.

a. Take your time to think about the above explanation
b. Show with practical example, no matter what, the interpretation depends on theory of communication, but not on **A**.
c. From the above figure, we have two models one on the left and one on the right. The bottom one on the right was reduced from the parent feedback model. Disregard the way we look at it, the two models in the bottom one to the left and one to the right. Both of them are very similar. Although there are similar, but there is a small difference. Show practically the small difference from the two models.
d. We may have already introduced to the application execution function from your instructor. Practically, the application execution function was realized from the following block diagrams. The second one is derived from the first one, where the first one shows more details with a typical example.



From the diagrams above, the application execution function was derived in the form of

$$f(x) = Ax$$

Communication Function	Communication	Application Value
$f(x)$	x	A

Now, by taking a closer look to the diagrams and the application function, we should see that there is a difference between the application execution function and the interpretation function. Show the difference between the application execution function and the interpretation function.

71. By looking at the characteristic of theory, we can see that there is big difference between theory and philosophy. For instance a theory is independent to a system where all the associated systems depend on it for functionality, where a philosophy is unique to its originator. Use the remaining characteristic of theory to show the difference between theory and philosophy. You might need to make a table to each difference side by side.

72. We already know about the associativity of the physical system. By analyzing the functional system, we can see that there is an associative relationship within the functional system as well. It can be shown that relationship extends to both the physical system and the functional system. Show practically that the associativity of the physical system related to the functional system. Since the physical system is associative, the functional system is also associative.

72′. We already know about the associativity of the physical system. By analyzing the functional system, we can see that there is an associative relationship within the functional system as well. It can be shown that relationship extends to both the physical system and the functional system. Show practically that the associativity of the physical system related to the functional system. Since the physical system is associative, the functional system is also associative.

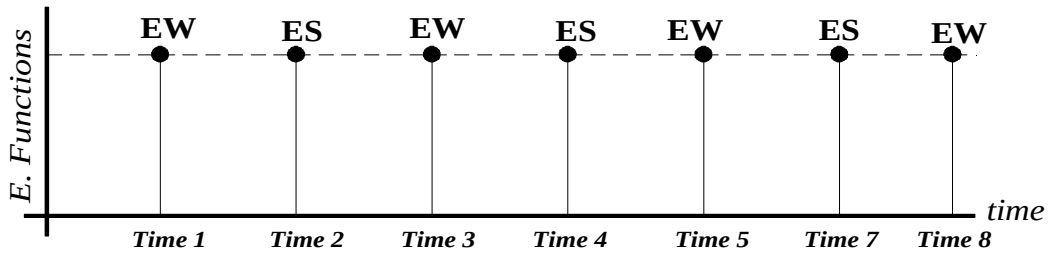
$$Functional\ \ System \Leftrightarrow Physical\ \ System$$

$$\mathcal{L}(t) \Leftrightarrow U_T$$

73. **Understanding Existing Functions Stability:** When we talk about system stability, we mean the functional system or the function of the physical system—us. It can also be viewed as the functionality of the overall entity that makes up the functional system. For example, now elephants walk, sometime later they stop, and then they continue to walk and so forth. If we look at the overall process, we can see that it is very stable, as shown on the table below. From our observation we can also say that in order for the functional system to be stable, the overall functions that make up the system must be stable.

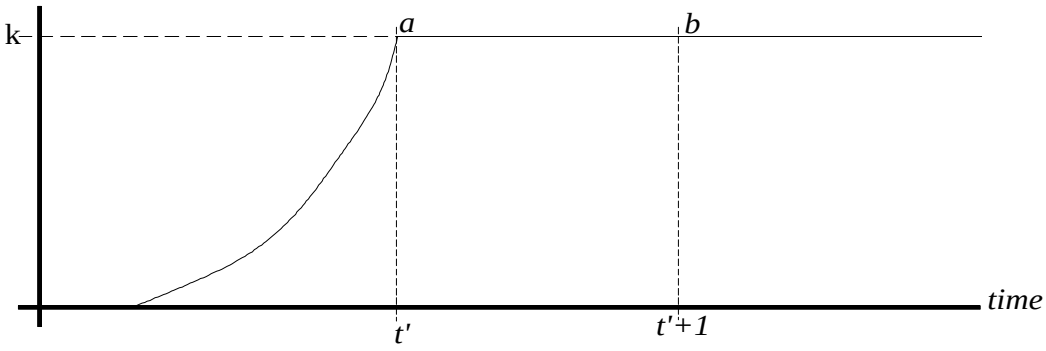
Elephant Functions	Time	Interpreted As
Walk	Now	Time 1
Stop	Some time later	Time 2
Continue to Walk	Some more time later	Time 3
Stop	Some much more time later	Time 4

The graph below is another interpretation of the table. It is not important; don't worry about it. It simply shows that at different times, the elephants perform some functions and at some later times, they still perform them. From the chart, we use abbreviations EW for elephants walk and ES for elephant stop. All you need to understand from the overall process as we have just said earlier, in order for the functional system to be stable, the functions that make up the system must be stable. Just take your time to think about it.

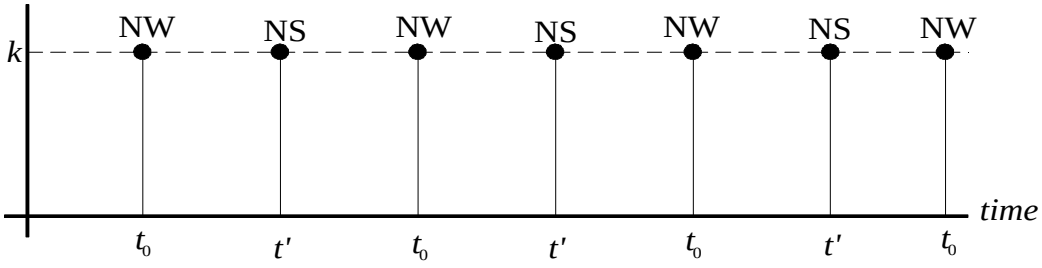


73′. **Understanding Existing Functions Stability:** When we talk about system stability, we mean the functional system or the function of the physical system—us. We can also view it as the average function of the functional system which is life; or the continuity of the functional system at different time. For example, at $t = t'$ elephants work and $t = t'+1$ elephants continue to walk. At $t = t'$ nightingales whistle and at $t = t'+1$ nightingales still whistle. At $t = t'$ human eats, and $t = t'+1$ human still eats. At $t = t'$ we don't harm each other and $t = t'+1$ we still don't harm each other. At $t = t'$ we hold our associativity relationship and at $t = t'+1$ we still hold that relationship. The table below shows a better view of what we are saying. The graph below the table shows the process related to time.

Time	Functions	Later	Functions
t'	Elephants walk	$t'+1$	Elephants continue to walk
t'	Human eats	$t'+1$	Human continues to eat
t'	We hold our associativity	$t'+1$	We continue to hold it together
t'	Dogs walk	$t'+1$	Dogs continue to walk
t'	Nightingales whistle	$t'+1$	Nightingales continue to whistle



Let's draw the observation for the nightingales, at $t = t_0$ nightingales whistle (NW) and at $t = t'$ nightingales stop (NS). At some time later, nightingales' whistle then stop, but at a later time they continue to whistle. If we continue looking at this process, we should see that it comes and goes related to time. Conclusion, we can say as time goes, this process is very stable. We can also do the same process for human walk; we can do the same process for dog walk etc. The way to look at it, in order to have stability, existing functions must continue their process of stability as time goes. Just take your time to think about the overall process.

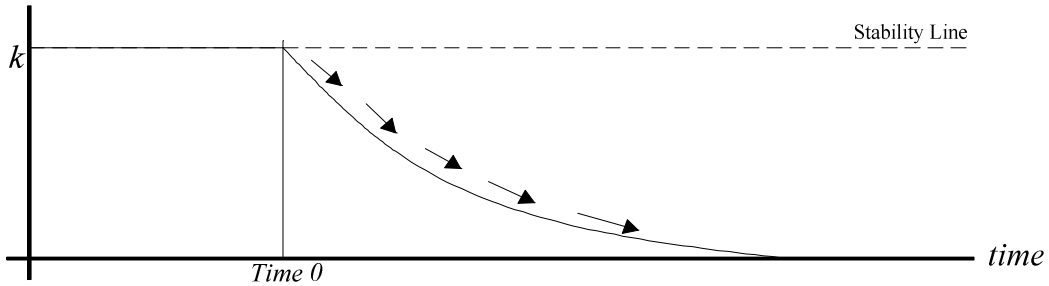


74. Show your understanding of the functional system related to function and system relationship. This can be viewed as the relationship you have learned about life and function and system relationship from the characteristics you have learned.

75. In the process of stability exercise, we have learned that in order for a system to be stable, the function of that system at some point of time must perform equivalently or similar function at a later time. From that exercise, we have learned as well that a given system theory determine that system stability. If the stability of a system was not hold at the time the theory was given, that means if the theory was disregarded at that time, in order to get the stability at a later time, the theory must start applying. Applying the theory at the time we want stability means that we do everything according to the theory to enable us to go to the direction of that theory. Naturally, we cannot go to the direction we want instantly, we can progressively go to that direction as time goes.

Assume that at the time the theory was given to us we throw it away and we think that we can make the system works with our own philosophies. As shown from the graph below, let's call that time t_0, basically by doing that we simply go to the opposite direction. The way to look at it, at the time the theory was given to us and we threw it away, we started operating in the philosophy mode and we started declining as shown by the figure below. Another way to look at it, since at the time the theory was given to us the functionality of the system was normal; we can say we were at the stability line. When we throw the system theory away, and do things in our own, we simply point to the opposite direction of the stability line. We can call the graph below the instability chart.

a. Take your time to think about the paragraphs
b. Show with a practical example, the chart below is the opposite of the stability chart and the average function of the stability of the system pointed down comparing to the stability chart.



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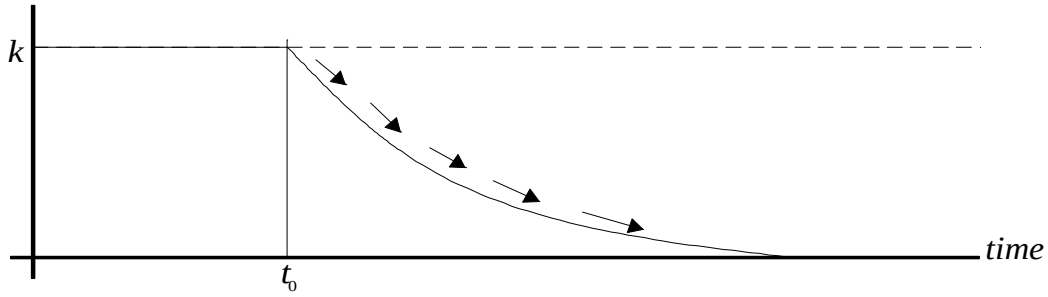
b. Show with a practical example, the chart below is the opposite of the stability chart and the average function of the stability of the system pointed down comparing to the stability chart.



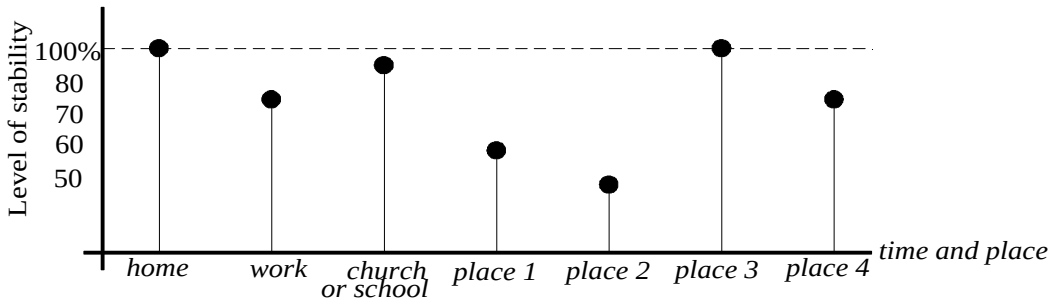
76. **The Back Door Interface Approach:** From fundamental of theory, we have learned that in order for our system to continue to function, our parents' principles must apply everywhere we go. With that in mind, we can say that our parents' principles are very portable since we can use them wherever and whenever to ensure the functionality of life. Since life is continue related to time, it does not make sense at anytime to stop applying our principles. There are cases where we tend to apply our parents' principles at some places and at some times, this approach is not good, since life is a continual process related to time, and since the utilization theory is very portable, so we cannot stop applying it. The term back door interface is given to this approach, since it looks like a hidden approach.
    a. Show an explain your experience by providing an example about this approach
    b. State anything that may contribute to this approach and explain why it is not good for any reason. Provide some reason on how this approach can be overcome.
    c. Refer to the exercise below and show how the back door interface approach contributes to the personal system stability.

77. **Understanding Personal Stability:** From independency of theory, we have learned that in order for the functional system to remain active, each individual physical system or each of us must constantly apply our parents' principles. From portability of theory, we have also learned that those principles should be applied everywhere the system—we are—is present and at anytime. This makes a lot of sense; since wherever and whenever the system is present, it's functionality does not change and it still remain active; so places and times do not matter when it comes to utilize our parent principles. The functional system stability tells us that in order for a system to be stable; its functionality at one time must be equivalent to its functionality at a later time. The nightingale graph can be used as an observation. Now, let's look at the personal or individual stability of the physical system related to the stability of the functional system. Since the stability of the functional system depends on the physical system, it makes sense for us to look at the individual stability of the physical system. When we talk about individual stability, we talk about the ~~confidence~~ of the physical system in terms of function

application. This can also be viewed as self stability. Since the term individual or personal stability sound much better and appropriate than ~~confidence~~, we take the word ~~confidence~~ out and we replace it with the better word. We can also view the overall process as the physical system stability. Since our utilization theory must be applied independently or individually to ensure the functionality of life, hence the term personal or individual system stability.

To better understand what we are talking about, let's use a chart as an example to look at the individual stability of the physical system at various times and at many places. Below shows an example where someone personal stability is changed from difference places at different time. That is not good, since our parent principles must be applied all the time, and since our characteristic remain constant all the time, our personal stability should remain constant all the time and it should always be at 100%. Since our personal system stability dictates the functional system stability, any fluctuation of that stability related to places and times can cause problems to the functional system stability; the result is always problem. It is always good to remain personally stable at the highest level as shown on the graph below. The graph below was interpreted from this table. Don't worry about the graph, just look at the table.

Places and Times	Personal Stability Level
Home	100 %
Work	80%
Church or School	90%
Place 1	60%
Place 2	50%
Place 3	100%
Place 4	80%



Since our characteristic does not change related to time and places, our parent principles does not change as well. For this reason, we should always apply our parent principles all the time and everywhere we are.

a. Take your time to think about the above explanation
b. Show the personal system instability affects the functional system stability by providing an example.

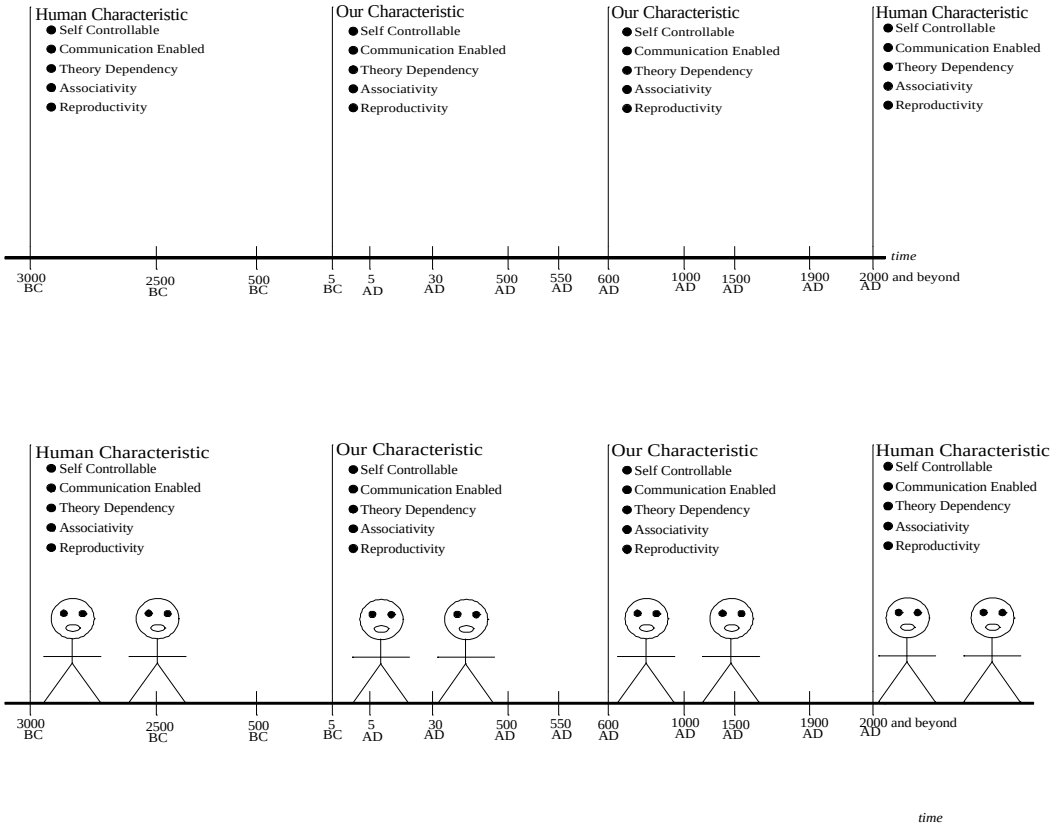
c. For each of the constant characteristic listed below, show that the personal stability of the physical system holds or must hold at anytime and in anyplace.
   - Associativity
   - Communication enable
   - Self controllable
   - Theory dependency

d. Our parent's feedback has enabled us to communicate better. By now, we should be very familiar with feedback. Since we depend on each other for functionality and all of us must apply our functional principles, it makes a lot of sense for one to feedback each other whenever and wherever the feedback is needed. It is not always a good approach at any given time, place, or for any reason to wait to provide a feedback. It is always good to provide the feedback instantly as it is needed. There are several reasons why the waiting period is not good. First, the person who does the bad thing might think he or she is doing it well and continues doing it. Second, while waiting, the person who was going to provide the feedback may not remember and the person who needs the feedback might continue to make the same mistake over and over. So when it comes to feedback, the instant correction or instant feedback approach is always the best.

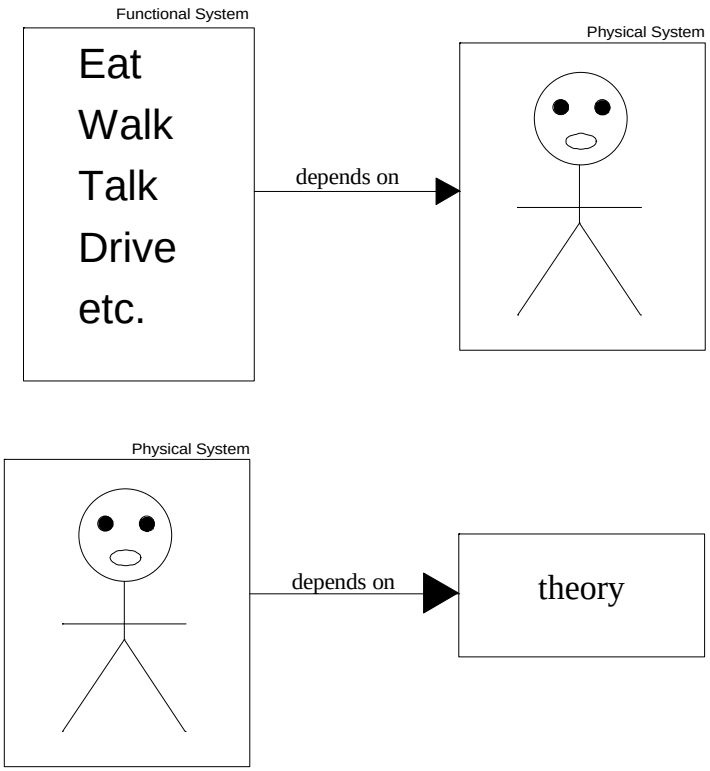
e. Take your time to think about the above paragraph. State what you think about the instant correction approach. Compare the instant correction approach to the postponing or future correction approach by providing an example.

f. When we do something wrong, it does not matter where we do it and at what time we do it. What is important is that we do it, and we should not have done it. Explain why it is wrong and what difference does it make. Show that the back door interface philosophy contributes to it.

78. From the chart below it can be shown practically that problem definition or identification remains the same as years go by. What do we mean, if the basis of the problem has not been solved, the original cause of the problem still remains and that does not change the definition and its identification basis? From the chart below, show with a practical example the statement holds. That means, as time changes, show that the definition of problem and identification remain the same. You can point to any time on the chart. The way to look at it, since a negative philosophy is not a physical entity, as time changes it remains the same. It dos not bound by time or place. Another way to look at it, as time changes a negative philosophy does not change or varnish, it simply expands. Both of the charts presented below are the same, except the second one shows the physical system with its constant characteristic.



79. Show the relationship of the functional system related to the physical system practically. For instance, when we create problems, they affect both the physical system and the functional system; for this reason, we can say that the functional system depends on our parent's principles as well. That relationship is shown by the picture below.



Importance Notice for the Next Exercise:
Our History is so dirty, we must be very, very careful when explaining it to our children. It makes a lot of sense to understand the statement based on our history.

80. **Problem Analysis and Solution Related to History:** When we look at our history, we feel very sorry about many things that had happened. If it was possible for us to go back to that time, we always believe that we would have done it differently than the way it happened. The reason we think this way, because we think differently now than the way we have thought back then when that happened. We always think that any problem we caused from history could have been prevented. The reason we think this way, because when we analyze the event that happened, we see many possibilities where it could have been prevented. It is very good to think like that.

    We have learned that we interface through communication to do what we do. In other words, communication enables us to accomplish what we need and what we want in life. We also know that communication is one of our key characteristic. By repeating our characteristic again; we are defined as a system that can communicate and we use communication to interface to each other. Since our lives depend on each other, we know that we work associatively to make our lives possible. By repeating our key characteristic again, we have associativity, communication enabled, theory dependency, self controllable, and Reproductivity. Since those key characteristics hold no matter what time, what year, and where we are, we can call

them constant characteristics. Those characteristics are constant to us and cannot be changed to no matter what we do. So whatever we do, we must take them into consideration. It is very important for us to always remember those characteristics and respect them to whatever we do.

From *Understanding the Principle of Communication*, we have learned about problem statement and we mentioned that it is always good to have a problem statement. By having a problem statement, it makes it easier for us to do what we want and what we need to do. It also makes it possible to find a solution for a problem. It is always good to have a problem statement at the beginning of our application or before we do what we wanted to do.

By looking at many events from history, we can see all problems that resulted to harming human could have been avoided if proper procedures were followed to solve the underlined problems. It is good to understand that. For instance, by having a problem statement, by understanding communication is the only interface between us, by understanding that we work associatively and our lives depend on each other, it should be sufficient enough for us to solve any problem without harming each other.

a. Take your time to think about the above paragraphs
b. Take any even or problem from history and perform some analysis on it. Show how the problem happened, and how it could have prevented.
c. Now, do some more analysis on that event. Define the problem statement that triggered that event or created the problem. Now, use the characteristic of human or use our characteristic to show how the problem could have been solved.
d. We know that we function associatively and our lives depend on each other. While we all live in different—separate—countries that do not change our characteristics and lives dependency. Since we live in different countries, many resources our many things that we need to live locate in many different countries. Disregard what we do; our lives always depend on each other. Many events happened in history where some people from other countries harmed people in other countries for resources. Now by understanding human characteristic and our communication interface and also life, we see that does not make sense at all for one to harm each other for resources. Since we know more now, it makes sense for us to think that way. We would never harm others for resources since we know our human characteristic and how we interface to each other. Pick an event in history where some people from a country harmed another country because of the need of resources. Analyze the problem; define a problem statement for the event. Describe how would you approach and solved this problem without harming the other country or the people? Take our characteristics into consideration.
e. We have learned in movies or television shows about the type of event described in question d. It would have been nice for a movie or television show to show the good side how the event could have happened as you answer in exercise d. Now, make—produce—a movie or television show

about the answer of question d. Now, if you are going to do that, take your time, do it in a national level. Take your time to research about the event and think about the solution on how it would have happened without harming each other. You can also do a play as well. This is a group project; take your time to analyze the problem so you can have a good understanding of it in order to come up with a possible solution.

f. From human characteristic, we have learned the following: associativity, communication enable, self controllable, and dependency on theory. Although we have already learned them, but we can repeat again what they mean. Associativity means that we function and work associatively; that means our lives depend on each other. It is very easy to see that. By looking at the grocery store example or whatever we do, or what our lives depend on, we see that our lives would not be possible without other people. Communication enabled, allow us to work together to make life possible. We know that communication is the only interface we have to each other. By using communication, we are able to interface to each other to work together to make life work. By using communication, we are able to work together to make life possible. The theory dependency characteristic enables us to use the principles we received from our parents. We use those principles in our work to enable the functionality of our lives. Without those principles, there is no way we can do things without errors. Those principles allow us to work together without committing errors. The self controllable characteristic allows us to prevent us from being forced to do things. For instance, we cannot be forced to do things that make life function abnormal. We cannot be forced to use someone's philosophy. This explanation had enhanced our understanding of our constant characteristics. Now, many events happened in history where people from one nation had forced people from another nation to do things, like forced—involuntary—work. We can analyze many events in history that deal with forced work. We can also analyze many events from history where people from one country tried to control people from another country. These types of events had never ended successfully. The reason for that is because of our characteristics. Our characteristic cannot be changed. We can go back to history from three to four thousand years ago to look at those types of events. They have never ended successfully. Our constant characteristic does not allow that. Take your time to think about this paragraph. Choose an event from history that deal with forced—involuntary—work; analyze it. Show how the problem happened and how it could have been prevented?

g. From the problem you picked above; you have already shown how it could have prevented. Now, derive a problem statement from your analysis. Show the process how you could have solved the problem without using forced work. We know that our lives depend on each other. We know that we need each other in order to live. We strongly believe it can be done without forced work. We simply use the term forced work, however there is a single word for it. We simply think it is more appropriate to use the term forced work; see the note at the beginning of this exercise.

h. From paragraph g, we learn from history people from one nation tried to control people from other nations. Now, pick an event from history that deals with the control of one nation by another nation. Analyze the problem and describe how it could have been prevented.
i. Derive a problem statement from question h. From that problem statement, show the step by step solution from that problem.
j. You can make two movies or two television shows for both g and h. You need to research the problem from history. You may show both how they happened and how they could have been prevented with your solutions. If you choose to show how they happened, you should do in two different movies for one. For instance, if you choose to show that you should have solved the forced work problem without forcing people, first you show how it happened, and then second you use your solution. You don't need to show how it happened. It may not be necessary, since many people already know that. You can also do play as well. This is a group project.
k. From paragraph f and from question g, we showed that a self programmable system cannot be controlled. It can only be self controlled or controlled by itself. By looking at the time chart below, we can see that our characteristic remains constant no matter what time from history. It does not matter from the past, present, or future, human characteristic does not change. It has never been done in history and it will never be done. Even more than 3000 years ago, many have tried, but hey always failed. If you believe that a self programmable system or human can be controlled by others, show that on this exercise. All that you are asked to do, if you think it can be done, show how it can be done? You can simply do this part if you think it can be done. If you don't think it can be done, you don't have to worry about this part. If you think it can be done, after you show how it can be done; go to the chart below and change the characteristics; remove the characteristics below and add what you have found from your method.
l. Our associativity characteristic allow us to work together associatively through communication. By having that characteristic, we can interact with each other to apply our parent principles in order to work to make life possible. Since many of us live in different parts of the world or in different countries, but that does not change or affect the associativity characteristic. Disregard where we are, this characteristic always hold and also the other characteristics. For instance, while we live in different countries, we also work together to assume the functionality of life. Even when we move from one part of the earth to another or from one country to another, our parent principles always apply and our characteristics still remain constant. Changing location does not affect our characteristics; it also preserves our parent's principles. There are many events from history where people from one part of the world or from other countries move to other countries or other part of the world. When they get there, rather than living together with the local to preserve the association, what they do, they treated the local people very badly. They harmed them, they destroyed their quality of lives; they also destroyed them. These types of event could have been avoided, if our parent

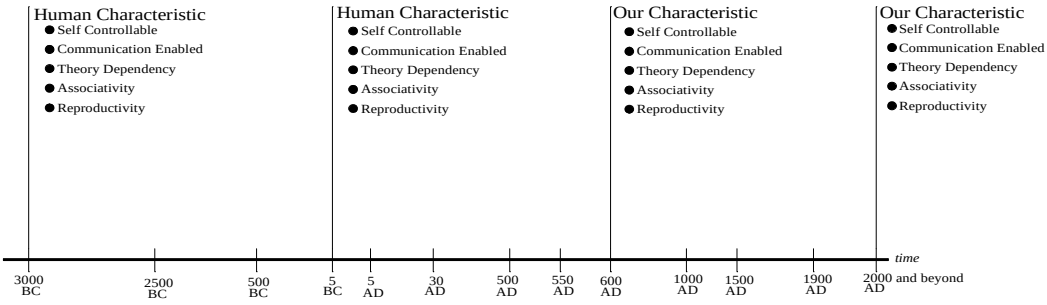
principles and our associativity characteristic were taking into account. It is always good to take our characteristic and our parent principles into account.

m. Take your time to read the above paragraph. Analyze an event in history where people from one part of the globe or from another nation, went to another part of the globe or another nation; where instead of living together with the local people to work together, they harmed they or destroyed them.

n. It is always good to have a problem statement. Having a problem statement allows us to solve problems we have by using our parent principles. Define the problem statement of the question above. For instance, these people may have been relocated, because they had problem. Because of the associative characteristic, relocation from one place to another is not a problem. We can still live and work associatively in the new place we are relocating.

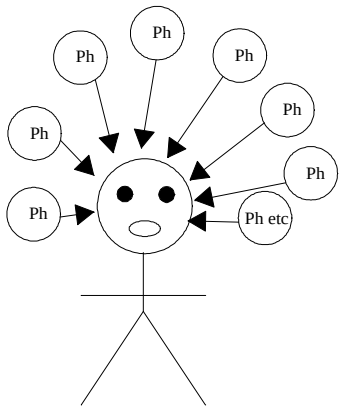
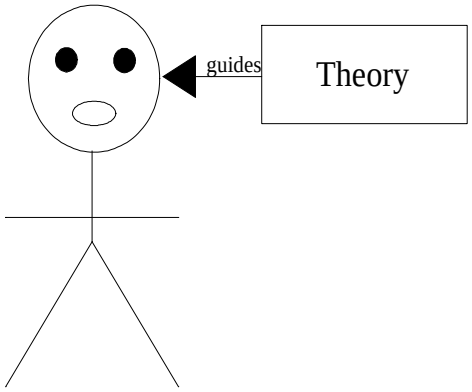
o. Assume that you are the people who had relocated from one part of the glob to another part, provide a step by step solution on how would you solve the problem of the above question.

p. With your step by step solution, produce a movie for the above problem. You must take your time to do research about the event and analyze it. You can also do play as well. This is a group project.



81. We have learned that the personal system stability also dictates the physical system stability. Although we use the word physical here, but since the functional system depends on the physical system, it is better to say functional system. Show with a practical example that the personal system stability has not been preserved by information. If you have not done so, you can also show that the personal system stability dictates the physical or the functional system stability.

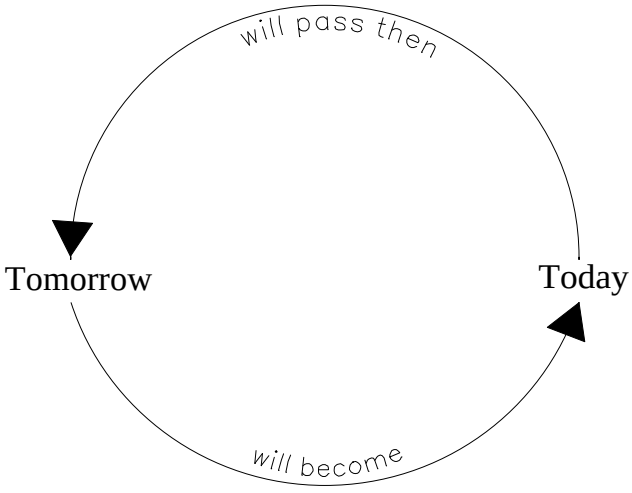
82. Since theory is limited by theory of communication, in any conversation theory is limited where philosophy is not. That makes sense, since philosophy is not limited in terms of numbers, any idea can be thrown on the table. Likewise, theory must look at the pattern of the statement to see any match in order to continue. We have learned that from a previous exercise. Show the practicality of that statement from the following diagram, where the first table shows the theory and the philosophy models while the second one is the statement table. From the statement table, there is no limit of statements for philosophy; however theory is limited to match as shown on the table.

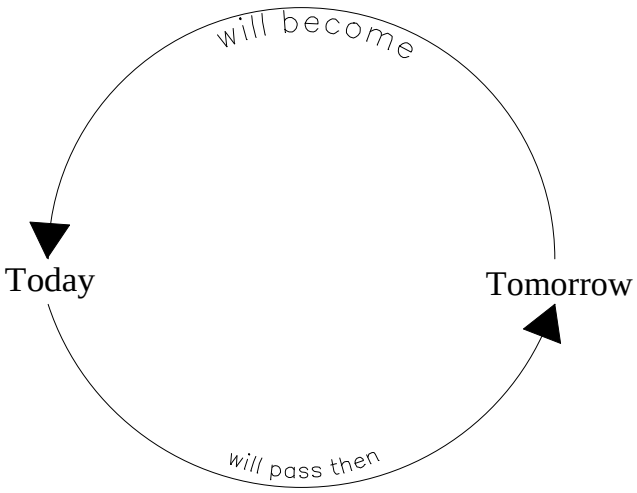
Philosophy Model	Theory Model
 **Physical System**	 **Physical System**

Philosophy Model	Theory Model
Statement 1	Statement a
Statement 2	Statement b only exists if match with a
Statement 3	Statement c only exists if match with b
Statement 4	
Statement etc.	

83. From other words characteristics in **Appendix A** the following characteristic have been provided for time.
    - Uncontrollable
    - Unstoppable

    Although we have shown time on the graphs, but we did not say anything about it before **Appendix A**, all we have to know about time besides what is listed above is that the basis of time is day. The way to look at it, time is cyclical so day comes and goes. The diagram below shows the cyclical view. It does not matter what way we read it from, both of them are the same.





The way to look at it, there will always be tomorrow. It may not be the way we would like it to be, but since the functional system depends on us to apply our parents' principles, we are the one who decide how tomorrow will be. We can roughly say that we dictate how to morrow will be based on what we do.

a. Elaborate the above statement
b. Show or verify that tomorrow is related to what we do; that means our application today determine how tomorrow will be; show practical examples.

84. Sow your understanding of the difference between theory and philosophy by looking at the functionality of the physical system related to our parent principles and the functionality of the physical system related to philosophy.

84′. State the difference between theory and philosophy based on the following equations. Since a system can never function by Radom set of ideas, the second equation never exists at all, so we call it the mistaken equation. The term *never exists* means; it is not from our parent principles. That makes sense, since the physical system cannot function by philosophies. Anyway, all that we need is couple of sentences to show the difference between theory and philosophy.

$$S = D_T + U_T$$
$$S = D_T + Ph$$

85. The understanding of natural instruments related to non natural instruments is very important, since non natural instrument must work associatively or in connection with natural instruments; so the same principles that work for natural instruments also work for non natural instruments. It is good to understand the functions of non natural instruments related to natural instruments. In the visual aspect of communication example, we have seen that a specific non natural instrument is used to extend the functionality of natural instruments. We can use many examples to show comparative functions, however what is important is the functions of non

natural instruments related to natural instruments. In short, we can say that non natural instruments extend the functionality of natural instruments. For instance, while we can work to go to a grocery store, but using a car, we can get there faster and we can also carry more groceries. Another observation we can make in relation of natural and non natural instruments, is that non natural instruments emulate the function of natural instruments in terms of derivation. It is good to think that the derivation of non-natural instruments emulate the function of natural instruments with extendibility.

a. Take your time to think about the above paragraph
b. Six months or more later, in terms of functions, pick some non natural instruments, compare their functions with natural instruments that use with them; state and describe what functions they extend or emulate.

86. **Understanding Problems and Their Solutions:** Due to the fact that problems are not physically defined, the process of solving any problem in life is very challenging. We must be very careful when dealing with problems. While any negative philosophy can be used to screw-up things instantly, however solving that screw-up things is very challenging and can take much, more times compare to the time it took to screw it up. Given that we don't have any capability to undo any process or we don't have any method to undo natural processes, when dealing with problems, we must carefully use normal procedure or rely on normal processes. For this reason, we must be very careful not to create any problem or screw-up things.

a. Think about this paragraph
b. Show with a practical example that the time it takes to get something to work is much, much greater than the time it takes to screw-up the same thing. In other words, the time it takes to solve a problem is much, much greater than the time it takes to create that same problem.
c. Show practically the process of screw-up things is related to philosophy expandability, while the process of getting things to work is related to expandability of theory.
d. Whenever we talk about problems, we always see in mind the abnormal functionality of life. To better understand the terms normal and abnormal functionalities of life, we have to look at problem definition by itself. We know that problems are negative philosophies that enable life to function abnormal. In terms of system functionality, we can see that the system was functioned normally, and then it started to function abnormally. Since multiplication and expandability are characteristics of problems, related to negative philosophies, there is not limit in terms of quantities and locations. In other words, negative philosophies which are problems themselves can be multiplied and expanded without limit. By understanding that, we can see time is not a factor at all in terms of expandability and multiplication of problems. The way to look at it, a problem that happened long time ago at a specific location can be expanded to various locations to create other problems; it can also be multiplied as well. Now, related to system functionality, we can see that as the problem keeps expanded and multiplied, the associated system

becomes more and more unstable. If we relate that we time, we can see there is a reduction in the system functionality. Another way to look at it, as time goes the problem keeps expanding and multiplying, at the same time the normal functionality of the system is diminished. When we look at this process, we can see that it is related to the downhill process. We name the opposite of the downhill process the uphill process.

e. Take your time to think about the above explanation. Verity with a practical example that the downhill process is related to expandability of philosophies, while the uphill process is related to expandability of theory.

86′. **Understanding Problems and their Solutions:** By now, we know a lot about system stability and about problem creation and definition as well. We also know about philosophy transformation and theory transformation as well. We know that in order for a system to be stable, its response as times go must be steady. Given that life depends on our utilization theory, in order for it to be stable, we must apply our theory. At the time the theory was given to us, if we chose not to apply it, we must wait and apply it at a later time. At the time the system can no longer function and we need to apply our theory to enable the system to function, we call that time t_0. Now, at t_0 we realize that we must apply our parent's principles. Since at the time we realize that, we cannot jump to 100% of what we have lost, we must incrementally go normally until we reach the level of stability.

Given that the system can no longer function without applying our utilization theory; given that we no longer operate at the satisfactory level or stability level, we call the process of not apply our utilization theory the downhill process; while we call the process of applying our utilization theory to reach the level of stability or satisfactory, the uphill process. Both the downhill and the uphill processes are directions. Assume that during the downhill process, we lost about 96% of stability, now that we are at 4%. From 4% stability, we drop to another 2%. Now we define Δt_d the difference of time it takes to drop from 4% to 2% as shown on the diagram below; Δt_d stands for Δt downhill. Keep in mind from 4% to 2%, we only lost 2% at that level. The equation below shows Δt_d calculation; think the difference time as $time1$ downhill and $time2$ downhill.

$$\Delta t_d = time2 - time1$$

Now assume that we have made a lot of accomplishment and we are successfully starting the uphill process. We are at 2% stability, and we are going to 4% stability. At 4% stability, we only gain 2%, now we define Δt_u the time it takes from 2% stability to 4% stability as shown on the diagram below; Δt_u stands for Δt uphill. The equation below shows Δt_u calculation; think the difference time as $time1$ uphill and $time2$ uphill.

$$\Delta t_u = time2 - time1$$

By observing both diagrams below and look at Δt_d and Δt_u, we see that in Δt_d we only lost 2% and in Δt_u we only gain 2%. Keep in mind that the time it takes for the 2% gain is different than the 2% lost. From the above equations, $time1$ and $time2$ are simply marks on each chart; they don't mean that Δt_d is equal to Δt_u. Therefore Δt_d is different than Δt_u. By understanding the fundamental approach of problem, it can be shown that Δt_u is much, much greater than Δt_d.

The way to look at it,

$$\Delta t_u \gg \Delta t_d$$

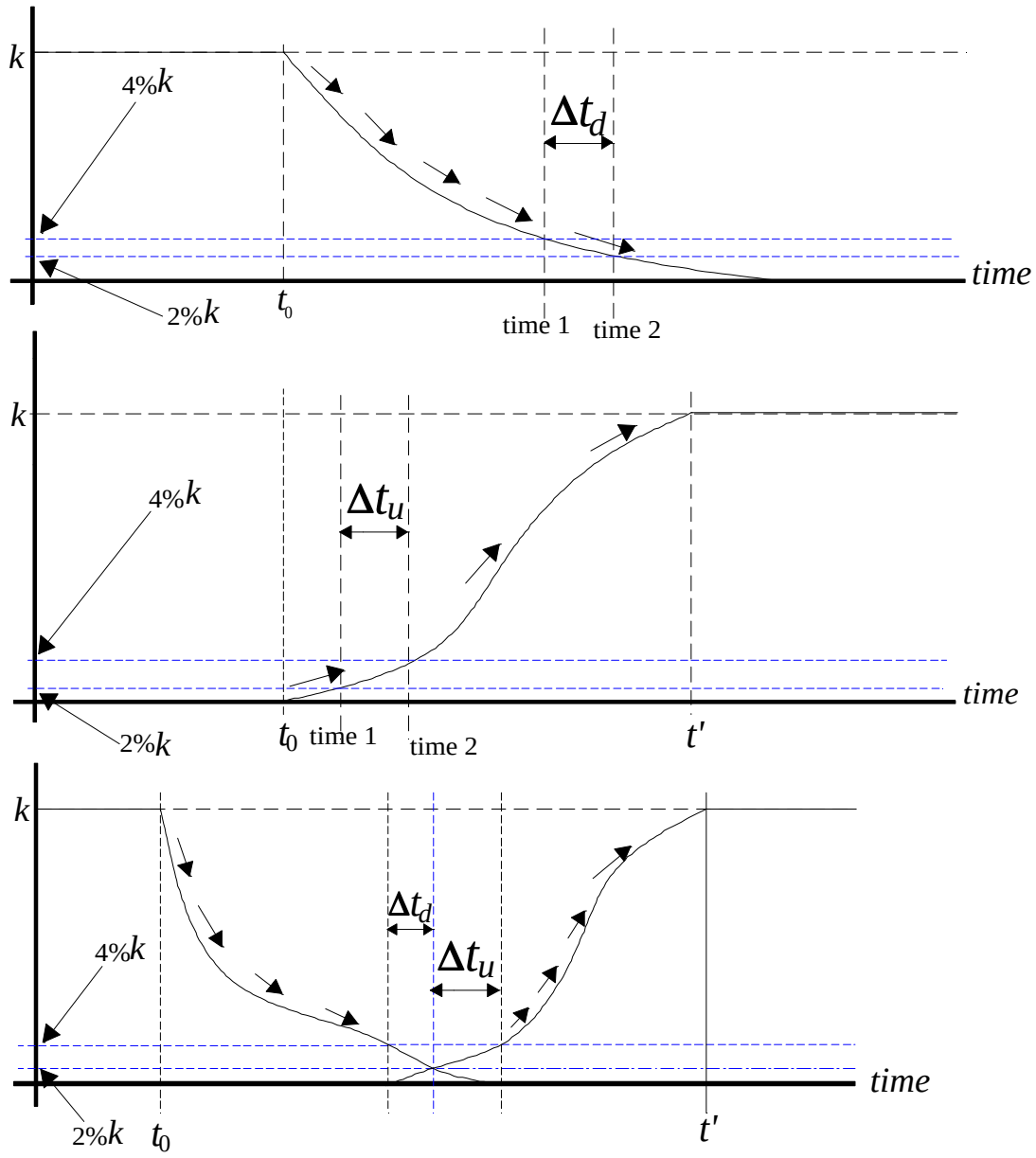
We can also say that

$$\Delta t_u = N \bullet \Delta t_d$$

The way to look at it, the time it takes to create problems or screw-up things are always much, much less than the time it takes to solve problems or fix up things. The second equation above can never be determined in advance, it is always preferable to use the first one. ***N*** can be any number like 2, 3, and 4 or greater, but can never be determine in advance. All that you are asked to do is to show with a practical example that.

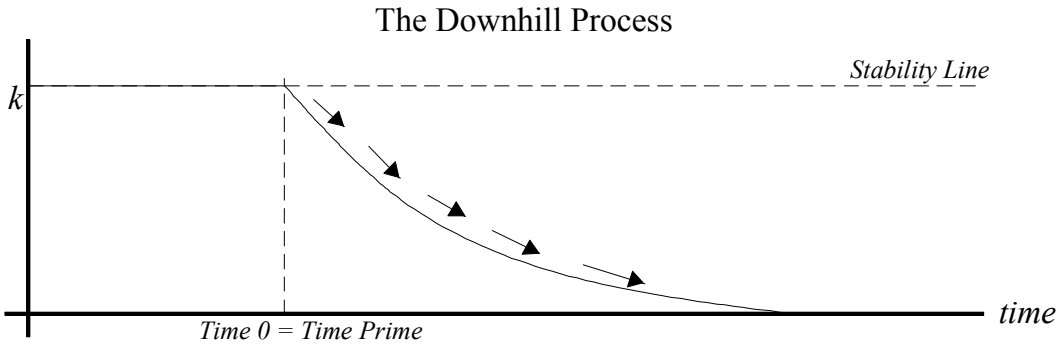
$$\Delta t_u \gg \Delta t_d$$

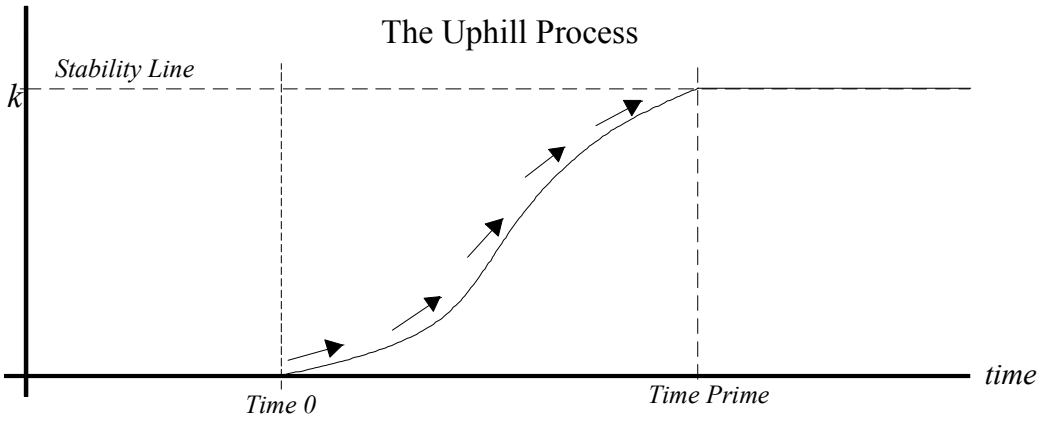
The way to look at the graphs below, the first one shows the downhill process. The second one shows the uphill process. In the first one, we define the time it takes for us to loose 2% and in the second one, we define the time it takes for us to gain 2%. The last graph shows both the first one and the second one together for better visualization; disregard any scaling from the graph. To conclude it, we can say that the time it takes to loose 2% is much, much less than the time it take recuperate the same 2%. Although the last graph shows both processes on the same chart, but keep in mind that both processes are opposite to each other and they can never happen at the same time.



87. **Understanding the Downhill and the Uphill Processes:** Some More Explanation about the downhill process and the uphill process related to *Time 0* and *Time Prime*. In the downhill process, at the time the *Theory* was given to us and we chose not to apply it, we call that time, *Time 0*, since the *Theory* was initially given to us. However, since we use *Time Prime* to denote 100% stability, in the downhill process, *Time 0* is equal to *Time Prime* since at the time the *Theory* was given to us, the system was 100% stable. *Time 0* in the downhill process is completely different than *Time 0* in the uphill process. *Time 0* in the downhill process denote the time the *Theory* was given to us and we chose not to apply it, while *Time 0* in the uphill process denote the time we realize the importance of the *Theory* and we start to

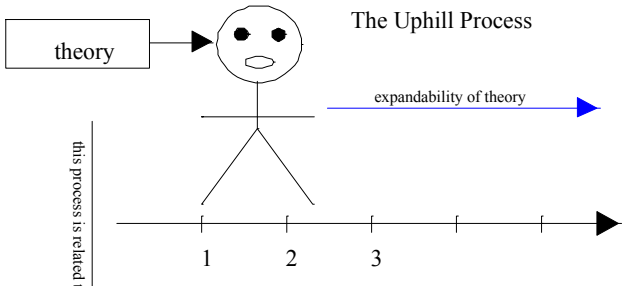
apply it in order to ensure stability. We can also say that the time the system can no longer function and we start to apply the *Theory* to ensure the functionality of the system; see the diagrams below for more information.

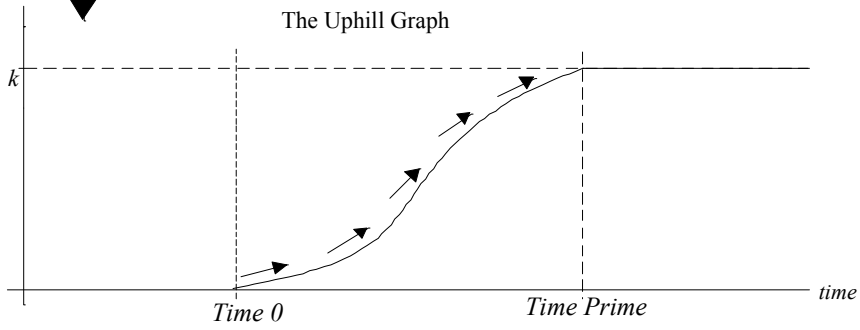


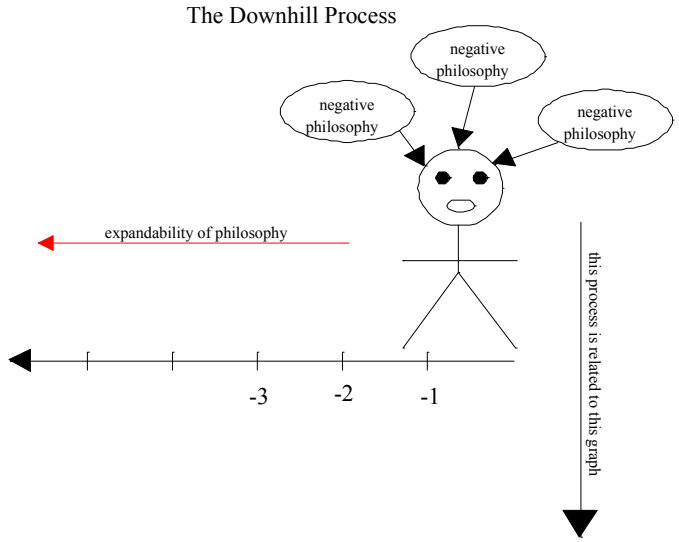


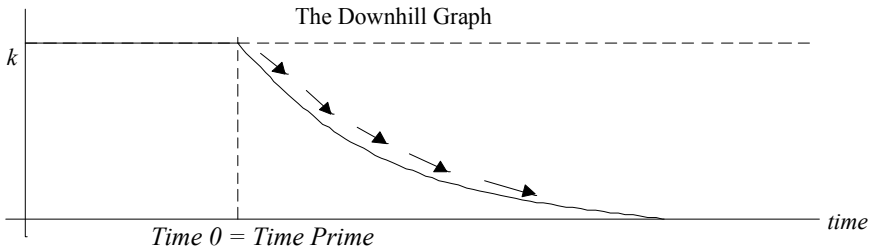
Related to expandability of philosophy and expandability of theory, it can be shown that the downhill process is related to expandability of philosophy while the uphill process is related to expandability of theory.

a. Show practically the relationship of the downhill process related to expandability of philosophy.
b. Show practically the relationship of the uphill process related to expandability of theory. The diagram below shows the relationship graphically related to each process.

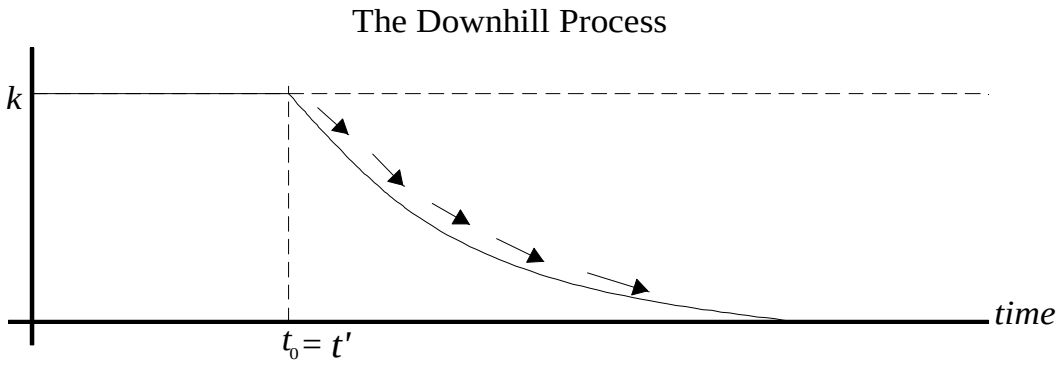


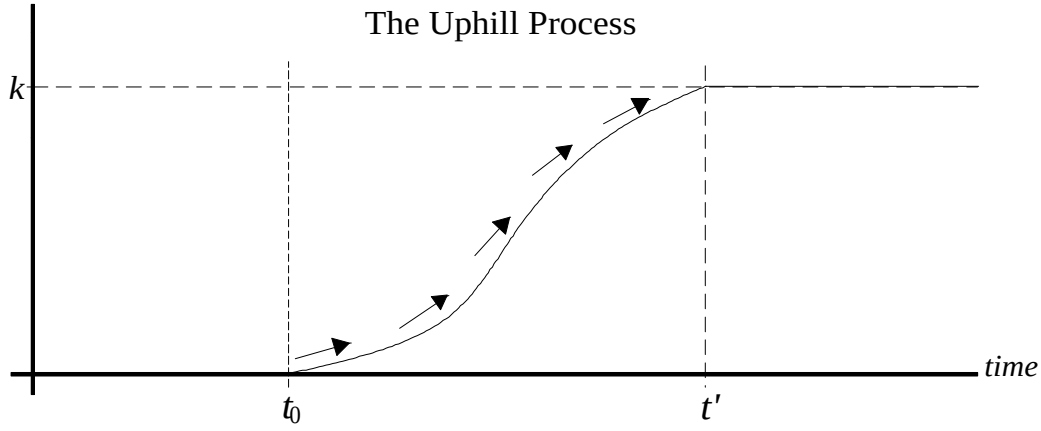






87′. **Understanding the Downhill and the Uphill Processes:** Some More Explanation about the downhill process and the uphill process related to t_0 and t'. In the downhill process, at the time T was given to us and we chose not to apply it, we call that time t_0, since T was initially given to us. However, since we use t' to denote 100% stability, in the downhill process, $t_0 = t'$ since at the time T was given to us, the system was 100% stable. t_0 in the downhill process is completely different than t_0 in the uphill process. t_0 in the downhill process denote the time T was given to us and we chose not to apply it, while t_0 in the uphill process denote the time we realize the importance of T and we start to apply it in order to ensure stability. We can also say that the time the system can no longer function and we start to apply T to ensure the functionality of the system; see the diagrams below for more information.

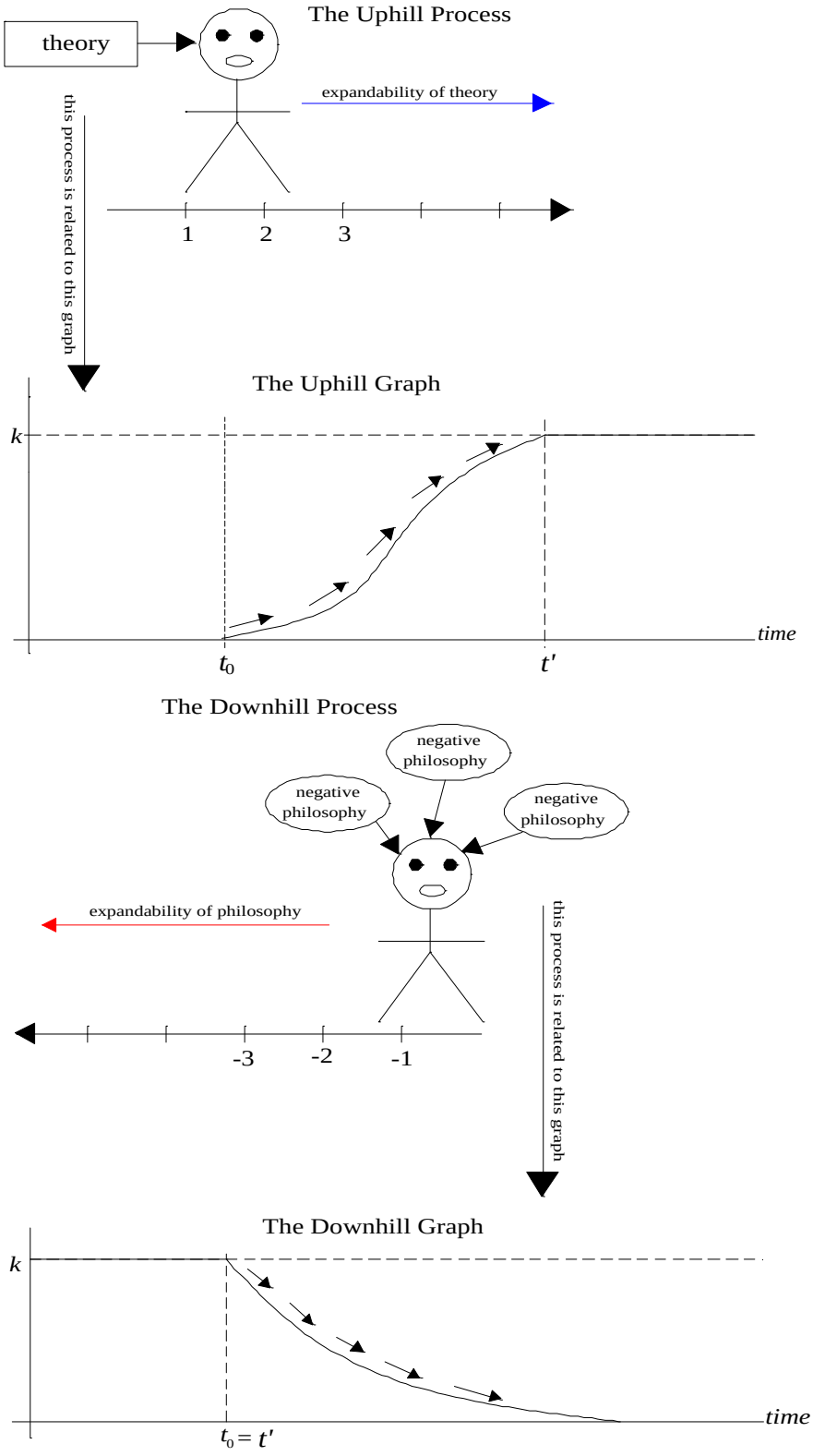




Related to expandability of philosophy and expandability of theory, it can be shown that the downhill process is related to expandability of philosophy while the uphill process is related to expandability of theory.

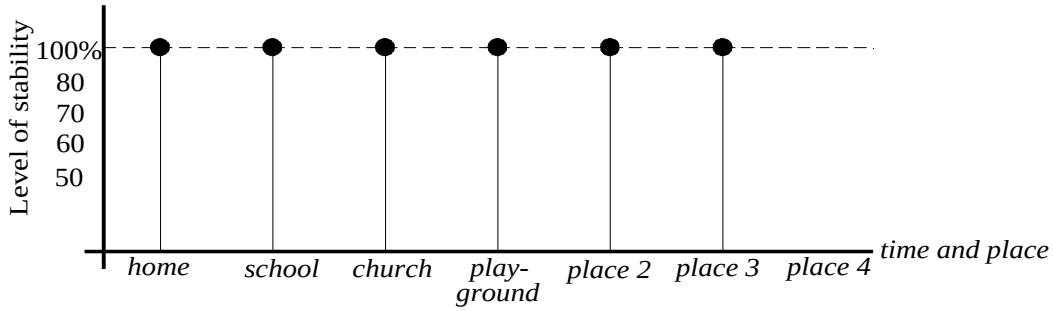
a. Show practically the relationship of the downhill process related to expandability of philosophy.

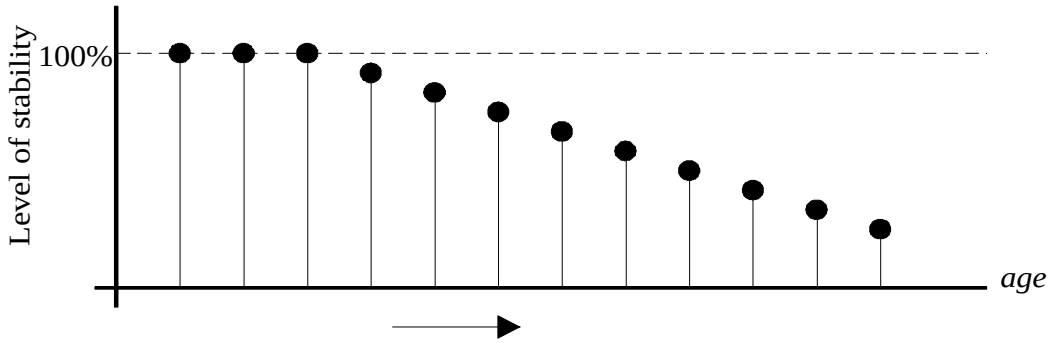
b. Show practically the relationship of the uphill process related to expandability of theory. The diagram below shows the relationship graphically related to each process.



88. The following characteristics are constant for the physical system. We call them constant since we cannot change them, so we have to work with them. That means we have to work with them in what we do as there are rather than trying to change them. Given that the utilization theory of a system must be applied in order for that system to work; given that philosophy believes that a system can work with a random set of ideas and can be changed without its derivation theory. When comparing theory and philosophy related to our constant characteristic, their points of view can be very different. For each constant characteristic listed below, show practically the difference between theory and philosophy.
    - Associativity
    - Communication enabled
    - Self controllable
    - Theory dependency
    - Reproductivity

89. From the Back Door Interface Approach exercise and from the Physical System Stability exercise, we have learned that it is very important for the physical system to maintain its stability all the times. Since the system is still functional wherever it is present, it is very important for us to keep our level of stability at the highest level as possible. Our level of stability should not have anything to do with time or location. Given that at any age we are still functional, we should always apply our utilization theory to maintain our stability at all times and at all ages. If we were going to compare our level of stability related to ages, we can see that we maintain the highest level of stability during our childhood. The way to look at it, the physical stability of children is higher than our physical stability. Since we use the term physical system stability to refer to the overall system stability, and we use personal stability to refer to individual stability, we can say that children maintain higher personal stability. If we were going to take an example, we can roughly say that at any place the physical stability of children stays at the highest; the graph below shows that. The second graph shows the decrease of our level stability as we get older. Although the second graph shows the decrease, but it is better not to interpret it graphically, but to think that when we were kids, our physical level of stability used to be at the highest level. Given that the functional system depends on the physical system, it is always good for the physical system to maintain 100% stability at all times. In other words, it is always good for us to be 100% stable physically all the times.





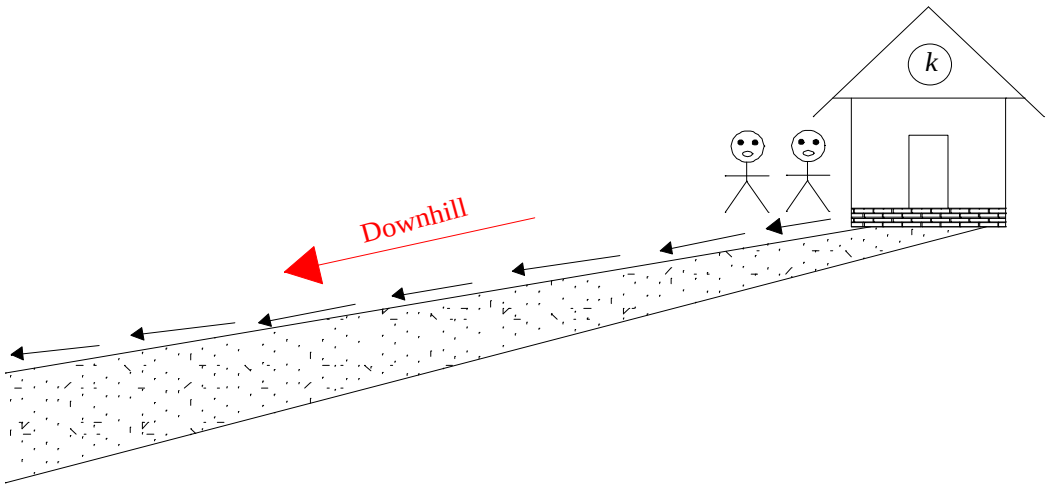
a. What attribute to the decrease of our level of stability as we grow up? In other words, what cause our level of stability to decrease as we get older?
b. Verify that children have higher level of stability comparing to us by providing an example. You can also provide more than one example if you want to.
c. Depend how you answer question a, show the incompatibility with our utilization theory and verify that the physical system stability should be at 100%.

90. **Visual Aspect of the Downhill and the Uphill Processes:** We have already shown that the terms uphill and downhill processes are referred to stability. It is always good to have a good understanding of what the word stability means itself and the process of stability. Whenever we talk about stability, it always means maintain functionality. For example, we can say that a system is stable if it stays functional normally related to time. We can also say that life is stable when it continues to function normally related to time. We know that life depends on the same theory that we depend on. In order for the system to continue to function normally related to time, we must apply the theory the system depends on. Without that, life cannot continue to function without problems. In terms of our utilization theory, related to life, our utilization theory is considered to be the basis of life, since it is the one that enables the functionality of life.

To better understand the downhill and the uphill processes, it is worthwhile to interpret the overall process as direction to go to our house as shown by the

picture below. k which is considered the top of the house, provides us direction where we should go. Since the top of the house is a part of the house itself, we call k our home. For example, since k is considered to be the direction of our home we always know where to go. Without that direction, we simply act like we don't know where we are heading. The way to look at it from the diagram below, the house is the direction where we should go. We should always follow the route to that house. By disregarding the direction of the house, which is the same as disregarding our parent's principles we simply heading to the opposite direction as shown by the downhill process on the diagram below. Once we are in the downhill process, we simply heading down with no limit. Since we don't know where we are heading, we are very unstable. Within that, anything can happen. It is always good to have a direction where to go.

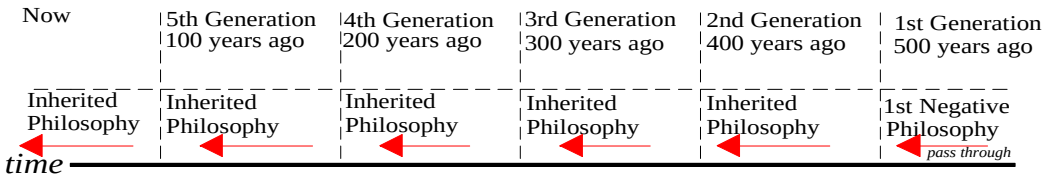
Another way to look at the downhill process related to the house in terms of stability. Assume that someone built us a house to live, rather than living in the house; we simply walk away from the house; we abandoned the house. By walking away from the house, we are heading in the opposite direction and we are very unstable, since we don't know where we are going to. Since the opposite direction is not the direction of the house, we simply walk without direction, where we don't know where we are heading. The diagram below shows just that. Maybe in our mind we assume that we are going to find another house in the opposite direction, however it does not work like that. Any assumption like that is very baseless without any fundamental.

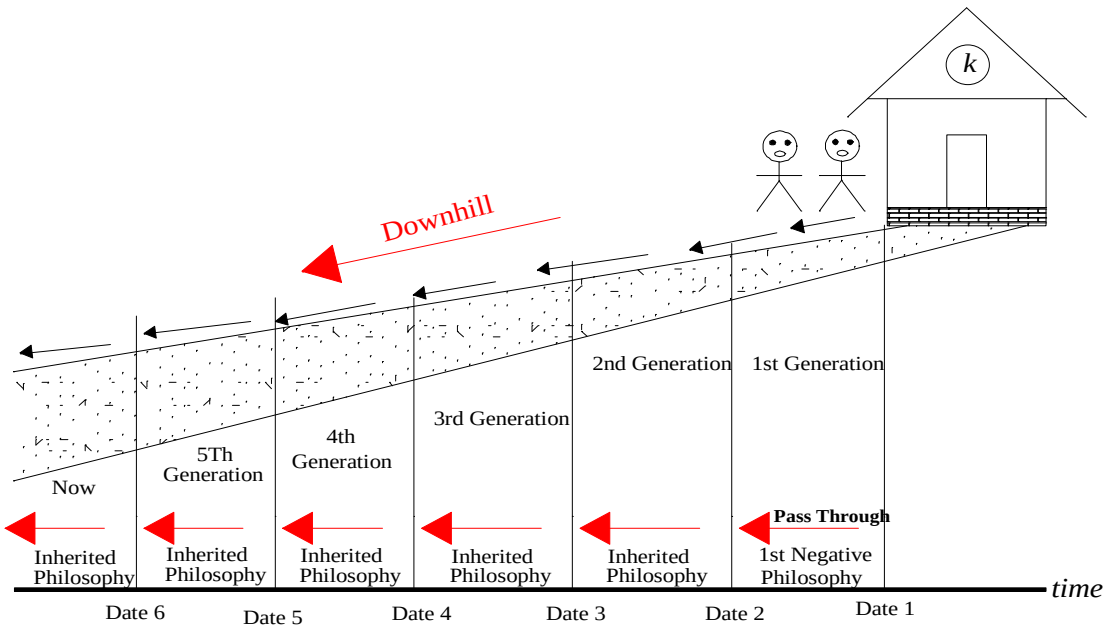


To better understand the overall uphill and the downhill process, it is always good to take it in terms of people and generation related to time. That means we started going downhill from generations to generations many, many years ago. Given that problems stay relatively constant related to time, but spread to create other problems, so any negative philosophy that existed many, many years ago are still around without being gotten rid off. It is always good to look at the downhill process in terms people related to time, rather than individual person.

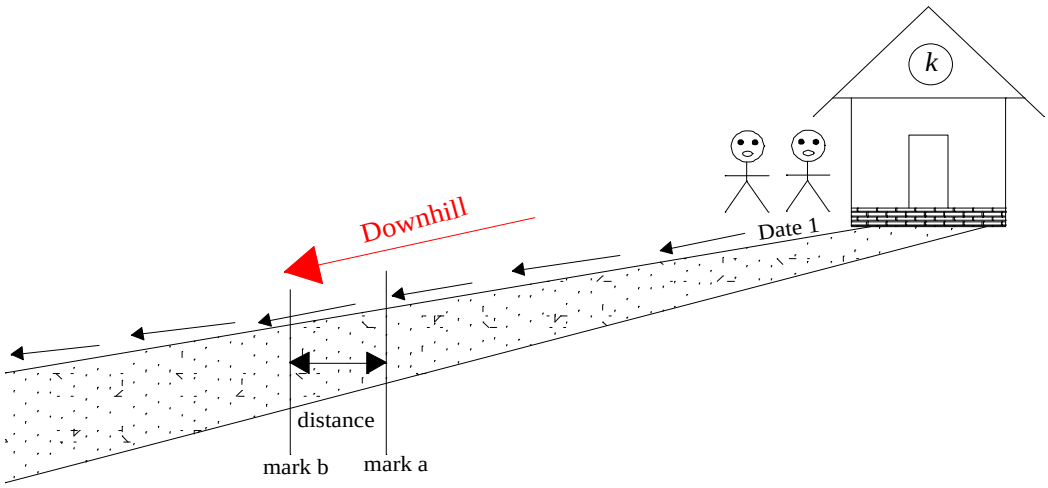
In order to understand the downhill process related to generation, we have to look at the terms philosophy inheritance. Since a negative philosophy remain relatively unchanged and spread, so the way to look at it, the same people who started the downhill process physically are not the same one today; anytime frame can be used it depends on you. From the diagram below, we use 500 years time frame for example.

Definition of Philosophy Inheritance: Philosophy inheritance is the process of inheriting or learning and applying our ancestors' negative philosophies and doing things according to those philosophies. During that process, we also pass those negative philosophies to our children, so our children also inherit them; see the diagrams below for more information; both of them are the same. In the first one, we use 500 years as the starting point of the first negative philosophy. In philosophy inheritance, time does not matter, anytime frame can be used. The second diagram shows the visual downhill process related to philosophy inheritance, where we label the entities. From the diagram, we can see the first initial philosophy is passing trough from generations to generations.

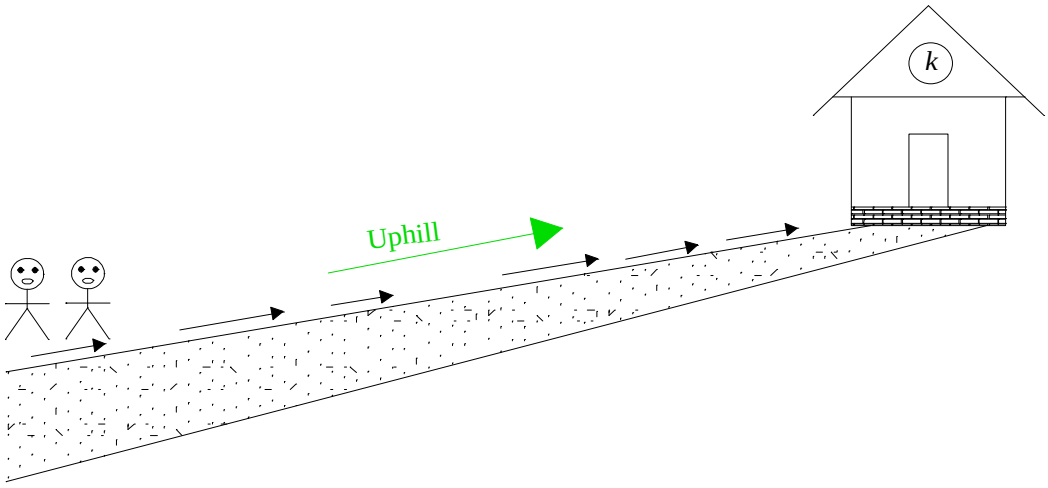




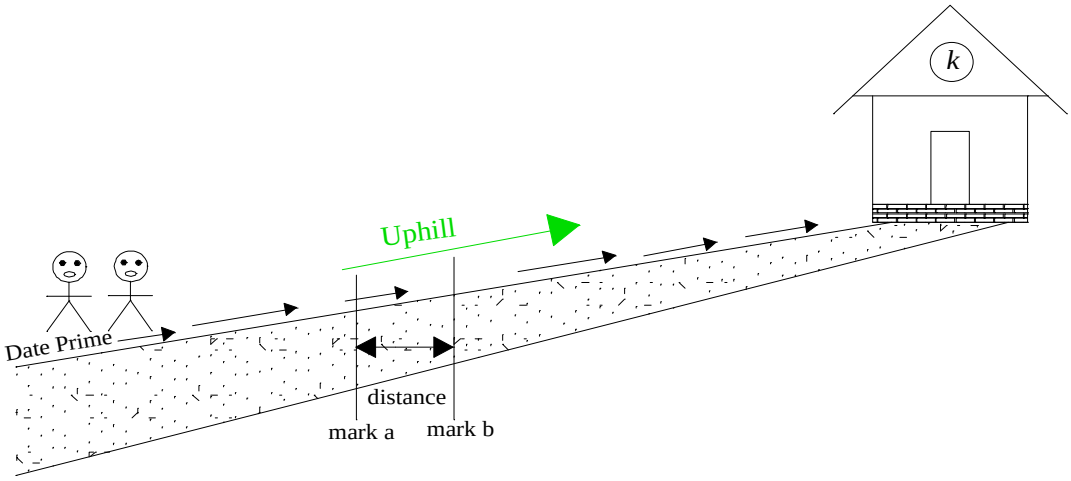
Now, let's look at the downhill process again. While we are heading down our path, after generations and generations, somewhere on the road we put a mark so we can remember where we are and we call it *mark a*. Then we continue heading down. When we are much, much farther than the first mark, we put another mark on the road and we call it *mark b* and we measure the distance from the first mark as shown by the figure below. From *mark a* to *mark b*, we measure a distance of 100, 000 miles and we continue heading down our path. At another location down the road, when we are heading down the road, we are farther from *mark b*, much farther from *mark a*, and much, much, much farther from the house. Now, in terms of distance from the house related to the house itself, how are we heading from the house? Just provide couple of sentences.



Now, let's look at the uphill process. After a long period of time, from generations to generations, we realized that we can no longer live with our ancestors' inheritance. There is a limit on living on inheritance. Since we don't have any control of time, we have to do everything according to it. Given that the system can no longer function properly without applying our parent's principles, we don't have any choice to apply them in order to be stable. After we fulfill all of the requirements possible, we start heading to the right direction as shown by the diagram below.

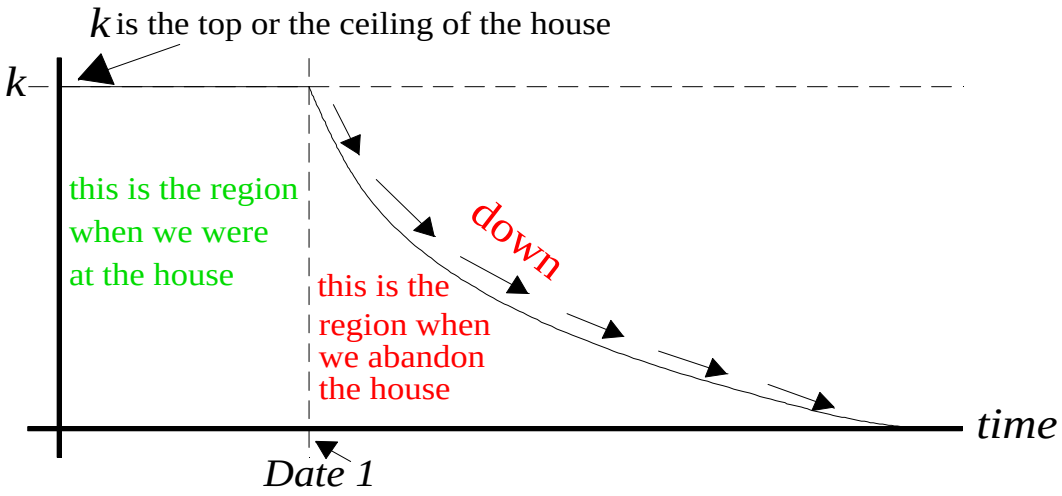


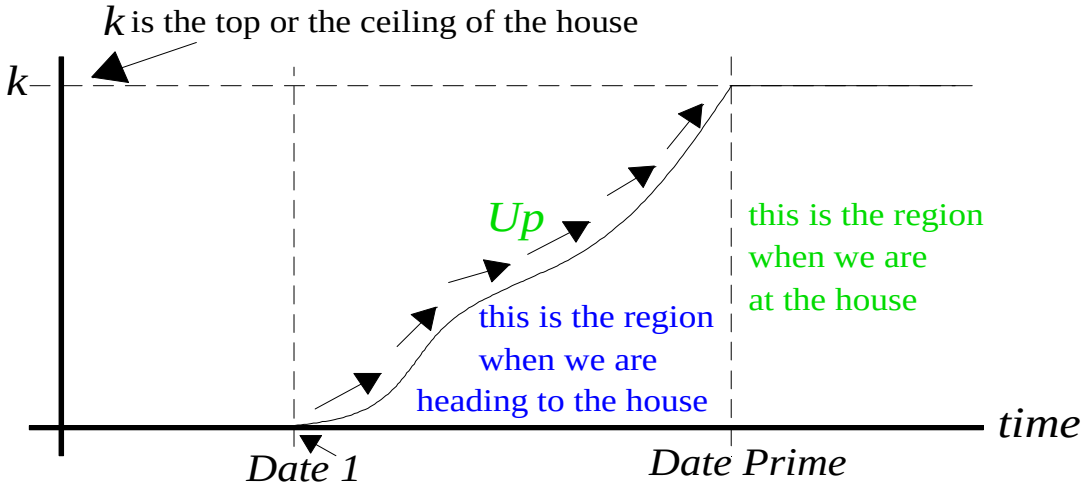
The diagram below shows that we put two marks on the road while we are heading to our house. We put *mark a* then we put *mark b*, much, much farter than *mark a* then we measure the distance as shown by the diagram.



The two graphs below are not important; however you can take a look of them. The first graph is related to the downhill process while the second one is related to the uphill process. Both of them show more information about the house and the condition of the path or the road.

You may need to answer this question with couple of sentences, why it takes less time during the downhill and take much, more time during the uphill.

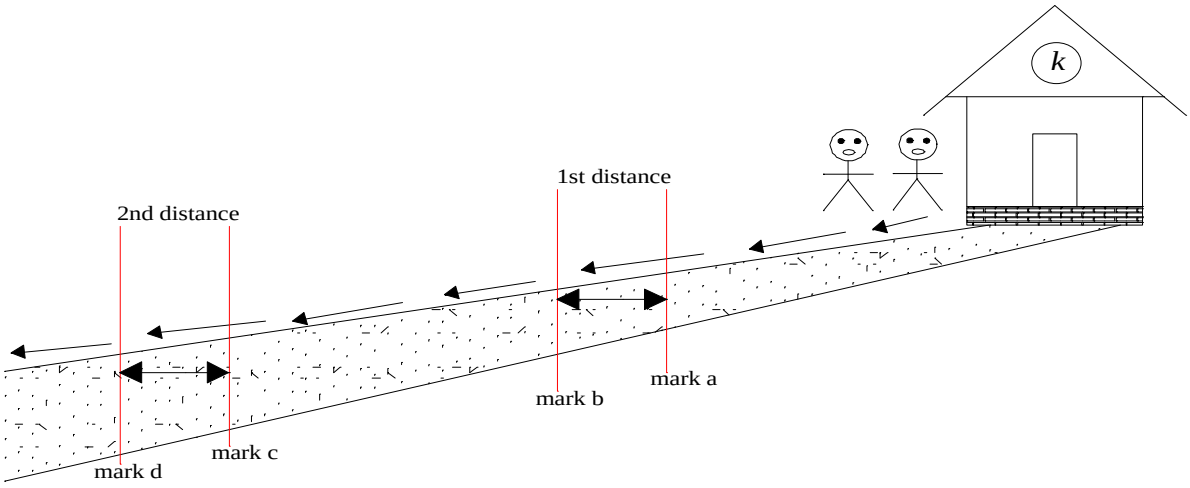




While we are going down the hill after a long period of time, we put a mark onto the road and we call *mark a*, then we continue our path. Later when we are farther away from *mark a*, we put another mark on the road and we call it *mark b*, at the same time we measure the distance of *mark a* to *mark b* to be 20, 000 miles. Then we continue heading down, after a long, long period of time, we put another mark on the road, and we call it *mark c*. Then we continue heading down, after a long period of time, we put another mark onto the road and we name it *mark d*; at the same time we measure the distance from *mark c* to *mark d* to be 20, 000 miles.

When we are at *mark b*, we measure the distance from *mark a* to *mark b*, which is 20, 000 miles, we name that distance the first distance. At *mark b*, that distance represents distance we lost from the house when we where at mark a. The distance and the marks are shown on the graph below. Now, at mark d, we measure a distance of 20, 000 miles from mark c. This distance represents the distance we lost from the house when we were at mark c. We name that distance

2nd distance as shown by the figure below. The ways to look at it, those distances represent additional distances that we lost from the house. For example, at mark a, we are farther from the house, but at mark b, we are much farther from the house. As well as, at mark c, we are farther from the house, but at mark d, we are much, much farther from the house. Both of those distance and the marks are shown on the figure below. Now, if we analyze our downhill process, we can see that both of the distances are equal. That makes sense, since the first distance measures 20, 000 miles and the second distance measure s20, 000 miles, we see clearly that they are equal. What is important here, although the distances are equal, however the time it takes us to complete those distances are completely different. For instance, the time it takes us to go from mark a to mark b is much, much greater than the time it takes us to go from mark c to mark d. In other words, the time it takes us to go from mark c to mark d is much, much less than the time it took us to go from mark a to mark d. By understanding problem and philosophy inheritance, it can be shown that the time it takes to accomplish the 2nd distance is much, much less than the time it takes to accomplish the 1st distance; verity that, you may also provide a practical example if you want to.



As a review of the explanations above, you need to answer the following questions.

a. In terms of the distance from the house related to the house itself, how are we heading from the house?
b. Why it takes less time to go from the house and take more times to go to the house.
c. We know that theory bases on fundamental while philosophy bases on comparative. With that, it can be shown that the downhill process is related to philosophy and the uphill process is related to theory; show that.
d. Verity from the diagram above by providing a practical example that the time it takes to accomplish the 2nd distance is much, much less than the time it takes to accomplish the 1st distance.

90′. **Visual Aspect of the Downhill and Uphill Processes:** To better understand system stability, it is worthwhile to look at the visual aspect of the downhill and the uphill processes. You may have seen the usage of k which we call the stability line in many charts we have depicted. It is very important to understand the importance of the stability. The stability line is very important to us as well. Without the stability line, there is not way we can function properly. The stability line can be viewed as the fundamental or the baseline of everything that we do. We already know that the functional system depends on the physical system and the physical system depends on its utilization theory. So the relationship between the functional system and the physical system is that they both depend on the same theory, where the physical system is the one that applies that theory to enable the overall system functionality.

To better understand the importance of the downhill and the uphill processes, it is worthwhile to interpret the overall process as direction to go to our house as shown by the picture below. The stability line provides us the direction where we should go. Without the stability line, we don't have any direction. Without that direction, we simply act like we don't know where we are heading. The way to look at it from the diagram below, the house is the direction where we should go. The stability line k is the house where we are going to. We should always follow the route to the house. By disregarding the stability line, which is the same as disregarding our parent's principles we simply heading to the opposite direction of the house as shown by the downhill process on the diagram below. Once we are in the downhill process, we simply heading down with no limit. Since we don't know where we are heading, we are very unstable. Within that, anything can happen. It is always good to have a direction where to go.

Another way to look at the downhill process from the graph related to the house in terms of stability. Assume that someone built us a house and put us in the front door or inside the house, rather living in the house or getting inside the house to live; we simply walk away from the house; we abandoned the house. By walking away from the house, we are heading in the opposite direction and we are very unstable, since we don't know where we are going to. Since the opposite direction is not the direction of the house, we simply walk without direction, where we don't know where we are heading. Maybe in our mind we assume that we are going to find another house in the opposite direction, however it does not work like that. Any assumption like that is very baseless without any fundamental.

To better understand the overall uphill and the downhill process, it is always good to take it in terms of people and generation related to time. That means we started going downhill from generations to generations many, many years ago. Given that problems stay relatively constant related to time, but spread to create other problems, so any negative philosophy that existed many, many years ago

are still around without being got rid off. It is always good to look at the downhill process in terms people related to time, rather than individual person.

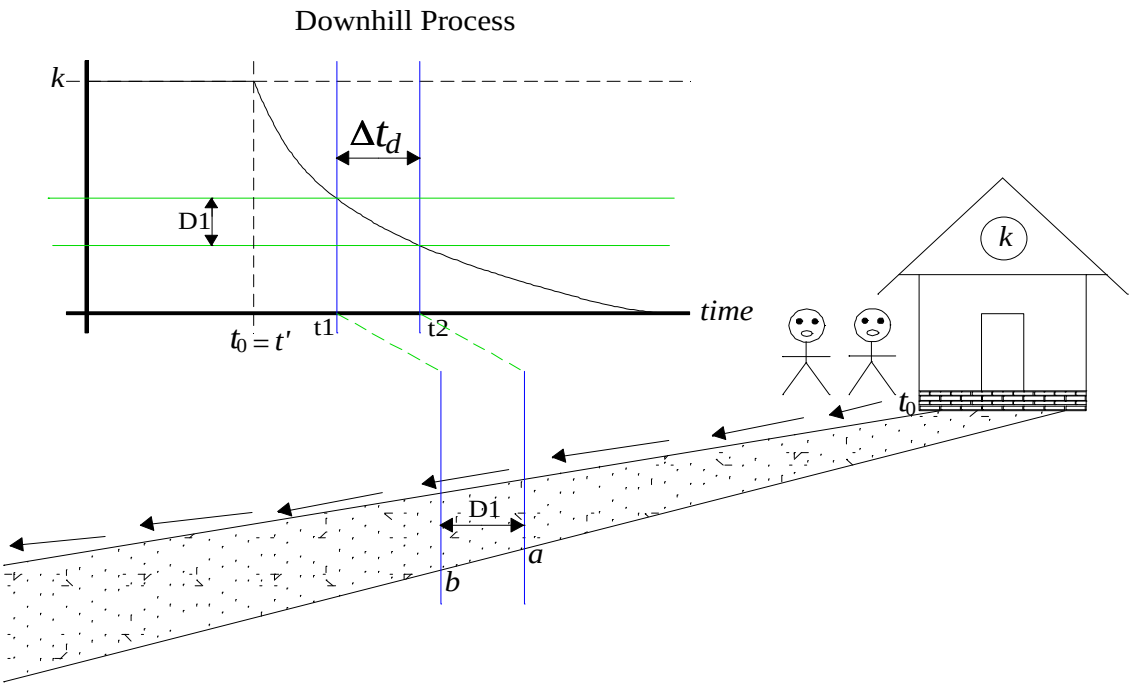
Let's look at the downhill process from the downhill of the house related to the downhill graph. From the downhill of the house, while we are heading down, after a long period of time, we simply put a mark on the road at some time. We name the mark a and we put it at time equal to t_1, then we continue heading down. At another distance, we put another mark on our route, we name it b, and we put it exactly at time equal to t_2. From the two points, we measure the distance D_1, where

$$D_1 = b - a$$

At the same time, we measure the difference of the time t_1 and t_2 and we call it Δt_d where

$$\Delta t_d = t_2 - t_1$$

From the diagram below, we can see the difference between the transition distances from the route to the transition of time from the graph. We also observe the transition of distance from the house to the transition of lost from the graph. At the time we were in the house or in front of the house, we were very stable. We call that time t' and the time we start heading down from the house t_0. By observation, we see those two times are equal.



After a long period of time, from generations to generations, we realized that we can no longer live with our ancestors' inheritance; see the philosophy inheritance note and diagrams below for more information. Since we don't have any control of time, we have to do everything according to it. Given that the system can no longer function properly without applying our parent's principles, we don't have any choice to apply them in order to be stable. After we fulfill all of the requirements possible, we start heading to the right direction as shown by the diagram below. We simply start walking to the direction of the house. At the time we start walking to the direction of the house, we call that time t_0. After many, many years later, we set a point in the route and we mark it as a and we record the time at that point t_1; then we continue heading uphill. Now we set another point in the route, we mark it b at time t_2 and we record the distance D_2 and the difference time Δt_u, where

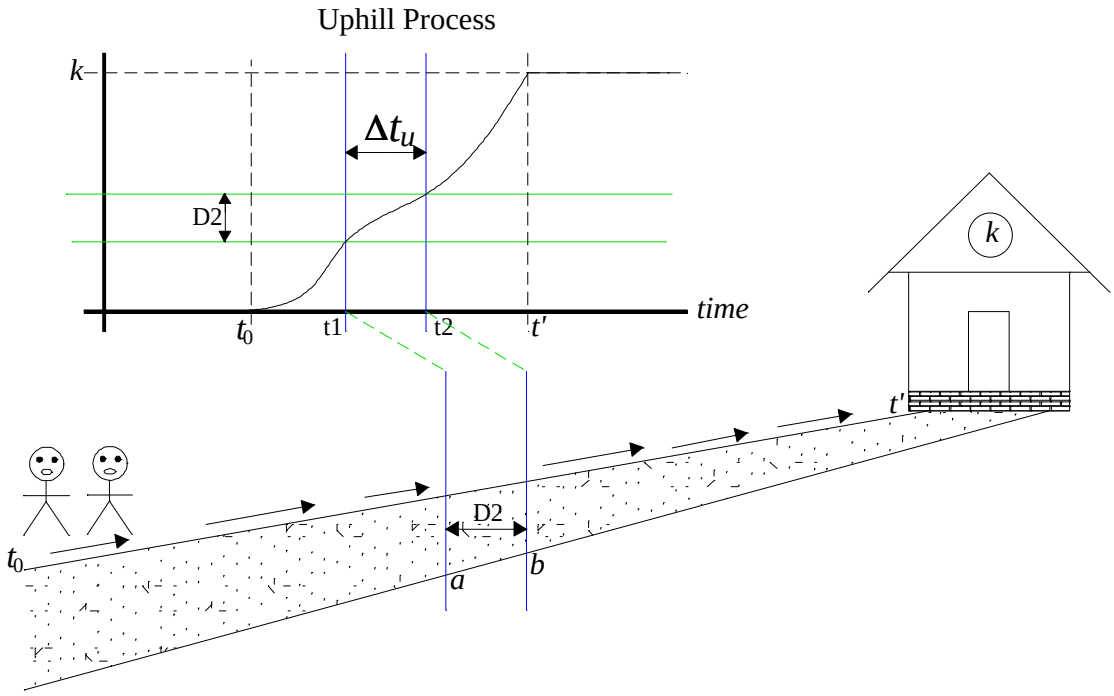
$$D_2 = b - a$$

$$\Delta t_u = t_2 - t_1$$

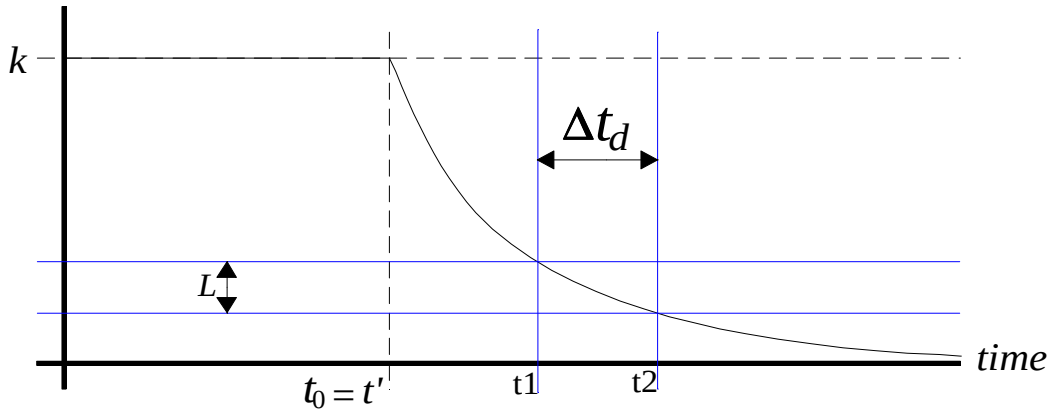
By observation, we can see that there is a relationship between

$$\frac{D_1}{\Delta t_d} \text{ and } \frac{D_2}{\Delta t_u}$$

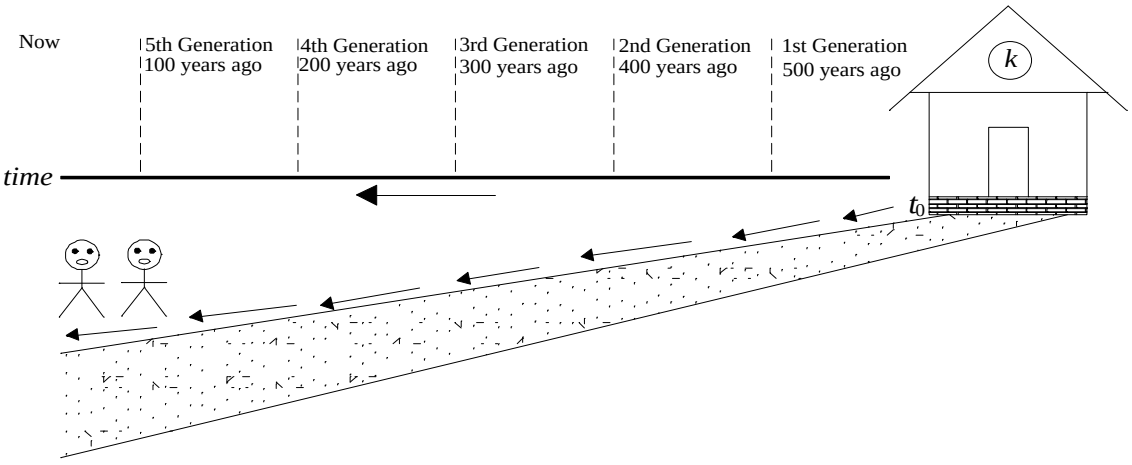
State the relationship between $\frac{D_1}{\Delta t_d}$ and $\frac{D_2}{\Delta t_u}$. All you need to do, state the relationship in one, two or three sentences.



By observation, we can see that from the downhill graph displays below, as we continue walking from the house, we go farther from the house. It can be shown that there is a relationship from the distance of the house related to the lost, which is recorded from the graph below. State the relationship from the distance of the house related to the declining as shown below. All you need to do, state that in 1, 2, or 3 sentences. If you want to, you can also show the relationship in terms of D_1, L, and k

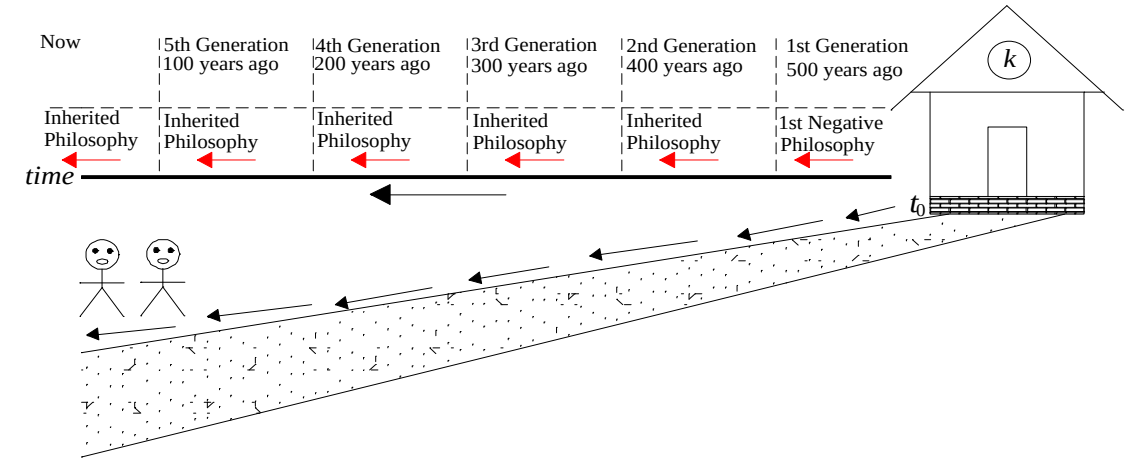


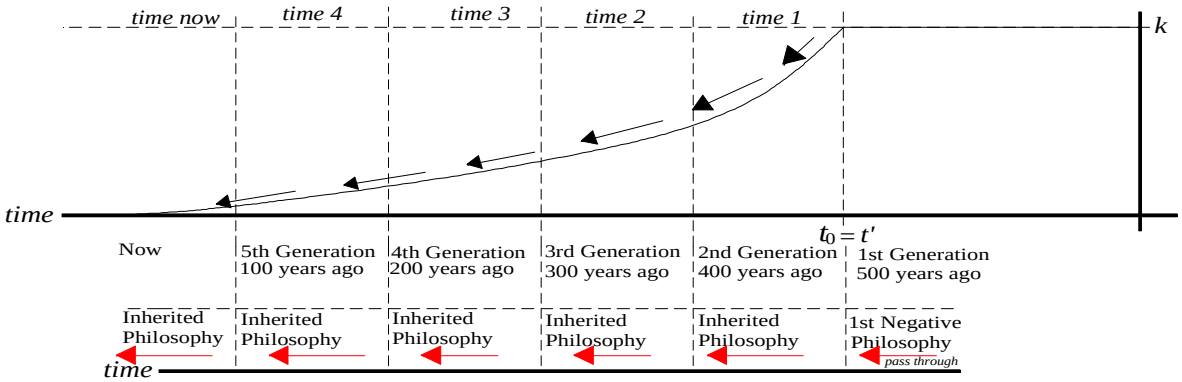
Philosophy Inheritance: To better understand the downhill process related to time and generations, since a negative philosophy remains relatively unchanged and spread, so the way to look at it, the same people who started the downhill process physically are not the same one today; anytime frame can be used it depends on you. From the diagram below, we use 500 years time frame.



Now, let's look at the negative philosophy inheritance related to time; as time goes, we continue to inherit the same negative philosophies; since we don't have any control of time, we cannot continue living on inheritance; there is a limit on living on inheritance when dealing with negative philosophies.

Definition of Philosophy Inheritance: Philosophy inheritance is the process of inheriting or learning and applying our ancestors' negative philosophies and doing things according to those philosophies. During that process, we also pass those negative philosophies to our children, so our children also inherit them; see the diagrams below for more information; both of them are the same. The time intervals on the second diagram below are simply intervals related to generations. They are completely different from t_1 and t_2 mentioned above.





a. Now, assume that we have fulfilled all the requirements and we want to get back to the house. What we have to do in order to get back to the house? All you need to do, state that in 1, 2, or 3 sentences.

b. While we are going down the hill and continue our path, at some point of time, we mark a point on the road and we call it point a, and at a later time, we mark another point on the road and we call it point b, at the same time we measure the distance between the two points and we call it D_3. With that, we have the following calculation

$$D_3 = b - a$$

And we continue our path. Many, many generations later, while we continue our path, we mark another point on the road and we call it point c and we continue down our path. In a much later time, we mark another point on the road and we call it point d. At the same

time, we measure the distance between the two points in the following form and we call it D_4

$$D_4 = d - c$$

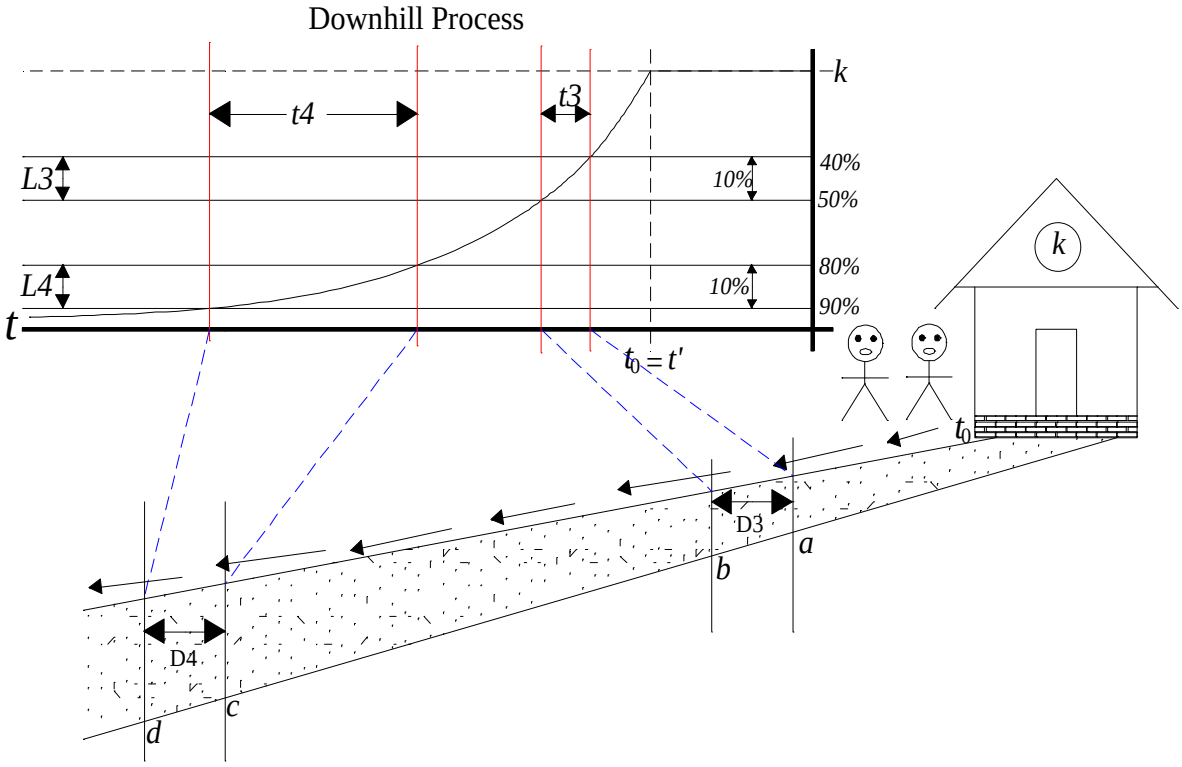
Now, if we look at the diagram below, we can see that from point a to point b at distance D_3 we lost 10%. That means we lost 10% of our distance from the house at point b. Let's look at the diagram again from point c to point d, we can see that we lost another 10% at distance D_4. Another word, at point d, we lost another 10% of our distance. The following losses where calculated and given to us. The numbers onto the right of the graph show the % loss of k.

$$L_3 = L_4 = 10\%$$

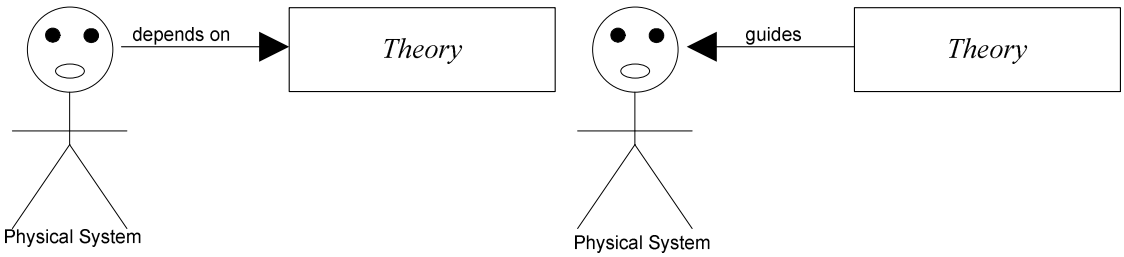
Although both lost are the same, however the times are completely difference. In other words, although L_3 is equal to L_4, however t_3 is completely different than t_4. By understanding philosophy inheritance and also problem itself, it can be shown that t_4 is much, much shorter than t_3. Verity that ; don't worry about the figure in terms of scaling.

$$t_4 \ll t_3$$

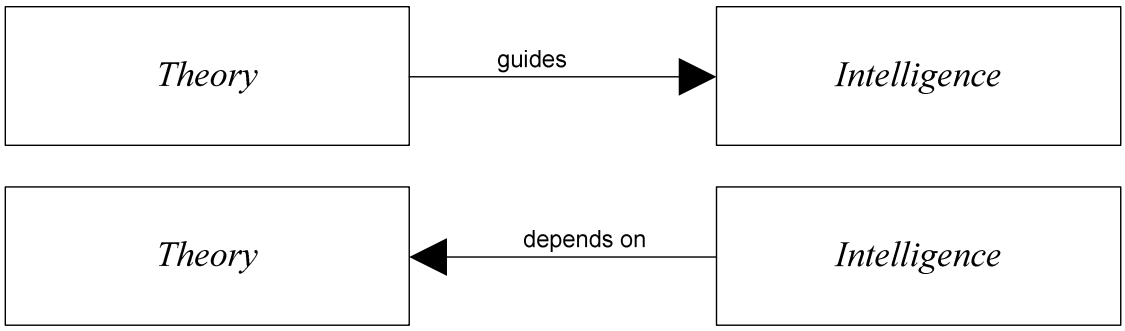
You may provide a practical example if you want to.



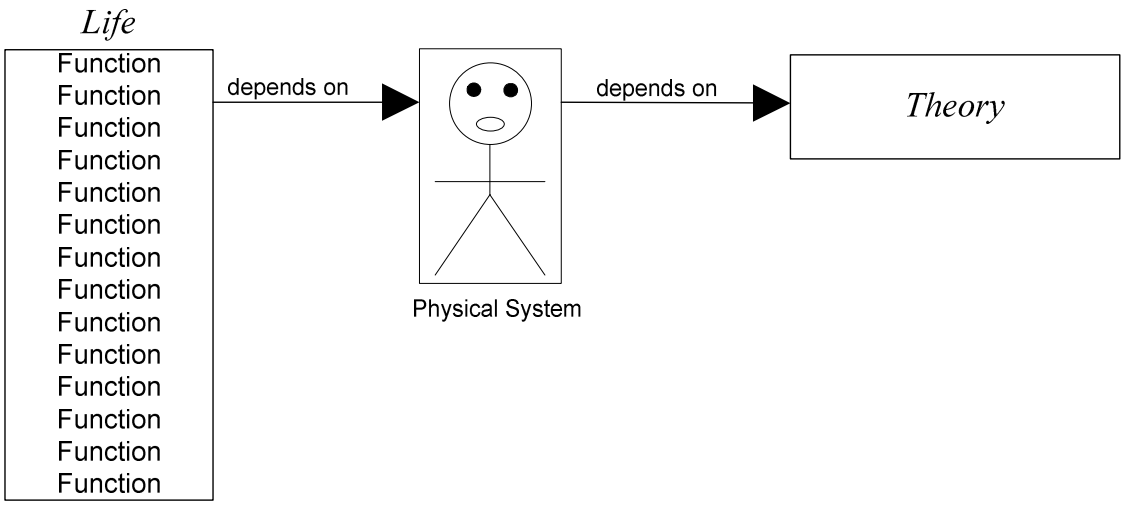
91. **Derivative Approach of Non Natural Instruments:** From the characteristic of the physical system, we have learned that we are both theory dependable and self controllable. As a theory dependable system, we depend on theory to do what we do. For instance, we depend on theory to derive an instrument that provides a functionality in life. To better understand the physical system theory dependable characteristic, it is always good to show the system itself with the attached theory. In other words, to better understand the theory dependable characteristic of our system, it is always good to show our system with the theory it depends on. The diagram below shows our physical system with the theory that the system depends on. The diagram to the left shows that our system depends on theory, while the one to the right shows that our system is guided by theory. It does not matter the way we look them, both of them are the same.



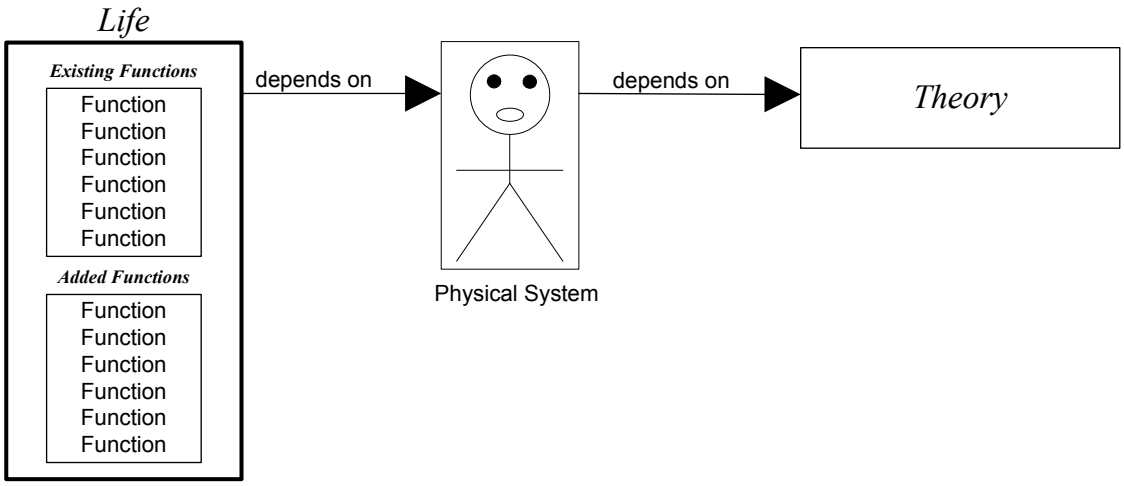
We know that our system is defined as an intelligent-system. As an intelligent-system, our intelligence depends on theory to give us ideas to enable us to what we do, for instance derive an instrument to provide a function in life. To better understand the relationship between our intelligence and theory, it is always good to draw them so we can have a better feeling of what we are talking about. The first diagram shows that our intelligence is guided by theory, while the second one shows that our intelligence depends on theory. Both of the diagrams are the same; they simply provide more information about our theory dependable and self controllable characteristics.



As a theory dependable system, we apply theory to execute function of life. We know that our function is to live. We also know that life is made of a lot of functions. In term of our theory dependable characteristic and the application characteristic of theory, we apply theory to enable us to execute functions of life. To better understand our theory dependable characteristic related to functions of life, it is always good to show the functions of life and the theory dependable characteristic into one diagram. The diagram below shows that we depend on theory to gives us ideas to execute functions of life, while those functions that we execute depends on us. In other words, those functions depend on the same theory that we depend on. Since we depend on theory to give us ideas to execute those functions, those functions also depend on the ideas we get from theory. We have represented life already in a circle form with a lot of functions. Here we simply represent life in a rectangular form with a lot of functions. It does not matter the way we look at it, what is important is that life is a set of functions and those functions depend on us and we depend on theory.

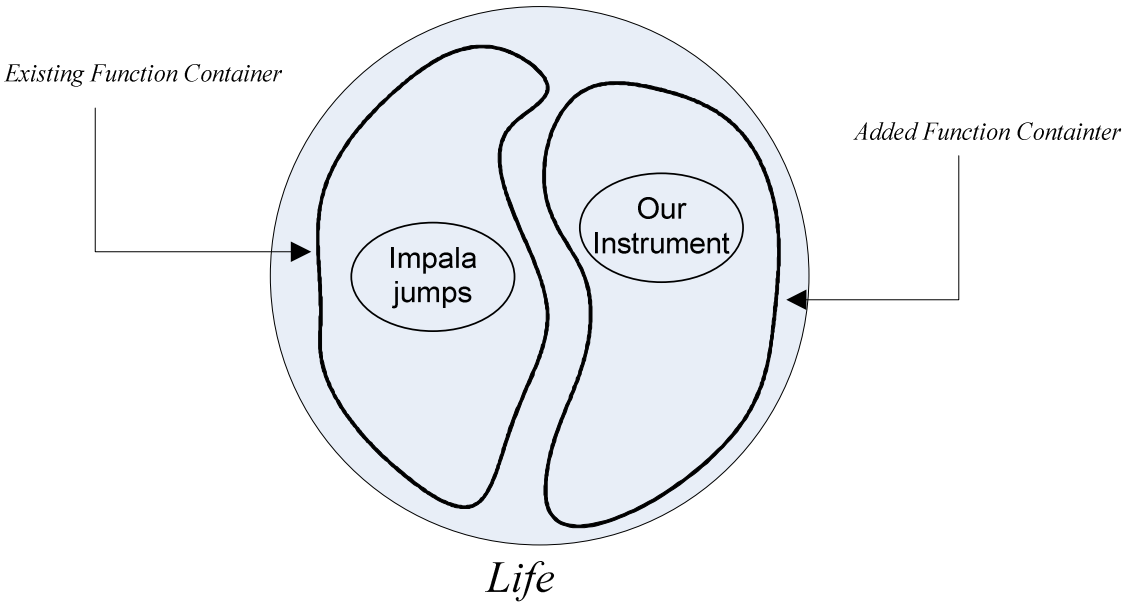


Now since life is made of both added and existing functions, if we want to we can partition those functions to show the added functions area and the existing functions area. By doing so, we have the diagram represented below. All that we do is divided the diagram above into two groups to show the group of added functions and the group of existing functions.

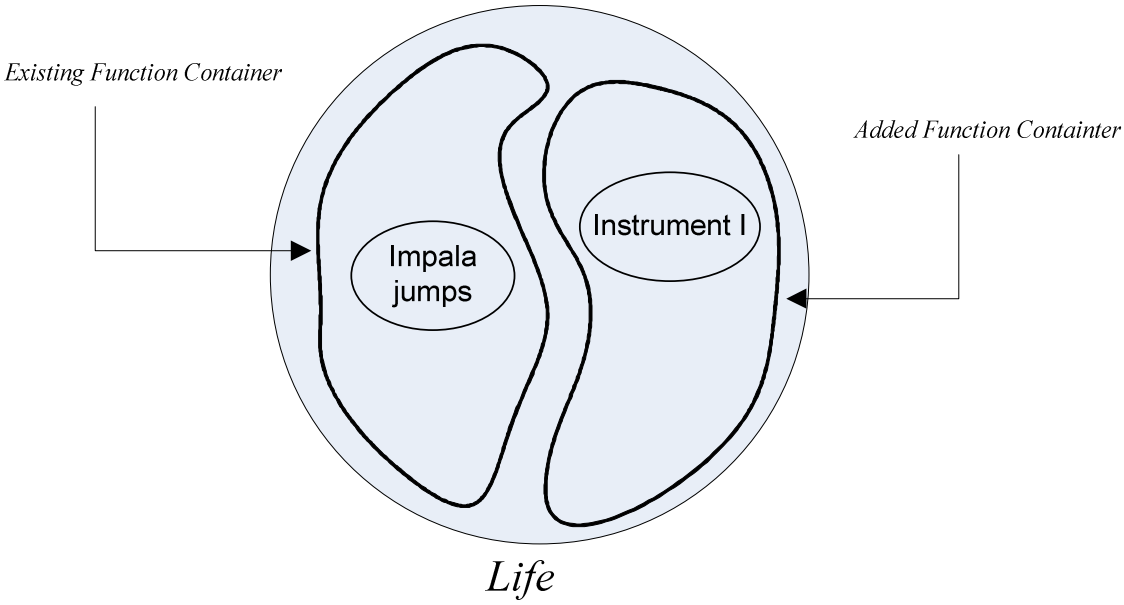


Since we depend on theory to enable us to derive and execute functions of life, let's assume that we want to add a function in life. As a theory dependable system, in order for us to add a function to life, we have to apply theory to derive that function in order to add it to life. Now in order for us to add that function for instance, we can derive an instrument to provide that functionality. It is the same as saying that, in order for us to add something to life, we have to make it or manufacture it. In this case, we use the word derive, which is much, much better rather than using other words like make or manufacture. As a communication enabled system, communication enables us to communicate related to what we identify. Since the overall process is considered as a derivative, here using the word derivative to explain the process of added function it is much better.

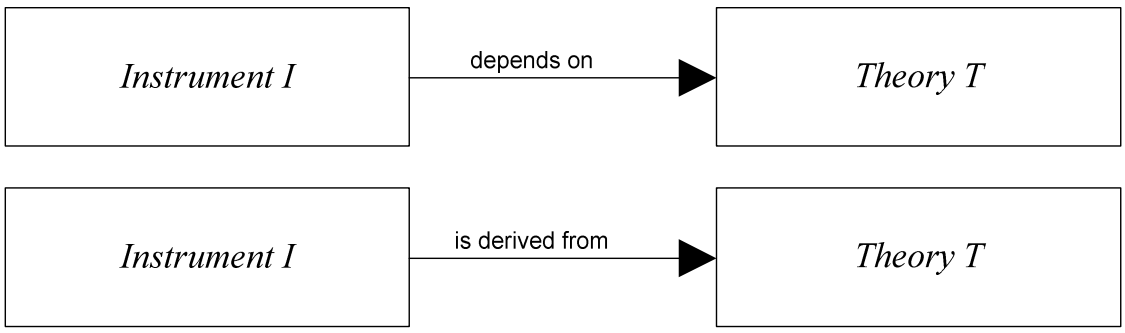
Now let's continue the process of added function to life. In order to add a function to life, we have to derive an instrument to perform that function. In this case, we can represent life in a form of a circle to show the instrument and the functionality of the instrument. For instance we can represent life in a circle to show that an impala jumps, at the same time, the instrument that we are about to add to life, also has its own functionality or execute its own function. Since we only worry about the instrument that we are in the process of adding to life, we don't have to worry about the function of that instrument. For that reason, we show the instrument only.



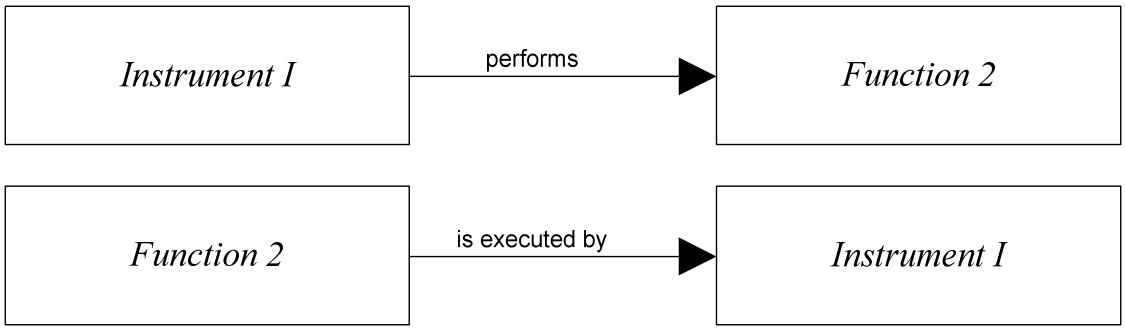
Assume that we have a name for that instrument, for instance we name it *Instrument I*; here we can show the name of the instrument in the circle instead. In that case, the *Instrument I* is what we are adding to life. While we use the term *Instrument I* here, it does not matter. We can use any other name that we like. The diagram below shows that we add an instrument to life from our process of derivation.



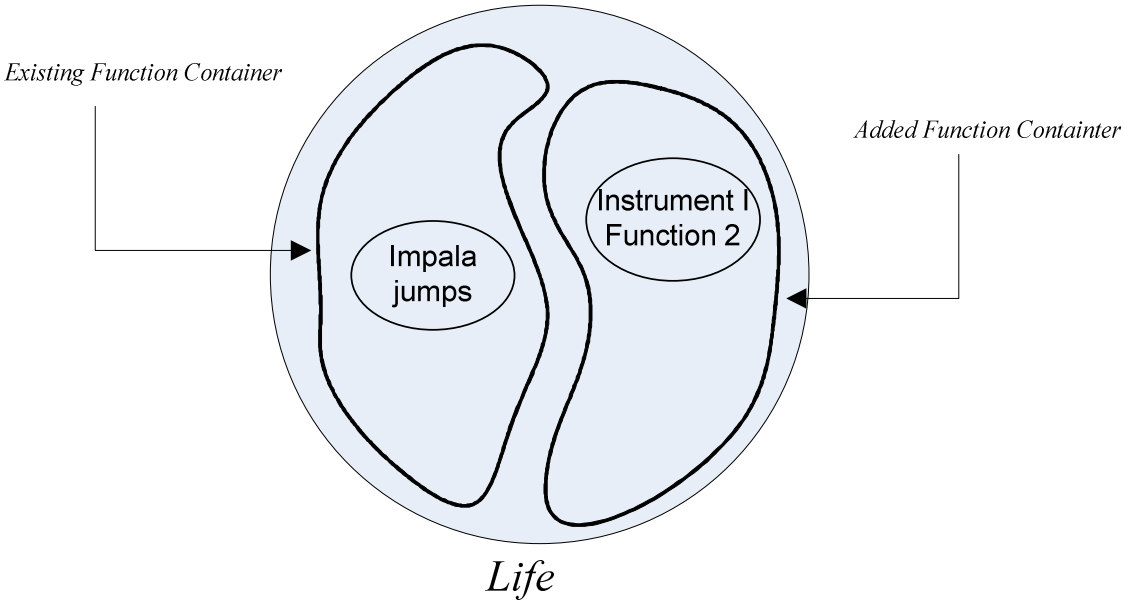
Now by understand the overall process of derivative, we know that we are theory dependable and we apply theory to derive and execute functions of life. For instance, assume that we go to the store to buy something, that thing is derived from a process, where theory was applied to derive it. In order for us to use what we have bought, we also depend on theory, since we are a theory dependable system. To better understand what we have just said, let's show the overall process in term of the instrument that we are in the process of adding to life. Since we are a theory dependable system, in order to add that instrument to life, we have to apply theory do derive it. In this case, we can say that the instrument that we are about to add to life is derived from the theory that we depend on. In this case, we can say that *Instrument I* depends on *Theory T*. Here we use the term *Theory T* to name the theory that we use to derive *Instrument I*. It does not matter; we could have used any other name. The diagrams below show the instrument that we add to life depends on the same theory that we depend on to derive it. Both of the diagrams are the same. The fist one shows that the instrument depends on the theory, while the second one shows that the instrument is derived from the theory. There is no difference; both of them are the same.



Now after deriving the instrument, we know that the instrument must have a function. While previously we were not concerning about the function of the instrument that we are in the process of deriving, here let's show the relationship between the instrument and the function of that instrument. By doing so, we can also show the instrument in life and its functionality. We mean show it in inside the circle. The diagrams below show the relationship between the instrument that we add to life and its function. While we use *Function 2* as the function of our instrument; it does not matter. We simply use the name function here with a number. We could have given the function any name that we like. The first diagram is the same as the second one. The first one show the function is performed by the instrument, while the second one shows that the function is executed by the instrument.

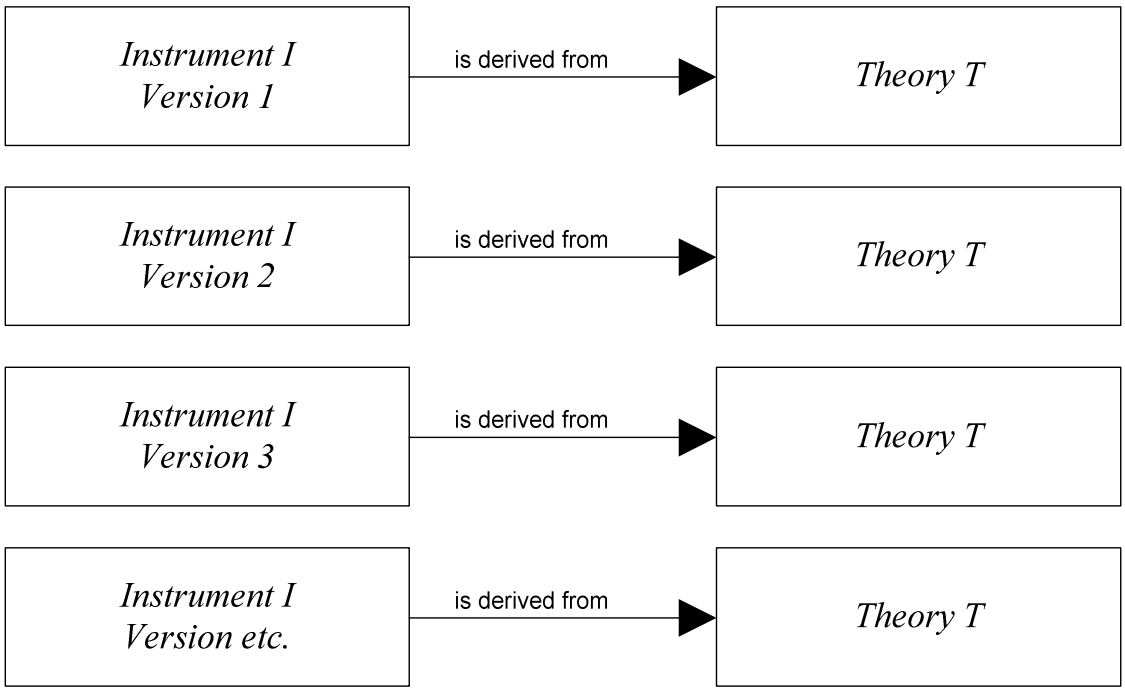


Here we show the instrument that we add to life and its function inside life. In other words, the instrument has been added to life with its functionality.

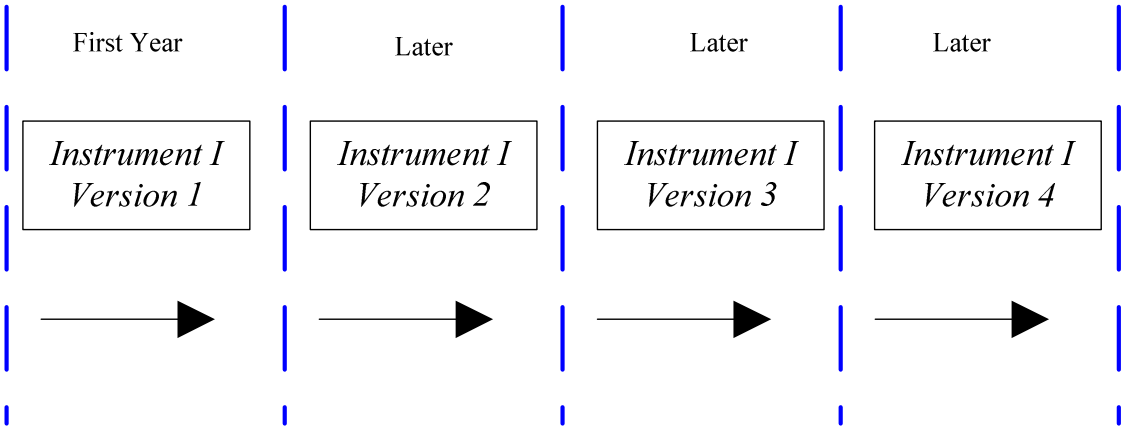


As a theory dependable system, we depend on theory to enable us to derive instruments in life. Now assume that after adding that instrument to life with the indicated functionality, later we need to add more functionality to the instrument. In other words, while we derive the first one now, later we are going to derive

another instrument. The other instrument will be considered as version 2 from the first instrument. In other words, our first instrument was version 1, the second one will be version 2. The overall process can be continued, where we can have version 3, version 4, and so forth. It does not matter and there is no limit. What is important here, as a theory dependable system, we depend on *Theory T* to derive version 1 of the instrument, we also depends on *Theory T* to derive version 2 of the instrument and so forth. To better understand the overall process, let's show it in a diagram.



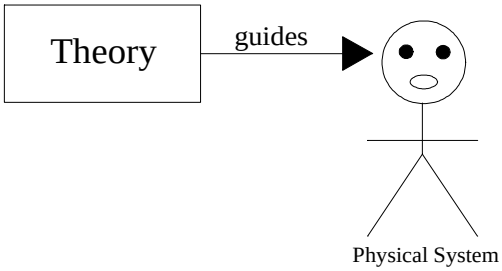
The diagram above shows that multiple versions of the instrument are derived from *Theory T*. Now to better understand the overall process, we have to take time into consideration. For instance, the first version of the instrument is derived first, while later, the second version of the instrument is derived, much, more later, the third version of the instrument is derived and so forth. To better understanding that process, let's draw it in a tabulated form. The diagram below shows what we have just talking about. We use arrows to show that version 1 goes to version 2 and so forth.



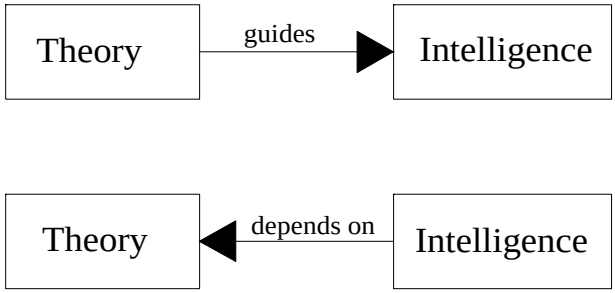
a. Just take your time to think about the overall explanation
b. From the explanation as we can see, multiple versions of the instruments are derived in different time from *Theory T*. Assume that we can count up to 15 version of the instrument. In this case we can say that, version 15 of the instrument is also derived from *Theory T*. Now, since we are an intelligent-system and we are theory dependable and in order to derive an instrument, we need a theory to gives us idea to do so. By understanding that, it can be shown that the 15th version of the instrument is still a product of the first version of the instrument. In other words, the 15th version of the instrument is still depends on the first version of the instrument. You need to show that by providing a practical example.
c. As we have learned from the explanation, since we are a theory dependable system, we depend on theory to execute functions of life. The instruments that we add to life also depend on theory as well. By understanding that, it can be shown that *Instrument I* is also limited by *Theory T*, verify that. In other words, show that the instruments that we add to life are also limited by the theory that we used to derive them. All you need to do show that the instrument that you add to life is limited by the derivation theory. You need to provide a practical example as well.
d. From your workout above, you may have shown that *Instrument I* is also limited from *Theory T*, disregard any version. In other words, it does not matter how many time we increment the version, it also does not matter when and how long it takes, *Instrument I* is still limited by *Theory T*. By understanding what we have just said, with that limit, it is always good to look at other alternative in term of derivation rather than relying on the same theory. We mean other alternative theory here.
e. With your understanding of theory and also instrument derived from theory, it can be shown that there is a similarity between all versions of the instruments. For instance if we go from version 1 to version 15, there must be a similarity within all of them. From your understanding of theory and instrument, show or state that similarity. If you want to, you can also provide a practical example.
f. Since the instrument is a separate entity from the theory, take a look of the instrument and its derivation theory, in terms of importance, verify with a

practical example whether the instrument is more important the theory or the theory is more important than the instrument.

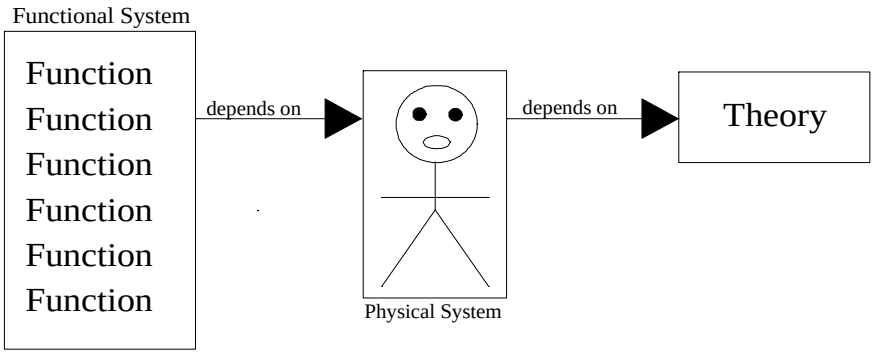
91′. **Derivative Approach of Non Natural Instruments:** The physical system is defined as a self programmable system. With a theory dependability characteristic, we can also define the physical system as a theory dependable system. To better understand the overall process, we have shown the diagram of the system in connection with its utilization theory. As shown below, it shows that the system functionality depends on theory.



The physical system is an intelligent-system, since its intelligence gives the system the ability to apply theory. To better understand the relationship of the physical system in term of theory related to the intelligence; let's look at the diagram below. It shows that the intelligence is guided by theory. Which is the same as the intelligence depends on theory as shown by the second diagram.



Since the function of the physical system is to apply theory to enable its functionality, let's look at the relationship of the physical system related to the functional system. What do we mean by that, since our function is to live, we must look at how we apply theory to enable the functionality of life.
The diagram below shows the functional system related to the physical system. It shows that while the physical system depends on theory to function, the functional system also depends on the physical system by the same theory.



From the life equation, we have learned that the relationship of the functional system related to the physical system. Below are the life equation and the equation of the physical system.

$$\mathcal{L}(t) = h(t) + u(t)$$

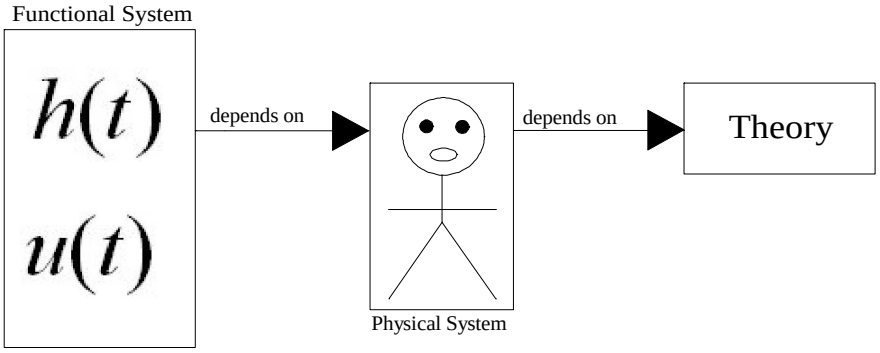
$$S = D_T + U_T$$

Life of Time	Existing Functions of Time	Adding Functions of Time
$\mathcal{L}(t)$	$h(t)$	$u(t)$

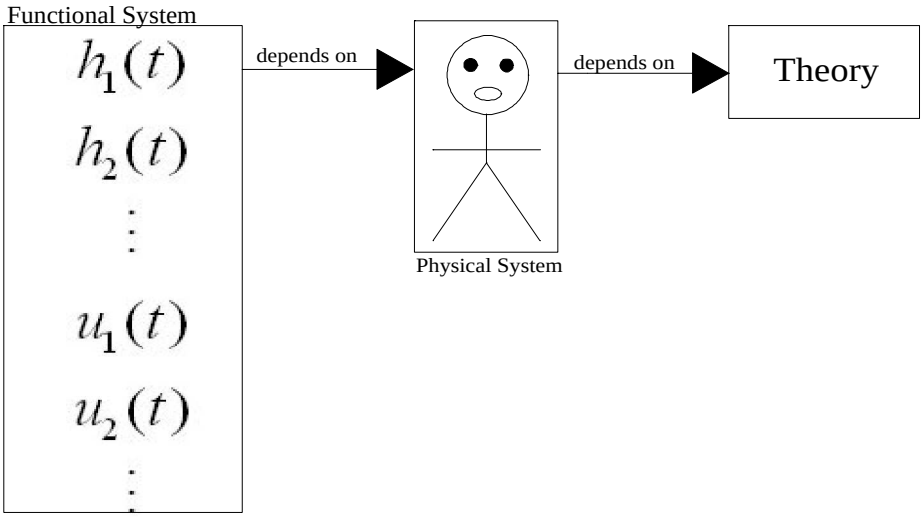
Physical System	Derivation Theory	Utilization Theory
S	D_T	U_T

$$\mathcal{L}(t) = \sum_{n=1}^{\infty} h_n(t) + \sum_{m=1}^{M} u_m(t)$$

From the above equations, we can represent the model by showing the relationship of the physical system related to the functional system by taking the life equation into account.



By extracting the terms from the summations above, the diagram above can be represented using the life equation as shown below. From this diagram, we can see that the functional system is a box that includes many, many functions. The box includes many, many existing functions and many, many adding functions. Those functions also depend on the physical system while the physical system depends on theory.



Now, let's assume that we want to add a function to the functional system. In order to add that function to the functional system, we must derive an instrument to perform that function. From the physical system equation, we know that a system is derived by its derivation theory and functioned by its utilization theory. For the non natural instrument we want to add to the functional system, we can represent it by the following equation.

$$\hat{I} = D_{\hat{T}} + U_{\hat{T}}$$

Where the terms used in the above equation can be interpreted as follow.

Non Natural Instrument	Added Theory
$\hat{I}$	$\hat{T}$

From the above equation, we assumed $\hat{T}$ as and added theory. We used the terms given from the table above to show the difference between given and added theory. Since we are very familiar with the original terms, rather than using the terms above, we are going to equate them by the original as shown by the table below. Don't worry about it. All we have to know, whenever we see I in this

exercise, it is referred to non natural instrument and whenever T in this exercise, it is referred as an added theory.

Non Natural Instrument	Added Theory
$\hat{I} = I$	$\hat{T} = T$

By using the equalization of terms from the above table, we can rewrite the equation as shown below.

$$I = D_T + U_T$$

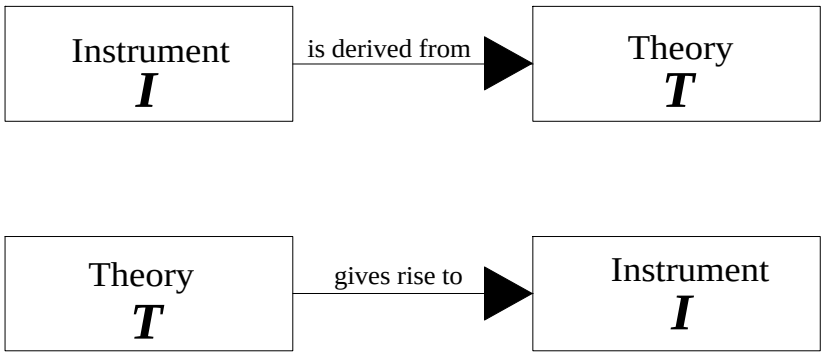
Since the instrument is a function of its theory, we can also rewrite the equation for the physical instrument as follow.

$$I(T) = D(T) + U(T)$$

Now, since we are concerning about the derivation of that instrument, we can simply use the derivation theory part of the equation and leave the utilization theory part at rest. By doing so, we have the equation below, which shows that instrument I which is a function of its theory is equal to its derivation theory.

$$I(T) = D(T)$$

To better understand the derivation process of the instrument related to its derivation theory, let's look at the diagram below. It shows that instrument I is derived from theory T, which is the same as theory T gives rise to instrument I. The way to look at it, when we say an instrument is derived from a theory; we mean that the existence of that instrument was realized by that theory. In this case, that theory is the set of principles that derive that instrument. The set of principles includes everything necessary that is used to realize the instrument. For instance the set of principles can include natural element, natural resources extraction and all other means that are necessary to derive the physical instrument.



Since the presence of any instrument is to provide a function to life, it makes sense to give that instrument a functional value in life. From the life equation, we have learned that the set of functions provided by instruments added to life are considered as adding functions. We can rewrite the equation again to show the set of adding function.

$$\mathcal{L}(t)=\sum_{n=1}^{\infty}h_n(t)+\sum_{m=1}^{M}u_m(t)$$

$$\mathcal{L}(t)=h_1(t)+h_2(t)+h_3(t)+\cdots+u_1(t)+u_2(t)+u_3(t)+\cdots$$

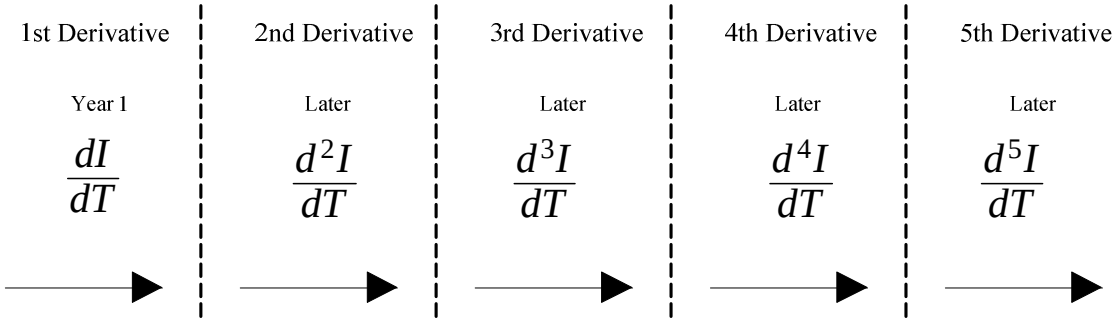
Now, for our function we are going to add to the system, we are going to give it an added functional value of $u_2(t)$. In this case, the following relationship exists in terms of our added instrument related to the functionality of that instrument.

$$I(T)\Leftrightarrow u_2(t)$$

Where $u_2(t)$ is the function of the physical instrument and $I(T)$ is the physical instrument itself. When we say the function of the physical instrument, we mean the usage of that instrument; what that instrument is used for. We simply choose the index of 2 from the summation of the adding functions to represent the function of our added instrument. It does not matter, any number can be chosen. It does not matter as well; another name can be given to that function. We simply choose a lower index for better representation and to help better understanding. With the dependency of our intelligence on theory, we can apply a theory to derive an instrument to perform a function in the functional system. Repeat again, since our system is theory dependable, we can apply a theory to derive instruments to use in life. Since our intelligence works incrementally related to what we have learned, any initial observation will lead us to more observations; disregard the quality of that observation. For instance, during the learning process of a theory, any initial application of that theory will give us more knowledge of

that theory to perform other applications. Another way to say it, any initial application of that theory will lead us to more applications of that theory. For instance, if we use that theory to derive an instrument, as we keep applying that theory, we can use the initial knowledge from the first derivation to derive similar or the same instrument with more functionality.

The diagram below shows an example of an initial derivation of an instrument. With that knowledge, later we can derive the same instrument with more functionality. We can also derive similar instruments with more functionality. The way to look at it, at year one, we do the first derivation of that instrument. With the knowledge we gain from the first derivation, later we use that knowledge to derive another version of that instrument with more functionality. This process can keep going to derive more and more instruments with more functionality. This process can also be used to derive other instruments with similar and different functionalities. From the diagram below, we use year one to show the first derivation, and later times to show the updated or other versions of the instruments. The derivative operator is used as an abbreviation. For instance we use $\frac{dI}{dT}$ to show the derivation of instrument I from derivation theory T. The index is used to show the version of the instrument. For example, $\frac{dI}{dT}$ is viewed as the first version of the instrument, while $\frac{d^2I}{dT}$ is considered as the second version of that instrument. In that case the second version of that instrument is considered to have more functionality than the first version and so forth.



Given that our intelligence works relatively with theory, any initial observation will lead us to more observations. For instance, the first derivation of an instrument will lead us to derive the second version of that instrument with more functions. This is basically what shows in the process by the terms represented below.

$$\left(\frac{dI}{dT}\right)\rightarrow\frac{d^2I}{dT}\rightarrow\frac{d^3I}{dT}\cdots\rightarrow\frac{d^{15}I}{dT}$$

a. Think about the above explanation
b. With respect of what we have said above, it can be show that the 15th version of that instrument is still a product of the fist version with some respect. The way to look at it, we can say that the 15th derivative is still a product of the 1st derivative as shown by the equation below. Show that with a practical example; simply verify the equation below by using a practical example; see more explanation from the table below for the interpretation of the equation.

$$\left(\frac{dI}{dT}\right)\bullet x=\frac{d^{15}I}{dT}$$

First Derivative	Some Other Derivatives	The 15th Derivative
$\frac{dI}{dT}$	x	$\frac{d^{15}I}{dT}$

c. Since our intelligence depends on theory to function, the instrument that we derive from a theory also depends on that theory. With that, we can say that an instrument that is derived from a theory is also limited by that theory. What we mean by that, we mean the functionality of that instrument is limited by its derivation theory. That instrument cannot perform any function greater than its derivation. With that in mind, the following relationship defined below holds between an instrument and its derivation theory. Verify the relationship below by using a practical example. All you need to do is to show that an instrument I is limited by its derivation theory T. Rather than doing this one, if you want to you can continue reading and do the next one.

$$I\leq T$$

d. Since instrument I is limited by its derivation theory T, this relationship also holds regarding the first derivative. Therefore, the relationship above can also be written in this form, where we can say the instrument I is limited by its derivation from its derivation theory T as shown below.

$$I\leq\frac{dI}{dT}$$

With some respect, we can also say the higher order derivatives of that instrument are also limited by the first derivative. In other words, the n derivatives of that instrument are also limited by the $n-1$ derivatives.

If you want to, you can also show that the n derivatives are also limited by the $n-1$ derivatives. For instance for the instrument above, it can be shown that the 15th derivative is also limited by the 1st derivative.

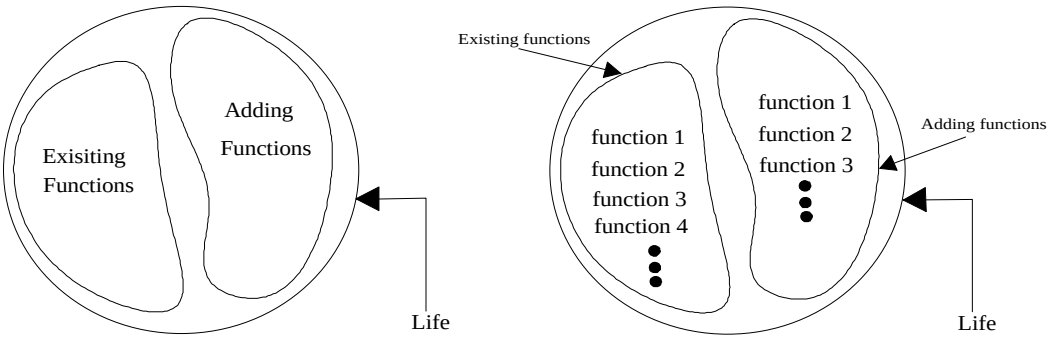
With the limit mentioned above, sometime it is better to start from scratch for the n derivatives rather than relying on the $n-1$ derivatives. In that case the terms n derivatives and $n-1$ derivatives are no longer useful, since we start from scratch. The way to look at it, with that limit, it is better sometime to take a look of other theory rather than relying on $n-1$ derivatives.

e. With our knowledge about theory and instruments derived from theory, it can be shown that there is a similarity between I_1 and I_{15}; where I_1 is considered to be the 1st derivative of the instrument and I_{15} is the 15th derivative. From your understanding of this statement, state the similarity between I_1 and I_{15}.

f. Take a look of the instrument and its derivation theory, in terms of importance, verify with a practical example whether the instrument is more important the theory or the theory is more important than the instrument. This is the same as saying whether I is more important than T or T is more important than I.

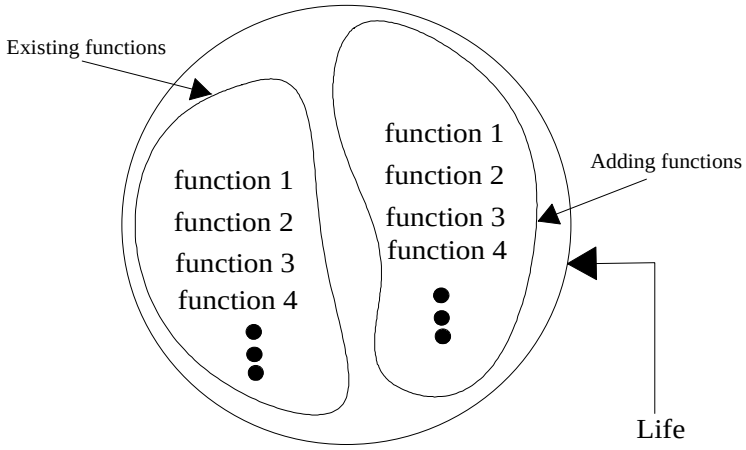
92. **Function Added to Life:** Which is the same as saying function added to the functional system; we already known that life is made of many functions. Those functions are divided into two groups: the functions that we add and the functions that are existed. We can name the existing functions as natural functions. Anything that is made in life performs a function. For instance, we go to store we buy an item; the item that we buy simply adds a function to life or simply provides a function in life. In this case, we can say what that item is used for is simply a function of life. The manufacture of that item simply adds a function to life as well.

To better understand the process, let's represent life by a circle as shown below. The diagram on the left shows that life is made of existing and adding functions, while in the one to the right, we show couple of functions name. Since there are so many, many functions, rather than name them all, we simply represent them by indexing them and show the dots to indicate more in the list. As we said earlier, any non natural instrument performs a function in life. For instance the item that we buy from the store, performs a function in life, the manufacturer of that item, also adds a function to life.



There are two ways functions can be added to life; first an instrument can provide a function to life. In this case, we say that the manufacturer of that instrument added a function in life. A function can also be added to life without providing by an instrument, for instance a service can be regarded as a function added to life. In this case, this function is not coming from the usage of an instrument. It does not matter if the function is performed by an instrument or a service, it is still a function added to life.

The diagram below shows the process of adding a function to life. The way to look at it, we go to store we buy an item, what we use the item for is a function added to life. In this case, we name that function, function 4. We could have also named it its own name. The name function 4 we add to life can also be from a service. For instance, suppose that we have a problem in our homes and we call for service to fix that problem, the service is viewed as a function added to life. In this case, we can also name that service function 4.



To better understand life, it is worthwhile to understand the functions life is made of. It is also good to understand both the existing and the adding functions and the difference between them.

a. Take your time to think about the above paragraphs

b. Name couple of instruments; provide a brief description or name the functions they perform in life; give each function an index like function 1, 2 etc. as shown by the table below for instrument.
c. Name couple of services; provide a brief description or name the functions they perform in life; give each function an index like function 1, 2 etc. as shown by the table below for service.
d. Draw the circle as shown above, add the function names for the instruments; then use another circle to add the functions name for the services; then draw two other circles to show the functions by indexing. You should have a total of 4 circles.

Instrument Names	Description/Function	Function Index
Instrument 1	Description/function	Function 1
Instrument 2	Description/function	Function 2
Instrument 3	Description/function	Function 3
Instrument 4	Description/function	Function 4
Instrument 5	Description/function	Function 5

Service Names	Description/Function	Function Index
Service 1	Description/function	Function 1
Service 2	Description/function	Function 2
Service 3	Description/function	Function 3
Service 4	Description/function	Function 4
Service 5	Description/function	Function 5

92′. **Function Added to Life**, which is the same as adding function to the functional system. From the life equation, we have learned that life is made of existing functions and adding functions. We name the existing functions natural functions. The adding functions are functions that we add in life. To better understand life and the overall process of adding functions, let's look at the life equation again. The explanation for each term from the equation is given on the table.

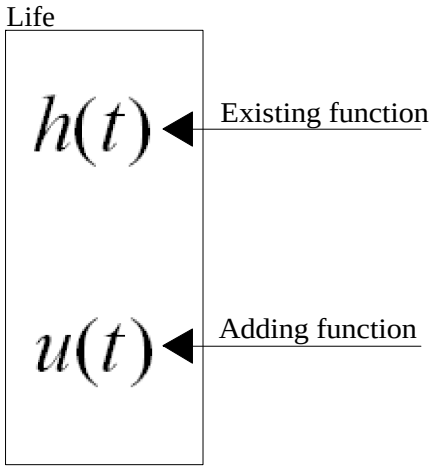
$$\mathcal{L}(t)=h(t)+u(t)$$

$$h(t)=\sum_{n=1}^{\infty}h_n(t) \quad \text{and} \quad u(t)=\sum_{m=1}^{M}u_m(t)$$

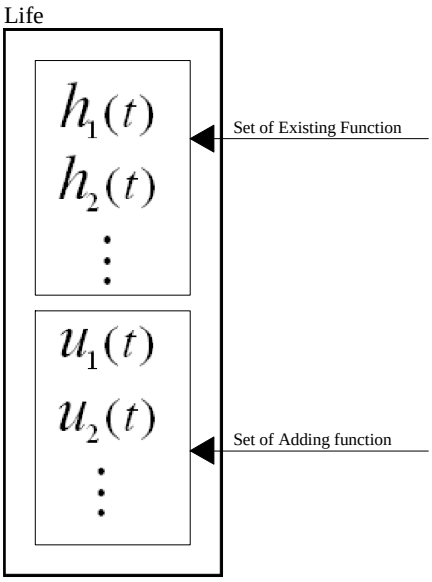
Life of Time	Existing Function	Adding Function
$\mathcal{L}(t)$	$h(t)$	$u(t)$

We can call the adding functions are functions that we add to life that are executed by the usage of non natural instruments. For instance, any instrument that we use in life performs a function of $u(t)$. Any service that we add also

performs a function of $u(t)$. For example, a non natural instrument that we derive can perform a function where we can index that function to have a name of $u_3(t)$, the same as a service provided in life is also a function that can be indexed to have a name of $u_3(t)$. To have a better view of the process, let's show in a block diagram. This diagrams shows life as a box that has both existing and adding functions.

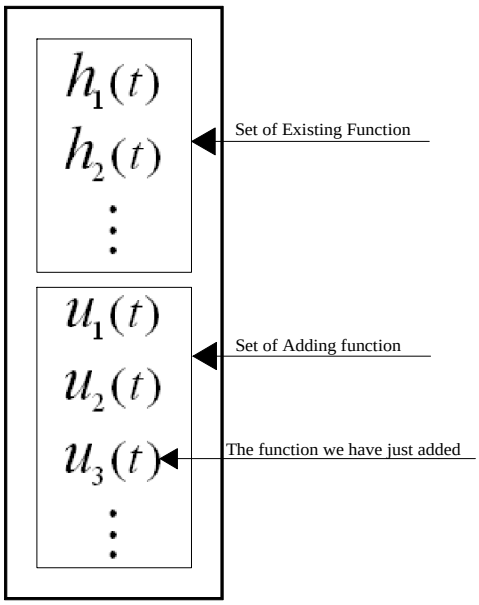


Now, let's expand the functions in the box to show the index for both the existing and adding functions as shown on the diagram below.



Now, assume that we derive or manufacture an instrument; we simply add a function to life. The usage of that instrument or the function provided by that instrument is simply a function of life. In this case, we can give it a function

name with an index. For instance, assume that we derive or manufacture an instrument, we can give it a name of $u_3(t)$. Any service that we provide is also a function that is added to life. In this case, we can give it any function name for instance $u_3(t)$. The diagram below shows life as a box and the function we have just added to it which is $u_3(t)$.



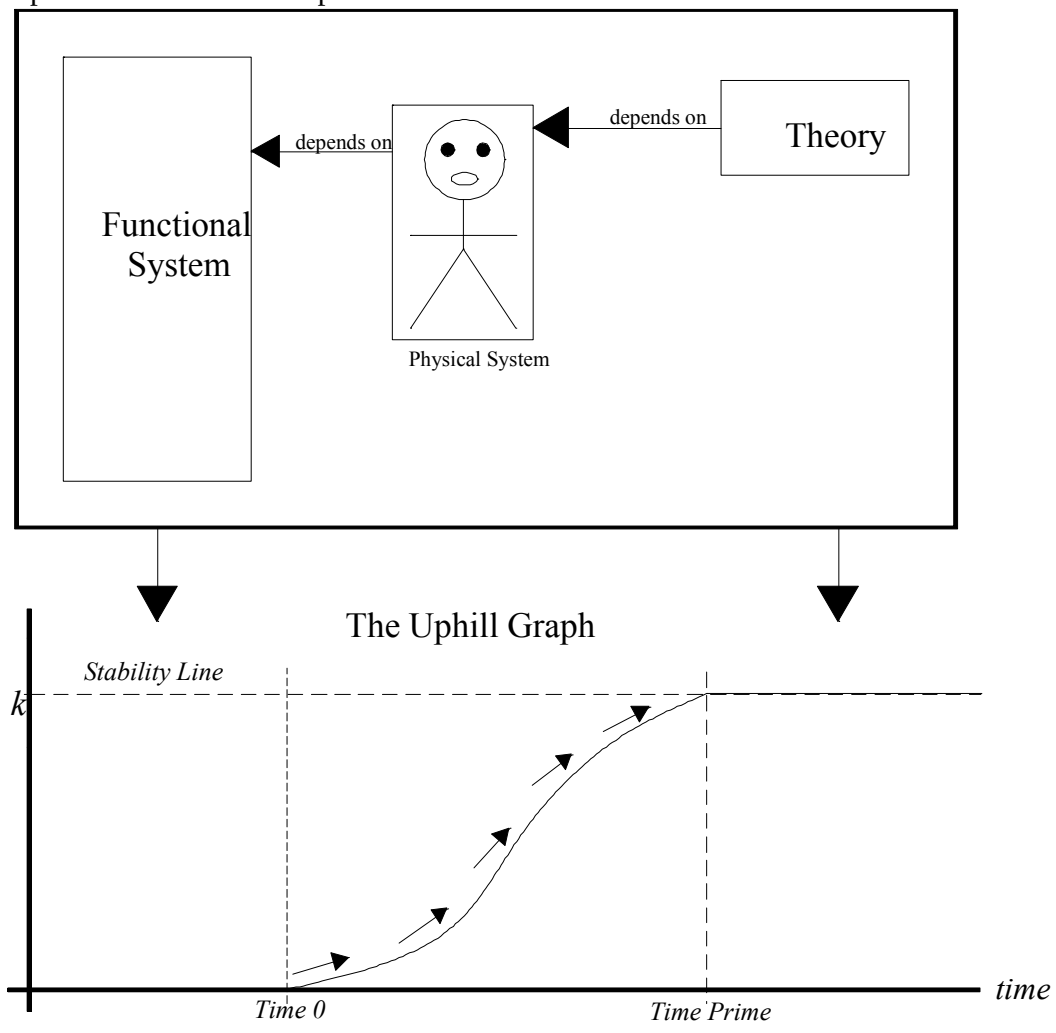
a. Take your time to think about functions added to life. Think in terms of functions performed by instruments and also services provided to life, which are also functions added to live.
b. Now, name couple of instruments and their functionalities. You can also give a description of them. Their functionalities are simply the functions they perform which are the functions added to life. Give each function a name an index as shown by the table below.
c. Now, name couple of services and their functionalities. You can also give a description of them. Their functionalities are simply the functions they perform which are the functions added to life. Give each function name an index as shown by the table below.
d. Draw the box for life as shown by the diagram above and include the functions names. Do for both instruments and services. Draw two more boxes and show the functions by indexing. You should have a total of four boxes.

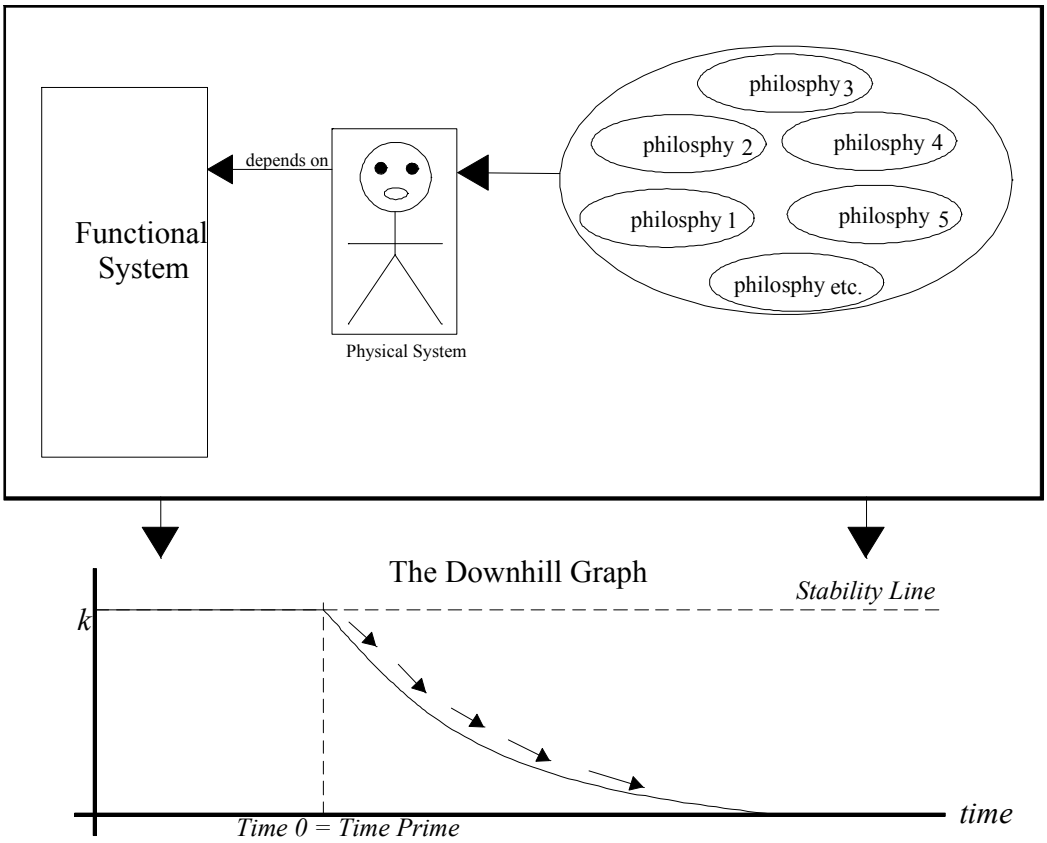
Instrument Names	Description/Function	Function Index
Instrument 1	Description/function	$u_1(t)$
Instrument 2	Description/function	$u_2(t)$
Instrument 3	Description/function	$u_3(t)$

Instrument 4	Description/function	$u_4(t)$
Instrument 5	Description/function	$u_5(t)$

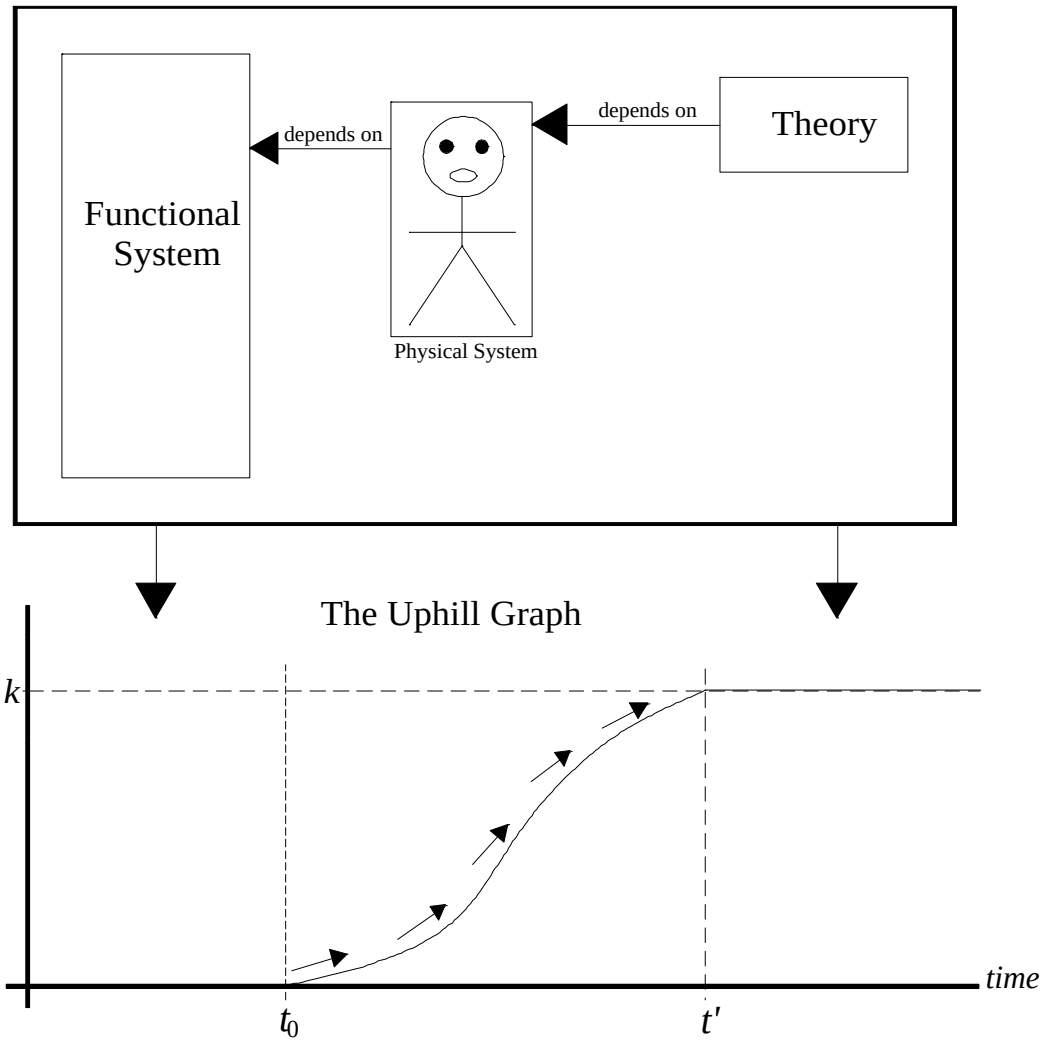
Service Names	Description/Function	Function Index
Service 1	Description/function	$u_1(t)$
Service 2	Description/function	$u_2(t)$
Service 3	Description/function	$u_3(t)$
Service 4	Description/function	$u_4(t)$
Service 5	Description/function	$u_5(t)$

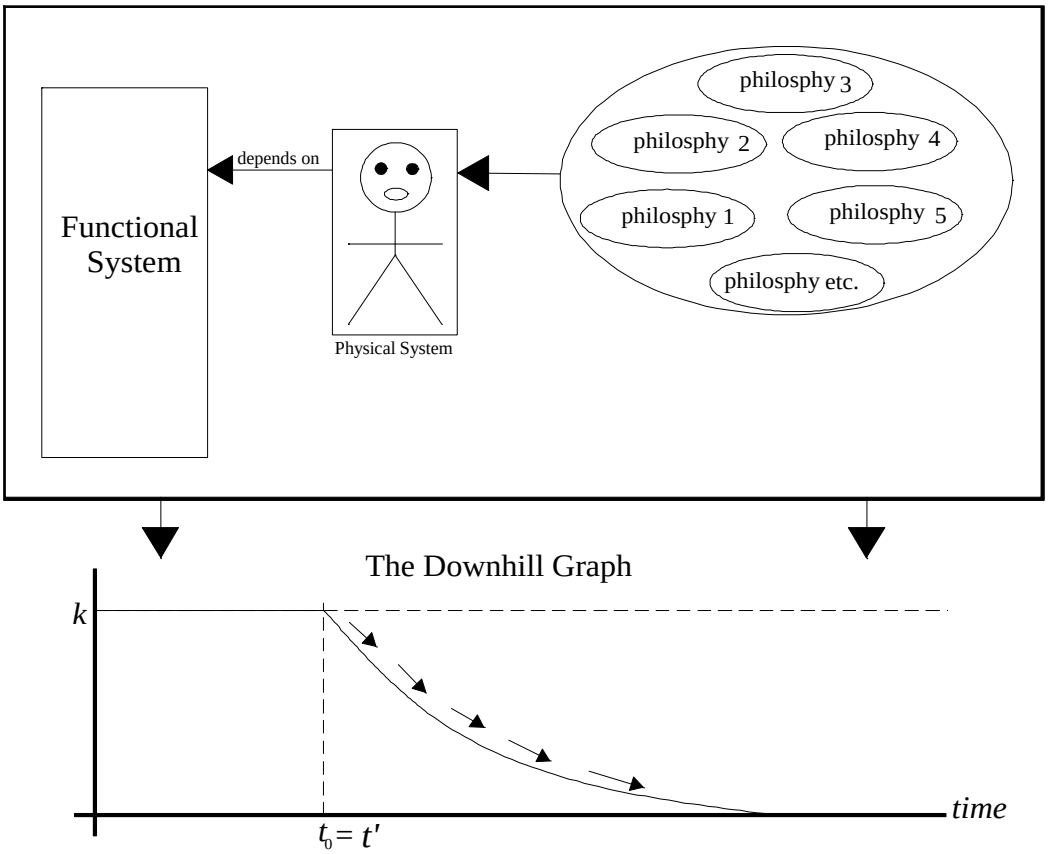
93. Show with a practical example that the following relationships provided by the graphs below. That means show that the physical system depends on its utilization theory provides a stable response, while when the system depends on philosophies, it provide an unstable response.

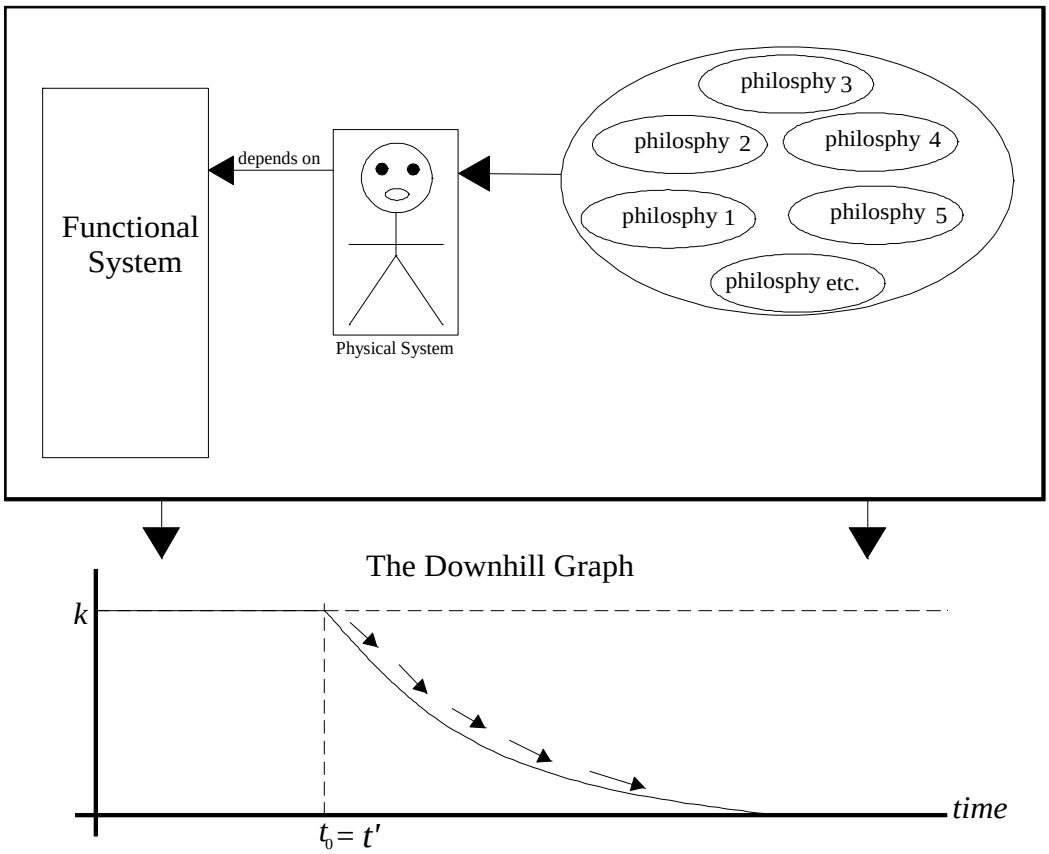




93′. Show with a practical example that the following relationships provided by the graphs below. That means show that the physical system depends on its utilization theory provides a stable response, while when the system depends on philosophies, it provide an unstable response.





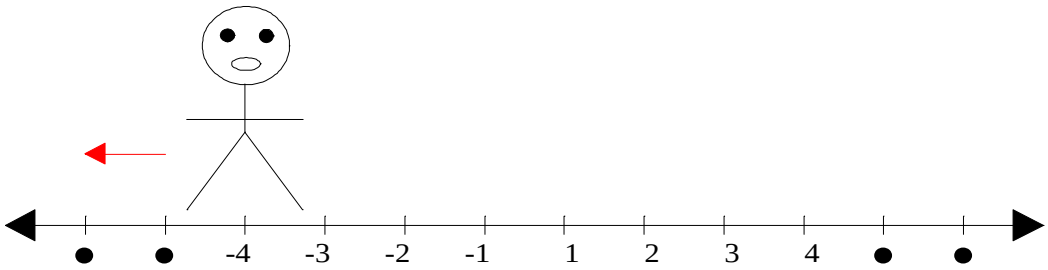


94. From information theory, we have learned that if the derivation theory of a system is unknown, there is much information about that system that is limited. With philosophies, that may not be the case. Show the difference between theory and philosophy related to the statement. That means, show the difference between theory and philosophy related to a system where its derivation theory is unknown; give some examples.

95. We already known that theories are very expandable, so as our negative philosophies. The fact that our intelligences allow us to learn from our previous ideas, there is a higher probability that we can make tremendous mistakes based from a previous negative philosophy if we don't drop it quickly. During the downhill process, we continue applying our negative philosophies related to time. As time goes, the system becomes more and more unstable. The reason for that, because related to theory and philosophy, our intelligences work in a successive basis. In term of theory, we already knew that theories are learned in a successive basis where the understanding of one will lead us to understand other. There is no limit on this process; any initial observation from a theory, will lead us to more observations. This process also applies to philosophy, where any negative philosophy will lead us to more negative philosophies. Related from the diagram below and from what we have just said, assume that we are at negative four, the probability of us to go to negative five, is much, much greater than going to

negative three. What do we mean by that, as we learn and apply more negative philosophies, without dropping or making any adjustment, the probability of learning and applying more negative is much, much higher than the probability of reducing?

f. Take your time to think about the above paragraph
g. Show that with a practical example that the probability of increasing our negative philosophies is much, much higher than decreasing. In another word, assume that we are heading downhill as shown by the chart below, the probability of continuing going downhill is much, much bigger than the probability of going uphill.



96. By using the time chart combined with the chart given previously below the definition of philosophy inheritance, show the spreading of negative philosophies related to time.

96′. By using the time chart combined with the chart given previously below the definition of philosophy inheritance, show the spreading of negative philosophies related to time algebraically. In other words, by using algebra you need to show the spreading of negative philosophy related to time.

97. Show your understanding of the word *ancestor* related to both theory and philosophy. You need to show your understanding of the word *ancestor* related to philosophy and also related to theory.

98. Show your understanding of the physical system related to instrument and system relationship. This can be viewed as the relationship of the physical system and the characteristic of instrument.

99. Refer to exercise 31, 41, 41′, 42, and 43, and determine why it is possible for one parent to feedback children of other parents. The way to look at it, I am a parent and I have one child, you are also a parent and you have one child. Why it is possible for me feedback your kid and it is also possible for you to feedback my kid. You can also provide diagrams in your workout.

100. By now, we should have had a very good understanding of the physical system, especially after working out exercise number 41. From your understanding of the

physical system and also philosophy, verify your understanding problem characteristic. In other words, using the physical system to show your understanding of problem characteristic.

100′. Using the mistaken equation, verify your understanding of problem characteristic. In other words, use the physical system mistaken equation to verify your understanding of problem characteristic.

101. By understanding theory and fundamental of theory, we know that the similarity of two theories depend on their fundamentals. In other words, the similarity of the fundamental of two theories, enable the similarity of the theories themselves. Now by understand the theories we have identified as shown on the table below

Theory Name	Abbreviation Identification
The Communication Theory	K_T
The Information Theory	I_T
The Education Theory	E_T
The Power Theory	P_T
The Instrumentation Theory	I_T

By understanding what we have said above and also, since a theory depends on its fundamental, the theories we have identified from the table above have the following fundamental as shown by the table below.

Fundamental of Theory Name	Abbreviation Identification
Fundamental of Communication Theory	f_{K_T}
Fundamental of Information Theory	f_{i_T}
Fundamental of Education Theory	f_{E_T}
Fundamental of The Power Theorem	f_{P_T}
Fundamental of Instrumentation Theory	f_{I_T}

Now by understanding everything we have said up to here and by understanding theory and fundamental of theory, you can do the following.

a. Assume that you have identified some similarities within the theories that we have identified, provide some explanation about each theory similarity you have identified.
b. Here, you can explain what lead you to that similarity
c. This is not important, however if you want to, you can draw the diagram of your similarities.

101′. The following theories have been given to us

$$K_T,\ i_T,\ E_T,\ P_T,\ I_T$$

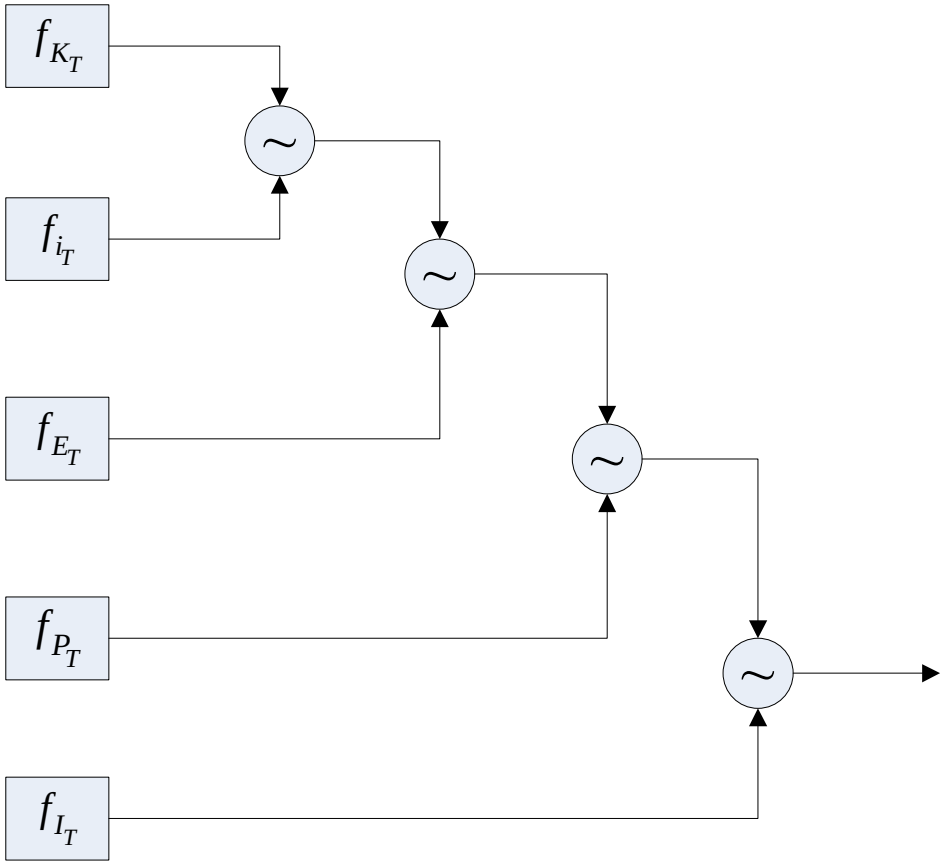
Given that a theory is uniquely identify by its fundamental, the theory identified above are pointed to the following fundamental

$$f_{K_T},\ f_{i_T},\ f_{E_T},\ f_{P_T},\ f_{I_T}$$

From similarity of theory, we know that if the fundamental of two theories are similar, then theories are similar themselves. With that, the following relationship applies for the given theories above.

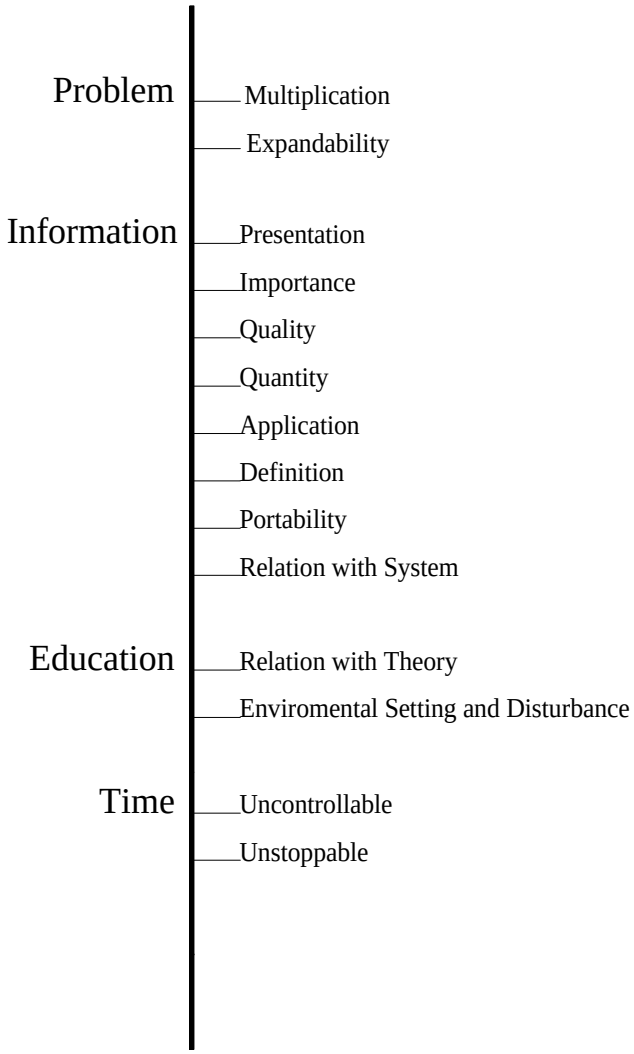
$$f_{K_T} \sim f_{i_T} \sim f_{E_T} \sim f_{P_T} \sim f_{I_T}$$

From the relationship identified above, we can draw the following block diagram to show the relationship for the fundamental of the theory.



a. Draw the relationship for the theories for the given fundamental above. Rather than using the above arrangement, you may find other arrangement. If you find other arrangements, use them.
b. Provide a statement that lead to each similarity

Other Words Characteristics



Characteristic of Time
Given that we have used the word time a lot in this book to denote function execution and method application related to a moment, it is worthwhile to provide a characteristic for it as shown above. The way to look at it, time is not what causes the function to execute or work. The function simply works related to time.

Reference Section

The most recommended and the most important reference for this book is our parents. Since our parent's principles enable us to understand both the physical system and the functional system, therefore those principles are the most recommended for this book.

Given that the physical person is a separate entity from the principle, given that the principle is what enables the system to function, it is always good to think that the application of the principle enabled the understanding of the principle. While mom, dad, and other people can provide us feedback to help us understand the principle, but they cannot apply the principle for us; only the person who receives the principles can apply the principles. Within what we have just said, it is always good to treat the principles as the reference rather than the physical person.

For the exercises that require algebra, refer to the subject itself or any other mean that may help understand the subject. In this case, the subject is still a separate entity from the book. It is always good to refer to the subject itself and any mean that may help understand the subject. The exercise that requires algebra assumes the understanding of the algebra. There is not need to work them out if the algebra is not understood.

Index

Index section

