## Ch. 3 Language

## 1 Definition of Expression

Just set theory notation and operators

## 2 Universe of all expressions

Define  $\mathcal{E}$ , the universe of all expressions

 $e_i \in \mathcal{E}, \quad \forall i$ 

# 3 Definition of Universal Expression

is a member of  $\mathcal{D}$ 

# 4 Definition of Divergent Expression

 $e_i \in \hat{\mathcal{D}}, e_i \notin \mathcal{D}, \forall i$ 

# 5 Definition of Language

Define language  $\mathcal{L}$ , a set of expressions inheriting from  $\mathcal{D}$  and/or  $\hat{\mathcal{D}}$ A set of consistent + inconsistent expressions to describe  $\mathcal{D}$ 

#### 6 Definition of Translation

Define "translation" or "mapping function" or function from  $\mathcal{L}_{in}$  to  $\mathcal{L}_{out}$  potentially introducing new paraconsistent statements

#### 6.1 Definition of Complete Translation

Maps every element

### 6.2 Definition of Incomplete Translation

Maps some elements but not all

#### 6.3 Definition of Inconsistent Translation

Maps some elements but introduces new paraconsistent statements

## 7 Fundamental Theorem of Language

All language is an inconsistent translations of  $\mathcal{D}$  implying  $\mathcal{D}$  has a finite magnitude that can never be expressed

Language allows for divergent expressions

The objective of language is to express  $\mathcal{D}$ 

Conjecture:  $\hat{\mathcal{D}} \neq \mathcal{D}$  contains inconsistent (or incomplete) expressions

The below sections might point to a universal theorem of language

Outline Proof of no universal translation implies no universal language? not necessarily yet so the best we can do is a paraconsistent ndimensional language manifold with positive entropy

- 8 Definition of Universal Translation
- 9 Theorem: A Universal Translation implies a Universal Language
- 10 Descriptions
- 10.1 Definition
- 10.2 The Universe of all Descriptions

Define  $\hat{\mathcal{E}}$  as the set of all descriptions

$$\hat{e}_i \in \hat{\mathcal{E}}, \quad \forall i$$

- 10.3 Definition of Divergent Description
- 10.4 Define  $\hat{D}$  the set of all problems that be described
- 10.5 Definition of  $D_{\perp}$

 $\mathcal{D}_{\perp} \equiv Universe - \mathcal{D}$ 

The Null Set of D, the set of problems that be described but not expressed

- 11 Conjecture: A Universal Translation doesn't exist
- 12 Definition of Universal Language
  "N dimensional Language Manifold"

Universal Language, divergent N dimensional language manifold describing  $\mathcal{D}$  and  $\hat{\mathcal{D}}$ 

# 13 Language is a mapping function to K

Language is portal to certain parts of the Universal Knowledge Plane

# 14 Conjecture: There exist Divergent Expression, There exists divergent description)

Direct translation from  $\mathcal{E}$  to language  $\mathcal{L}_j$ 

This statement is false Let statement  $a_i$  = True Assert !a Could it be described as an expression?

15 Conjecture: Infinity is a Divergent Expression

16 Conjecture: Prime Numbers is a Divergent System