## 狭义语言与广义语言

## Traditional Language & Extended Language

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### 摘要

本文提出并系统性地探讨了"广义语言"(Extended Language)的全新概念,旨在扩展 传统语言学和符号学的边界。广义语言不仅仅局限于传统的语言符号系统(如文字、语 音、图像等),还涵盖了所有通过感官(如视觉、听觉、触觉等)接收到的信号,这些 信号经过大脑解析后形成的主观体验。广义语言可以被视为我们与真实世界之间的"翻 译"媒介,即个体通过感官系统接收外界的物理信号,并通过大脑的符号化处理将其转 化为有意义的体验。广义语言也可以被视为对世界的"建构",即我们通过感知和符号 系统主动构建了对世界的理解和体验,而非被动地反映外界的现实。广义语言包括但不 限于感知、情感、记忆、文化符号,并且能够超越个体甚至时空的局限。通过这种扩展, 广义语言被定义为一种超越个体主观体验的全局信息表征系统,涵盖了感知与符号化的 广泛领域。

#### Abstract

This paper introduces and systematically explores the novel concept of "Extended Language," aiming to expand the boundaries of traditional linguistics and semiotics. Extended Language is not confined to conventional linguistic symbol systems (such as text, speech, images, etc.), but also encompasses all signals received through the senses (such as vision, hearing, touch, etc.), which form subjective experiences after being processed by the brain. Extended Language can be seen as a "translation" medium between us and the real world, where individuals receive physical signals from the external environment through sensory systems and transform them into meaningful experiences through the symbolic processing of the brain. Extended Language can also be viewed as the "construction" of the world, meaning that we actively construct our understanding and experience of the world through perception and symbolic systems, rather than passively reflecting the reality of the external world. Extended Language includes but is not limited to perception, emotion, memory, and cultural symbols, and it has the ability to transcend individual and even spatiotemporal limitations. Through this expansion, Extended Language is defined as a global information representation system that transcends individual subjective experiences, covering a broad range of perception and symbolization.

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## 第一部分 对狭义语言的批判

## "基于狭义语言的理论大概率并不反映现实,而只是一种分类和定义的游戏"

## 1.1.狭义语言的局限性和悖论、问题、反例的不可避免性

语言是人类不可替代的记录、保存、传播具象思想的唯一方式。

只要使用语言, 分类和定义即无法避免地同时开始。

进行分类或定义(使用语言)时,无数已经或尚未被发掘的悖论、问题、反例同时产生,为 了理解一个分类或定义,我们依赖于另一些分类和定义。而一旦深究到底,这个过程归根结 底会无休止地延续下去(无限递归/循环定义/循环论证/自我指涉)。

就如同一个经典的悖论:"这句话是假的。"

## 1.2.分类与定义的加速膨胀问题

细化分类和开启新定义是掩盖或绕过问题的常用手段。新的定义和分类定会带来更多更新的 定义和分类,导致语言如同屎山一样加速膨胀。

新悖论、新问题和新反例以更高的速度加速膨胀,一个直观的例子是"知道的越多就越感受 到无知"。

## 1.3."狭义语言屎山"的生成动机—逃避反例

原本公认一个反例就可使命题不成立,但只需更细地分类/造新定义,反例就"消失"了,命题 就"成立"了。

分类或定义一定会生成更多的悖论、问题和反例,这些问题和反例很多是尚未预见的。

## 1.4.基于狭义语言的理论大概率并不反映现实,而只是一种分类和定义的游戏

语言只是分类和定义的载体,现实存在的思想和知识并不少分类和定义,更不是语言。

人类构筑的每一个理论体系,实际上是在用分类和定义(语言)作为工具构建一个复杂的模型。无论使用何种语言工具或体系,永远有无数未解之谜(反例)随着模型发展而加速涌现。因此基于狭义语言的模型大概率并不反映现实,而只是一种"分类和定义的游戏"。

## 1.5.走出困境的困境

"基于狭义语言屎山的表达方式"很难全新或正确地阐述事物。

历史性负担:每个词汇、每种表达方式都带有其历史背景和文化语境。即便我们试图用语言 表达全新的思想或事物,这些思想往往会被拉回到已有的概念框架中。语言的每一个词汇都 承载了过去的意义,因此很难完全脱离历史的包袱,去准确描述新的事物。

语言的惯性:语言的使用具有惯性。我们依赖既有的词汇和概念来表达思想,而这些词汇和概念往往是基于过去的经验和分类系统。即便我们试图创造新的词汇或概念,语言系统的惯性仍会将这些新词汇拉入已有的语义网络中,导致它们迅速被"同化"或"框定"。

新词汇的同化:当我们创造新的词汇或概念时,这些词汇往往会迅速被既有的语言体系所同 化,进入既有的语义网络。例如,互联网时代产生了许多新的词汇,如"云计算"、"区块链" 等。然而,这些新词汇一旦进入语言体系,便会迅速被赋予特定的语义框架,并在使用过程 中逐渐被固定化,失去了其最初的开放性和灵活性。

隐喻和类比的局限:在面对全新事物时,我们经常依赖隐喻和类比进行表达。然而,隐喻和 类比本质上是一种将新事物与已有事物进行比较的方式,这种比较往往会带来误导。例如, 早期互联网常被比作"信息高速公路",这种比喻虽然帮助人们理解互联网的功能,但也局限 了人们对其潜力的想象。

语言的自我封闭性:我们通过语言来解释语言,通过概念来解释概念。这种自我验证机制使得语言体系看似自治,但实际上这种自治性可能掩盖了其内在的矛盾和局限。例如,哲学中的许多概念(如"存在"或"意识")往往通过语言的自我验证机制得到解释,但这些解释并没有真正解决这些概念的本质问题。

# 第二部分 广义语言

## 2.1.广义语言的定义与浅显理解

人们夜以继日地重复着"感受世界,识别出语言,再解析语言"的循环,而欢快和恐怖的声波 组成的音乐同样能让人有共鸣。不含文字或语音的视频和图片也能表达很多意义。姑且称音 乐、图片和视频这类为"广义语言"吧。移开屏幕,通过眼睛看到的缤纷世界是否也是一种"广 义语言"?我认为是的。通过眼睛所看到的,并不是真实的世界。语言,就是这个世界的代 言。脚踩到钉子会感到不悦和剧痛的"全物种共识",是广义语言存在的证据之一。

<u>定义:广义语言是"我们"从(视细胞、耳蜗、人工耳蜗、外周感受器等)一切神经涌现的</u> <u>信号经过神经器官(包括但不限于个体人类大脑)解析后结果的全集,并非神经信号本身。</u>

根据这个定义, 广义语言不仅包括传统意义上的语言 (即通过符号、文字、语音进行的交流), 还包括音乐、图像、视频, 甚至是我们通过感官感知到的整个世界。所有这些感知和体验都 可以视为大脑对外部信号的"翻译"或"解码", 因此它们本质上是大脑对外部世界的解释, 而非外部世界本身。

这一观点强调了感知与现实世界之间的间隔。通过眼睛、耳朵等感官所接收到的,并不是真 实的世界,而是经过大脑处理后的"版本"或"解释"。这种解释过程可以被视为一种"翻译", 类似于语言的功能。因此,广义语言在某种意义上是"世界的代言"。

感知的建构性:现代神经科学和认知科学的研究表明,我们的大脑并不是被动地接收外界的 信号,而是主动地对这些信号进行加工、解释和建构。例如,视觉并不是对外界物体的直接 反映,而是大脑根据光线、颜色、形状、运动等信息构建出的一个主观图像。因此,我们看 到的世界实际上是大脑根据外界信号构建出的一个"虚拟现实"。

语言的功能:传统语言的功能是将思想、经验和信息通过符号系统进行交流。而在广义语言的框架下,感知系统本身也可以被视为一种"语言",因为它同样是在将外界的信号转化为大脑能够理解的"信息"。因此,感知系统和传统语言系统在本质上有相似性:它们都是将外界的刺激转化为大脑能够处理的"符号"或"信号"。

世界的代言:这一观点可以理解为,广义语言是大脑对外部世界的"代言"或"翻译"。我们无 法直接接触到外部世界的本质,而只能通过大脑对感官信号的解释来"体验"世界。因此,广 义语言并不是真实的世界本身,而是大脑对世界的解释和建构。

感知的主观性:我们通过感官接收到的信号并不等同于外部世界本身。我们的大脑通过复杂的神经网络对这些信号进行解析和解释,最终构建出我们所体验到的"世界"。这种体验是主观的,是大脑对外界信号的翻译或解释。因此,感知到的世界可以被视为一种广义语言——它是大脑对外部世界的"翻译",而不是外部世界的直接反映。

感知的符号化:感知系统将外部的物理信号(如光、声、触觉等)转化为大脑能够理解的"符

号"或"信号"。这些符号系统与传统语言的符号系统有相似之处:它们都是通过一定的规则 和结构来传递信息。例如,视觉系统通过解析光的波长和强度来构建颜色、形状和运动的感 知,这与语言中的词汇和语法结构有类似的功能。

因此,通过眼睛看到的世界可以被视为广义语言的一部分,因为它是大脑对外部世界的符号 化和解释过程。

## 2.2.狭义语言无法定义广义语言——以忒修斯之船问题为例

## 2.2.1. 狭义语言的静态性与广义语言的动态性

狭义语言系统是相对静态的。它通过固定的符号、定义和分类来描述事物。例如,我们用"船" 这个词来指代某种特定的物体。然而,现实中的事物是动态变化的,尤其是像忒修斯之船这 种随着时间不断变化的事物。在狭义语言中,我们必须要决定:当船的所有部件都被替换后, 它是否还是同一艘船?这在狭义语言的框架下成为了一个二元选择(是或不是)。

然而, 广义语言——即我们通过感官和大脑解析所感知到的世界——是动态的、连续的。我 们感知到的船并不是一个静态的符号, 而是一个随着时间变化的整体体验。即使船的部件逐 渐被替换, 我们的感知和体验可能仍然将其视为"同一艘船", 因为在广义语言的层面上, 我 们更关心的是整体的连续性和功能, 而不是每个细节的变化。

因此, 忒修斯之船悖论揭示了狭义语言的局限性: 它无法充分捕捉广义语言中事物的动态变 化和连续性。狭义语言倾向于将事物划分为固定的类别, 而广义语言则更关注事物在变化过 程中的整体性和连续性。

## 2.2.2. 狭义语言的分类与广义语言的模糊性

狭义语言依赖于明确的分类和定义。例如,狭义语言要求我们定义"船"是什么,并且在部件 逐渐被替换的过程中,我们必须决定这艘船是否依然符合"船"的定义。这种分类系统是离散 的、二元的:一艘船要么是原来的船,要么不是。

然而, 广义语言的体验往往是模糊的、连续的。例如, 当我们通过视觉或触觉感知到一艘船时, 我们并不会突然觉得它在某个时刻变成了另一艘船。即使所有的部件都被替换, 我们的体验可能仍然保持一致, 因为我们对事物的感知不仅仅依赖于其物理组成, 还包括其功能、用途、外观等多个维度。

因此, 忒修斯之船问题展示了狭义语言在处理模糊性和连续性方面的局限。狭义语言要求明确的分类, 而广义语言则允许模糊的、渐变的体验。狭义语言无法轻易处理"部分替换"或"渐变"的问题, 而广义语言则能够在这些模糊的边界中运作。

## 2.2.3. 狭义语言的同一性与广义语言的多维性

狭义语言往往试图通过定义来维持事物的"同一性"。在忒修斯之船的例子中,狭义语言要求 我们回答"这艘船是否还是同一艘船"的问题。然而,广义语言的体验是多维的:我们不仅仅

通过物理部件来定义一艘船的同一性,还可以通过其功能、历史、情感联系等多个维度来定 义它。

例如,即使船的所有部件都被替换,我们可能仍然认为它是"同一艘船",因为它在我们的体验中保持了相同的功能或情感意义。换句话说,广义语言允许我们在多个维度上理解同一性,而狭义语言则倾向于通过单一的、物理的维度来定义同一性。

因此, 忒修斯之船问题揭示了狭义语言在处理多维同一性方面的局限。狭义语言试图通过单一的定义来解决同一性问题, 而广义语言则能够在多个维度上同时处理同一性问题。

#### 2.2.4. 狭义语言无法完全定义广义语言的困境

通过忒修斯之船悖论,我们可以看到狭义语言在试图定义广义语言时所面临的困境。狭义语言的符号系统是有限的、静态的,而广义语言的体验是无限的、动态的。狭义语言试图通过 固定的分类和定义来描述广义语言的体验,但这种描述往往是片面的、不完整的。

语言的简化性:狭义语言本质上是一种简化工具。它通过符号和定义来对复杂的现实进行简 化和抽象。然而,广义语言的体验远比狭义语言所能描述的复杂得多。我们通过感官接收到 的信号和大脑对这些信号的解释,构成了丰富的、多维的体验,而狭义语言只能捕捉其中的 一部分。

语言的局限性: 忒修斯之船悖论展示了狭义语言在处理动态变化、模糊性和多维同一性方面 的局限。狭义语言要求我们对事物进行明确的分类和定义, 而广义语言的体验往往是连续的、 模糊的、多维的。因此, 狭义语言无法完全定义或描述广义语言的丰富性和复杂性。

### 2.2.5. 广义语言与哲学思考的延展

将忒修斯之船问题与广义语言的概念联系起来,实际上揭示了一个更广泛的哲学问题:我们 如何通过有限的符号系统(狭义语言)来理解和描述无限复杂的体验(广义语言)?

语言的建构性:狭义语言并不是对现实的直接反映,而是一种建构。我们通过语言来分类、 定义和描述世界,但这种描述不可避免地带有简化和抽象的成分。因此,狭义语言在某种意 义上是对广义语言体验的"翻译"或"重构",而不是对其的直接再现。

语言与现实的错位: 广义语言的体验是主观的、连续的、多维的, 而狭义语言的描述是客观 的、离散的、单维的。这种错位导致了许多哲学问题的产生, 例如同一性、变化、模糊性等 问题。忒修斯之船悖论就是这种错位的一个典型表现: 我们试图通过狭义语言来回答一个关 于广义语言体验的问题, 但这种尝试往往会陷入悖论或困境。

忒修斯之船问题可以被视为关于狭义语言无法充分定义广义语言的一个典型案例。狭义语言 通过符号和定义来描述世界,但它在处理动态变化、模糊性和多维同一性时面临局限。广义 语言则是我们通过感官和大脑解析所感知到的世界,它是动态的、连续的、多维的。

狭义语言试图通过简化和抽象来描述广义语言的体验,但这种描述往往是不完全的、不充分

的。忒修斯之船悖论揭示了狭义语言在面对广义语言时的局限性,也引发了关于语言与现实 之间关系的深刻哲学思考。

## 2.3. 广义语言是超越时空的,而非个体的瞬时体验

由于每个人的物理位置(经纬度、海拔高度)、身体姿态(头部朝向、眼球角度)、注意力 焦点(聚焦的位置)以及当前所处的情境(会议内容等)都不同,因此每个个体的广义语言 必然是独特的。就如同我们无法看到自己身后的画面,这表明个体的感知是局部的、有限的。

因此,我想表达的关键观点是:广义语言是超越个体的主观体验,是一种超越时空的、更为 广泛的概念。这意味着,广义语言不应仅仅局限于个体大脑对感官信号的解析,而应涵盖一 种更为全局性的、超越个体的"语言"系统。这种系统可能是对现实世界的某种更为广泛的表 征或结构,而个体的体验只是从这个广义语言中"取样"或"切片"。

我们可以将广义语言分为以下两种层次的理解:

个体层次的广义语言:这是我们之前讨论的内容,即个体通过感官系统接收到的信号,经过 大脑解析后形成的主观体验。这个层次的广义语言是局部的、有限的、动态的,受到个体的 物理位置、感官限制、注意力焦点等因素的影响。每个人的广义语言体验都是不同的,因为 每个人的感知条件和背景不同。

超越时空的广义语言: 正如踩到钉子时, 所有个体无论在合适何地都会感到类似的疼痛一样。 广义语言应超越个体的主观体验, 成为一种更为全局的结构。这个层次的广义语言可以被理 解为一种对现实世界的"全息"描述, 涵盖了所有可能的感知和体验。个体的广义语言体验只 是这个超越时空的广义语言中的一个"切片"或"局部投影"。

要理解超越时空的广义语言,我们可以将其视为一种对信息的全局性表征。这种全局性表征 涵盖了所有可能的感知和体验,而不仅仅是个体在某一时刻的局部体验。

全局信息场:超越时空的广义语言可以被视为一种"信息场",这个场包含了所有可能的感知 维度和体验方式。它不仅涵盖了我们当前能够感知到的世界(如视觉、听觉等感官输入), 还包括我们无法直接感知的部分(如我们背后的画面,或其他人正在经历的感受)。这个信 息场是全局的、完整的,而个体的感知只是从这个全局信息场中"抽取"出一部分信息。

个体的局部切片:每个个体的感知和体验可以被视为从这个全局信息场中"切片"出来的局部 视角。由于个体的物理位置、感官限制、注意力焦点等因素,每个人只能感知到全局信息场 的一小部分。这就像一个巨大的全息图,每个人只能从特定的角度看到其中的一部分,而无 法看到全局。

时空的超越性:超越时空的广义语言意味着它并不局限于某个特定的时刻或地点,而是涵盖 了所有时空中的信息。它不仅包括当前的感知,还包括过去的、未来的、以及其他可能的感 知体验。个体的感知只是这个全局信息场中的一个瞬时切片,而广义语言本身是跨越时空的。

## 2.4. "广义语言"可以超越更多界限

"广义语言"不仅可以超越个体的感知局限,还可以超越疾病与健康、年龄差异,甚至物种界限。

#### 2.4.1.精神疾病与健康

在健康与疾病之间,尤其是在精神健康方面,个体的感知和体验可能会发生巨大的变化。例如,精神病患者可能会经历幻觉、妄想等与常人不同的感知体验。然而,广义语言的普适性意味着,它不仅涵盖了健康个体的感知体验,也涵盖了那些在疾病状态下的感知。

精神病患者的感知:精神病患者的感知体验可能与常人不同,但这并不意味着他们的体验就 不属于广义语言的范畴。广义语言的普适性意味着,它能够包容所有形式的感知,无论这些 感知在常规标准下是否被视为"正常"或"健康"。这些感知体验依然是对外界信息的某种解析, 只是这种解析方式与常规认知有所不同。

疾病的多样性与广义语言的包容性:广义语言的概念可以超越个体的生理或心理状态,涵盖 所有可能的感知方式。这意味着,无论是健康状态下的感知,还是疾病状态下的感知,都是 广义语言的一部分。精神病患者的幻觉或妄想可以被视为大脑对外界信息的一种特殊解析方 式,这种解析方式虽然与常规认知不同,但仍然属于广义语言的范畴。

#### 2.4.2.年龄差异

广义语言可以超越年龄的差异,包括新生儿与老年人之间的不同感知体验。新生儿的大脑尚 未完全发育,而老年人可能面临感知能力的衰退。然而,广义语言的普适性意味着,它能够 涵盖所有年龄段的感知体验。

新生儿的感知:新生儿的大脑仍在发育,他们的感知方式与成人有很大不同。尽管他们的感知可能更为原始和模糊,但这并不意味着他们的感知不属于广义语言的范畴。

老年人的感知:随着年龄的增长,老年人的感知能力可能会逐渐衰退,例如视觉、听觉的退 化以及认知功能的下降。然而,广义语言的普适性意味着,即使在感知能力衰退的情况下, 老年人的感知体验依然是广义语言的一部分。广义语言并不依赖于个体的感知能力的强弱, 而是涵盖了所有可能的感知方式。

因此,广义语言可以超越年龄的差异,包容从新生儿到老年人之间的所有感知体验。

### 2.4.3.物种之间的跨越

不同物种的感知系统差异巨大。例如, 蝙蝠通过超声波进行回声定位, 狗的嗅觉远远超过人类, 鸟类可以感知地球磁场。这些感知方式与人类的感知方式截然不同, 但如果我们将广义语言定义为一种超越个体感知的全局性表征, 那么这些不同物种的感知方式都可以被视为广义语言的一部分。

跨物种的广义语言: 广义语言的普适性意味着, 它能够涵盖所有物种的感知体验。无论是蝙

蝠的回声定位,还是狗的嗅觉系统,这些感知方式都是大脑或神经系统对外界信息的解析方式。因此,广义语言不仅仅是人类的专属,而是跨物种的。不同物种的感知方式只是广义语言的不同"切片",它们从全局信息场中提取了不同的维度来构建自己的感知体验。

物种间的感知共性:尽管不同物种的感知方式存在巨大差异,但它们在某种程度上也有共性。 所有的感知系统都是对外界信息的某种解析方式,无论是通过光、声、触觉还是其他感官。 因此,广义语言可以被视为一种跨物种的"语言",它涵盖了所有可能的感知方式,而不同 物种的感知系统只是从中提取了不同的信息。

## 2.5.缸中之脑问题

在广义语言框架下,缸中之脑问题可以从几个角度进行解释和扩展。广义语言的概念将语言 扩展到包括感知、情感、记忆、文化符号等多维度的符号系统,超越了传统的符号化语言。 因此,广义语言的框架可以为缸中之脑问题提供新的视角,尤其是在探讨感知、符号化体验、 意识与现实的关系时。

## 2.5.1.广义语言的感知与符号化体验

在广义语言的框架下,感知本身是一种符号化的过程。外界的物理信号(如光、声、触觉等) 通过感官系统进入大脑,经过大脑的处理,被符号化为有意义的体验。因此,广义语言不仅 仅是符号、文字和语言的交流系统,它还包括了所有感知信号的符号化过程。

在"缸中之脑"的思想实验中,尽管大脑不再与真实的物理世界直接接触,但它仍然通过计算 机生成的信号接收"感知体验"。这些信号经过大脑的处理,符号化为视觉、听觉、触觉等体 验。因此,从广义语言的角度来看,缸中之脑仍然在"体验"广义语言,因为大脑仍然在处理 感知信号并将其符号化为有意义的体验。

感知的符号化过程: 在广义语言的框架下, 感知并不是对外界的直接反映, 而是大脑对感官 信号的符号化解释。因此, 缸中之脑的感知体验虽然是由计算机模拟的, 但它仍然是经过符 号化的体验。大脑并不区分这些信号的来源是否真实, 它只处理这些信号并将其转化为有意 义的符号系统。

广义语言的符号化过程并不依赖于外界物理世界的真实性, 而是依赖于大脑对信号的处理方式。

## 2.5.2.广义语言的现实和虚拟性

广义语言的一个核心观点是:感知、情感、记忆等都是大脑对外界信息的符号化处理。因此, 在广义语言的框架下,"现实"本身就是一种符号化的建构。我们通过感官系统接收外界的信 号,并将其符号化为有意义的体验。因此,现实并不是直接存在于我们面前的物理世界,而 是我们通过符号系统建构出来的体验。

缸中之脑的"虚拟现实":在缸中之脑的设定中,尽管大脑接收到的信号是虚假的,但大脑仍 然将这些信号符号化为"现实"。因此,从广义语言的角度来看,缸中之脑的体验并不比我们 日常的体验更"虚假"。无论是通过感官接收的真实物理信号,还是通过计算机生成的虚拟信号,大脑都会将这些信号符号化为有意义的体验。因此,现实与虚拟的区分在广义语言的框架下变得模糊。现实是我们符号化的体验,而不是外界世界本身。

现实的建构性: 广义语言强调感知和现实的建构性。无论是缸中之脑还是普通人类的日常体验, 现实都是通过符号系统建构出来的。缸中之脑的问题揭示了我们对现实的依赖: 我们无法直接接触到"物自体"(康德的术语, 指的是世界的本质), 我们只能通过感知系统符号化的现实来体验世界。因此, 在广义语言的框架下, 缸中之脑的体验仍然是"现实"的一种形式, 只不过它的符号化过程依赖于虚拟信号而非物理信号。

## 2.5.3.广义语言的意识和主体性

在广义语言的框架下,意识是广义语言的主要体验者。意识通过感知系统接收外界信号,并 将其符号化为有意义的体验。在缸中之脑的设定中,尽管大脑被隔离在一个虚拟环境中,但 它仍然拥有意识,并且通过计算机生成的信号符号化为虚拟的体验。

意识的符号化功能: 广义语言的一个核心观点是, 意识不仅仅是被动地接收信息, 它还主动 参与了符号化的过程。缸中之脑的意识在接收虚拟信号时, 仍然会将这些信号符号化为有意 义的体验。因此, 意识的符号化功能并不依赖于信号的真实性, 而是依赖于信号的可处理性。 只要大脑能够处理这些信号, 意识就会将其符号化为"现实"。

主体性的建构: 广义语言还涉及主体性的问题。缸中之脑的思想实验引发了对主体性和自我的质疑: 如果大脑接收到的所有体验都是虚假的, 那么"我"的存在是否也是虚假的? 在广义语言的框架下, 主体性本身也是通过符号系统建构出来的。无论大脑接收到的是虚拟信号还是物理信号, 主体性都是通过符号化的感知和体验建构出来的。因此, 缸中之脑的主体性并不会因为信号的虚拟性而消失, 主体性仍然是大脑符号化体验的产物。

## 2.5.4. 广义语言与缸中之脑的认识论意义

广义语言的框架为缸中之脑问题提供了新的认识论视角。缸中之脑问题提出了关于我们如何 知道自己所处的世界是真实的这一根本问题。广义语言的视角认为,无论外界世界是否真实, 感知和体验本身都是符号化的建构。因此,现实的真实性并不是我们感知体验的必要条件。

感知与现实的分离: 广义语言的观点是, 感知和符号化过程并不依赖于外界的真实性。即使 我们处于一个虚拟环境中, 我们的感知体验仍然是"真实的", 因为它们是通过符号系统建构 出来的。缸中之脑的问题揭示了感知与现实的分离: 我们无法直接接触到现实世界, 我们只 能通过符号系统体验到符号化的现实。

认识论的相对性: 广义语言的视角还表明, 认识论的相对性: 我们对世界的认识总是通过符 号系统进行的, 无论这些符号系统是基于物理信号还是虚拟信号。缸中之脑的问题进一步揭 示了这一点:即使我们生活在一个虚拟世界中, 我们的认识仍然是通过符号化的体验进行的。 因此, 广义语言的框架下, 认识论的核心问题不再是"世界是否真实", 而是"我们如何通过 符号系统构建对世界的理解"。

无论信号来源是真实的物理环境还是虚拟的计算机生成,大脑都会对其进行符号化处理,形成有意义的体验。

## 2.6. 广义语言的切片不等价于现实

正如不能说背后看不见的东西不存在一样,现实不是由个体某段时间某个位置的广义语言切 片定义的,更何况个体的广义语言切片非常容易出现偏差。接下来用三个例子辅助理解个体 的广义语言切片是如何出现偏差的:

#### 视觉错觉

视觉错觉是最常见的例子之一。在视觉错觉中,我们的大脑对外界的视觉信号进行错误的符号化,使我们看到的东西与实际存在的物理现实不一致。例如,米勒-莱尔错觉 (Müller-Lyer illusion)中,两条长度相同的直线由于附加了不同的箭头,导致我们主观上认为它们的长度不同。

在这种情况下,我们的大脑通过广义语言符号化了感官信号,但符号化的结果(即我们看到的"现实")与物理现实不一致。我们将主观的视觉符号化结果误认为是客观的现实,混淆了 广义语言与所谓现实。

### 幻觉

幻觉是指个体在没有外界刺激的情况下产生的感知体验。例如,精神病患者可能会听到不存在的声音或看到不存在的物体。在这种情况下,幻觉是大脑自行生成的符号化体验,完全独立于外界的物理现实。

在幻觉中,个体将大脑生成的符号化体验(即广义语言的产物)误认为是外界的客观现实。 这种混淆表明,广义语言的符号化过程并不总是依赖于外界的物理刺激,而我们常常会将这 些符号化的体验误认为是真实的外部世界。

梦境与清醒现实的混淆

梦境是另一个典型的例子,表明广义语言与所谓现实之间的混淆。在梦境中,我们的大脑通 过符号化过程生成了一个虚拟的"现实",尽管这个"现实"与清醒状态下的物理世界无关。

在梦中,我们完全沉浸于大脑生成的符号化体验中,这些体验在梦境中显得"真实"。然而, 这些体验实际上是大脑在没有外界刺激的情况下生成的符号化结果。清醒后,我们意识到这 些体验并不是真实的物理现实,但在梦中,我们常常将这些符号化的体验误认为是"现实"。

## 2.7. 广义语言不等价于现实?

广义语言的切片不等价于现实的首要原因是切片在个体与全面、时点与时段等无数个方面具有不完整性。而完整的广义语言或许也不等价于现实。

## 2.7.1.现实的超越性

现实更是超越个体、物种、时空的,它是一个整体的、复杂的、广阔的存在。现实不仅仅是 我们通过感知系统和符号系统所体验到的部分信息,而是一个完整的、全局的存在。现实并 不依赖于我们的感知或符号化过程.

现实的独立性:现实并不依赖于任何个体的感知或符号化过程,它是一个独立于个体和物种的存在。因此,现实并不是我们通过符号系统所建构的"切片化"体验,而是一个完整的、不可被完全符号化的存在。

现实的复杂性:现实远比广义语言复杂和广阔。即使广义语言涵盖了感知、情感、记忆等多 维度的符号化过程,它仍然无法完全捕捉现实的复杂性。现实不仅包括我们能够感知的部分, 还包括我们无法感知的部分,甚至包括那些超越我们符号化能力的维度。

## 2.7.2.广义语言的表征性

尽管广义语言比狭义语言更加广泛,涵盖了多维度的符号化体验,但它仍然是对现实的表征 或映射。广义语言通过感知系统、符号系统、文化符号等方式将现实的某些维度符号化为有 意义的体验,但它无法完全等同于现实。

符号化的局限性: 广义语言虽然比狭义语言更为广泛, 但它仍然依赖于符号系统来处理和表达信息。符号系统本质上是对现实的简化和抽象, 因此广义语言无法完全捕捉现实的全部复杂性。现实的某些维度可能是超出我们符号化能力的, 广义语言只能符号化现实的某些方面, 而无法涵盖现实的全貌。

表征的局部性: 广义语言的符号化过程只能捕捉现实的某些维度或切片。尽管广义语言超越 了个体的局限,涵盖了跨物种和跨时空的符号化过程,但它仍然是对现实的某种"切片化" 表征,而不是现实的完整再现。

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## Part 1 The Criticism of Traditional Language

"Theories Based on Traditional Language Most Likely Do Not Reflect Reality, But Are Only a Game of Classification and Definition"

## 1.1.The Limitations and Paradoxes of Language, the Inevitability of Problems and Counterexamples

Language is the irreplaceable means by which humans record, preserve, and disseminate concrete thoughts. As soon as language is used, classification and definition inevitably begin simultaneously. When engaging in classification or definition (using language), countless paradoxes, problems, and counterexamples that have already been discovered or remain undiscovered arise at the same time. To understand a classification or definition, we rely on other classifications and definitions. Once we delve deeply into this process, it ultimately continues indefinitely (infinite recursion/circular definition/circular reasoning/self-reference).

This is akin to a classic paradox: "This statement is false."

## 1.2. The Accelerating Expansion of Classification and Definition Issues

Refining classifications and initiating new definitions are common tactics for masking or circumventing issues. New definitions and classifications will inevitably bring about even more new definitions and classifications, leading to an accelerating expansion of language, much like a growing pile of excrement.

New paradoxes, new problems, and new counterexamples proliferate at an ever-increasing rate, exemplified intuitively by the saying, "the more you know, the more you realize how much you do not know."

## **1.3.The Motivation for the Generation of a "Language Mess"** — Evading Counterexamples

Originally, it was widely accepted that a single counterexample could invalidate a proposition. However, by refining classifications or creating new definitions, the counterexample can seemingly "disappear," making the proposition appear "valid."

Classification or definition will inevitably generate more paradoxes, problems, and counterexamples, many of which are unforeseen.

## 1.4.Theories Based on Traditional Language Most Likely Do Not Reflect Reality, But Are Only a Game of Classification and Definition

Language is merely a vehicle for classification and definition; the existing ideas and knowledge in reality are not confined to classification and definition, nor are they limited to language. Every theoretical system constructed by humans essentially uses classification and definition (language) as

tools to build a complex model. Regardless of the language tool or system used, countless unsolved mysteries (counterexamples) emerge at an accelerating rate as the model develops. Therefore, models based on traditional language most likely do not reflect reality but are only a "game of classification and definition."

## 1.5. The Dilemma of Escaping the Quagmire

"Expression based on the mess of traditional language" makes it difficult to articulate things in a completely new or correct manner.

Historical Burden: Each word and every mode of expression carries its historical context and cultural setting. Even when we attempt to use language to express entirely new ideas or things, these ideas are often pulled back into existing conceptual frameworks. Every word in language bears the weight of past meanings, making it difficult to fully shed the burden of history and accurately describe new things.

Linguistic Inertia: The use of language has inertia. We rely on existing vocabulary and concepts to express our thoughts, and these words and concepts are often based on past experiences and classification systems. Even when we try to create new vocabulary or concepts, the inertia of the language system tends to pull these new terms into the existing semantic network, causing them to be quickly "assimilated" or "framed" within it.

## Part 2 Extended Language

"Language and Reality Are Never Equivalent"

## 2.1. The Definition of Broad Language and Its Superficial Understanding

People repeatedly engage in the cycle of "perceiving the world, recognizing language, and then interpreting language" day and night. Music, composed of pleasant and terrifying sound waves, can also evoke resonance in people. Videos and images without text or speech can convey a great deal of meaning. For the sake of discussion, let's refer to music, images, and videos as "extended language." When we look away from the screen, does the colorful world we see through our eyes also constitute a form of "extended language"? I believe it does. What we see through our eyes is not the real world. Language is the spokesperson for this world. The universal consensus across species that stepping on a nail causes discomfort and intense pain is one piece of evidence for the existence of extended language.

Definition: Extended Language is the comprehensive set of results obtained from the parsing of all neural signals that emerge from various sensory receptors (including but not limited to photoreceptors, cochlea, cochlear implants, peripheral receptors, etc.) by neural organs (including but not limited to the human brain), and is not the neural signals themselves.

According to this definition, Extended Language not only includes traditional forms of language (i.e., communication through symbols, texts, and speech) but also encompasses music, images, videos, and even the entire world we perceive through our senses. All these perceptions and experiences can be seen as the brain's "translation" or "decoding" of external signals. Therefore, they are essentially the brain's interpretation of the external world, rather than the external world itself.

This perspective emphasizes the gap between perception and the real world. What we receive through our senses, such as our eyes and ears, is not the real world but a "version" or "interpretation" processed by the brain. This interpretative process can be seen as a form of "translation," similar to the function of language. Therefore, in a certain sense, Extended Language serves as "the spokesperson of the world."

The Constructive Nature of Perception: Research in modern neuroscience and cognitive science indicates that our brains do not passively receive signals from the external world but actively process, interpret, and construct them. For example, vision is not a direct reflection of external objects but a subjective image constructed by the brain based on information such as light, color, shape, and motion. Therefore, the world we see is actually a "virtual reality" constructed by the brain based on external signals.

The Function of Language: Traditional language serves to communicate thoughts, experiences, and information through a symbolic system. Within the framework of Extended Language, the perceptual system itself can also be viewed as a form of "language," as it similarly converts external signals into "information" that the brain can understand. Thus, the perceptual system and the traditional language system share fundamental similarities: both transform external stimuli into "symbols" or

"signals" that the brain can process.

The Spokesperson of the World: This perspective can be understood as viewing Extended Language as the "spokesperson" or "translation" of the external world by the brain. We cannot directly access the essence of the external world but can only "experience" it through the brain's interpretation of sensory signals. Therefore, Extended Language is not the real world itself but the brain's interpretation and construction of the world.

The Subjectivity of Perception: The signals we receive through our senses are not equivalent to the external world itself. Our brain processes and interprets these signals through complex neural networks, ultimately constructing the "world" that we experience. This experience is subjective, being the brain's translation or interpretation of external signals. Therefore, the perceived world can be seen as a form of Extended Language—it is the brain's "translation" of the external world, not a direct reflection of it.

The Symbolization of Perception: The perceptual system transforms external physical signals (such as light, sound, and touch) into "symbols" or "signals" that the brain can understand. These symbol systems share similarities with the symbol systems of traditional language: both convey information through specific rules and structures. For example, the visual system constructs perceptions of color, shape, and motion by analyzing the wavelength and intensity of light, which functions similarly to the vocabulary and grammatical structures in language.

Therefore, the world we see through our eyes can be considered a part of Extended Language, as it is the result of the brain's process of symbolizing and interpreting the external world.

## 2.2.Traditional Language Cannot Define Extended Language — Taking the Ship of Theseus Problem as an Example

## 2.2.1.The Static Nature of Traditional Language and the Dynamic Nature of Extended Language

The Traditional Language System is relatively static. It describes things using fixed symbols, definitions, and classifications. For example, we use the word "ship" to refer to a specific object. However, things in reality are dynamic and changing, especially those like the Ship of Theseus, which undergo continuous changes over time. In traditional language, we must decide: when all the parts of the ship have been replaced, is it still the same ship? This becomes a binary choice (yes or no) within the framework of traditional language.

However, Extended Language—what we perceive through our senses and the brain's interpretation—is dynamic and continuous. The ship we perceive is not a static symbol but a holistic experience that changes over time. Even as the ship's components are gradually replaced, our perception and experience may still regard it as the "same ship," because at the level of Extended Language, we are more concerned with overall continuity and function rather than each detail's change.

Thus, the Ship of Theseus paradox reveals the limitations of traditional language: it fails to adequately capture the dynamic changes and continuity of things as perceived in Extended Language. Traditional language tends to categorize things into fixed classes, whereas Extended Language focuses more on the wholeness and continuity of things during their transformation processes.

## 2.2.2.The Classification of Traditional Language and the Ambiguity of Extended Language

Traditional language relies on clear classifications and definitions. For example, traditional language requires us to define what a "ship" is, and as its parts are gradually replaced, we must decide whether the ship still meets the definition of a "ship." This classification system is discrete and binary: a ship is either the original ship or it is not.

However, the experience of Extended Language is often fuzzy and continuous. For example, when we perceive a ship through our vision or touch, we do not suddenly feel that it has become a different ship at some point. Even if all the parts are replaced, our experience may remain consistent, because our perception of things depends not only on their physical composition but also on multiple dimensions such as their function, purpose, and appearance.

Therefore, the Ship of Theseus problem highlights the limitations of traditional language in handling ambiguity and continuity. Traditional language demands clear classifications, whereas Extended Language allows for fuzzy, gradual experiences. Traditional language struggles to easily address issues of "partial replacement" or "gradual change," while Extended Language can operate within these ambiguous boundaries.

## 2.2.3.The Identity of Traditional Language and the Multidimensionality of Extended Language

Traditional language often attempts to maintain the "identity" of things through definitions. In the case of the Ship of Theseus, traditional language requires us to answer the question, "Is this still the same ship?" However, the experience of Extended Language is multidimensional: we do not define the identity of a ship solely through its physical components. Instead, we can define it through multiple dimensions, including its function, history, and emotional connections.

For example, even if all the parts of the ship are replaced, we might still consider it the "same ship" because it retains the same function or emotional significance in our experience. In other words, Extended Language allows us to understand identity across multiple dimensions, whereas traditional language tends to define identity through a single, physical dimension.

Therefore, the Ship of Theseus problem reveals the limitations of traditional language in handling multidimensional identity. Traditional language attempts to resolve identity issues through a single definition, while Extended Language can address identity across multiple dimensions simultaneously.

## 2.2.4.The Dilemma of Traditional Language Being Unable to Fully Define Extended Language

Through the Ship of Theseus paradox, we can see the dilemma that traditional language faces when attempting to define Extended Language. The symbol system of traditional language is limited and static, whereas the experience of Extended Language is infinite and dynamic. Traditional language tries to describe the experience of Extended Language using fixed classifications and definitions, but such descriptions are often partial and incomplete.

The Simplifying Nature of Language: Traditional language is inherently a simplifying tool. It simplifies and abstracts complex realities through symbols and definitions. However, the experience of Extended Language is far more complex than what traditional language can describe. The signals we receive through our senses and the brain's interpretation of these signals form rich, multidimensional experiences, of which traditional language can only capture a part.

The Limitations of Language: The Ship of Theseus paradox illustrates the limitations of traditional language in handling dynamic change, ambiguity, and multidimensional identity. Traditional language demands clear classifications and definitions, whereas the experience of Extended Language is often continuous, ambiguous, and multidimensional. Therefore, traditional language cannot fully define or describe the richness and complexity of Extended Language.

## 2.2.5.Extended Language and the Extension of Philosophical Thought

Linking the Ship of Theseus problem with the concept of Extended Language actually reveals a broader philosophical issue: how do we understand and describe infinitely complex experiences (Extended Language) through a limited symbol system (traditional language)?

The Constructive Nature of Language: Traditional Language is not a direct reflection of reality but a construction. We categorize, define, and describe the world through language, yet this description inevitably carries elements of simplification and abstraction. Therefore, Traditional Language can be seen as a "translation" or "reconstruction" of Extended Language experiences, rather than a direct representation of them.

The Misalignment Between Language and Reality: The experience of Extended Language is subjective, continuous, and multidimensional, whereas the description of Traditional Language is objective, discrete, and unidimensional. This misalignment gives rise to many philosophical issues, such as identity, change, and ambiguity. The paradox of Theseus' ship is a typical manifestation of this misalignment: we attempt to answer a question about Extended Language experience using Traditional Language, but such attempts often lead to paradoxes or dilemmas.

The problem of Theseus' ship can be seen as a classic case regarding the inability of Traditional Language to adequately define Extended Language. Traditional Language describes the world through symbols and definitions, but it faces limitations when dealing with dynamic changes, ambiguity, and multidimensional identity. Extended Language, on the other hand, is the world as

perceived and interpreted by our senses and brain; it is dynamic, continuous, and multidimensional.

Traditional Language attempts to describe the experience of Extended Language through simplification and abstraction, but such descriptions are often incomplete and inadequate. The paradox of Theseus' ship reveals the limitations of Traditional Language when confronted with Extended Language, and also provokes deep philosophical reflections on the relationship between language and reality.

## 2.3.Extended Language Transcends Time and Space, Rather Than Being an Individual's Instantaneous Experience

Due to each person's unique physical position (latitude, longitude, altitude), body posture (head orientation, eye angle), focus of attention (point of focus), and current context (such as meeting content), every individual's Extended Language must necessarily be unique. Just as we cannot see what is behind us, this indicates that individual perception is partial and limited.

Therefore, the key point I want to express is that Extended Language transcends individual subjective experiences and represents a broader concept that goes beyond time and space. This means that Extended Language should not be confined to the individual brain's interpretation of sensory signals but should encompass a more comprehensive, trans-individual "language" system. Such a system might be a broader representation or structure of the real world, of which individual experiences are merely "samples" or "slices."

We can divide Extended Language into the following two levels of understanding:

Individual Level of Extended Language: As we discussed earlier, this refers to the subjective experiences formed by the signals received through an individual's sensory systems and processed by the brain. This level of Extended Language is partial, limited, and dynamic, influenced by factors such as the individual's physical position, sensory limitations, and focus of attention. Each person's experience of Extended Language is unique because their perceptual conditions and backgrounds differ.

Trans-Individual or Transcendent Level of Extended Language: Similar to how stepping on a nail would cause a similar sensation of pain in any individual regardless of time and place, Extended Language should transcend individual subjective experiences to become a more global structure. This level of Extended Language can be understood as a "holographic" description of the real world, encompassing all possible perceptions and experiences. An individual's experience of Extended Language is just a "slice" or "partial projection" of this transcendent, time-and-space-independent Extended Language.

To understand the transcendent level of Extended Language, we can view it as a global representation of information. This global representation encompasses all possible perceptions and experiences, not just the localized experiences of an individual at a particular moment. It serves as a comprehensive framework that includes the full spectrum of potential sensory inputs and experiential

states, from which individual experiences are derived as specific instances or subsets.

Global Information Field: The transcendent level of Extended Language can be conceptualized as an "information field," which contains all possible dimensions of perception and modes of experience. This field not only encompasses the world we currently perceive (such as visual and auditory sensory inputs) but also includes aspects that we cannot directly perceive (such as what is behind us or the experiences of others). The information field is global and complete, while individual perception is merely a subset of information "extracted" from this global information field.

Individual Local Slices: Each individual's perception and experience can be seen as a local perspective "sliced" from this global information field. Due to factors such as physical position, sensory limitations, and focus of attention, each person can only perceive a small part of the global information field. This is akin to a vast hologram, where each person can only view a portion from a specific angle, unable to see the whole picture.

Transcendence of Time and Space: The transcendent level of Extended Language means that it is not confined to a specific moment or location but encompasses information from all times and places. It includes not only current perceptions but also past, future, and other possible perceptual experiences. Individual perception is just an instantaneous slice from this global information field, while Extended Language itself transcends time and space.

## 2.4. Extended Language Can Transcend More Boundaries

"Extended Language" not only transcends the perceptual limitations of individuals but also extends beyond the boundaries of illness and health, age differences, and even species.

## 2.4.1.Psychosis and Health

Between health and illness, especially in mental health, an individual's perceptions and experiences can undergo significant changes. For example, individuals with mental illnesses may experience hallucinations, delusions, and other perceptions that differ from those of healthy individuals. However, the universality of Extended Language implies that it encompasses not only the perceptual experiences of healthy individuals but also those experienced in states of illness.

Perceptions of Individuals with Mental Illness: The perceptual experiences of individuals with mental illness may differ from those of the general population, but this does not mean that their experiences fall outside the scope of Extended Language. The universality of Extended Language means that it can encompass all forms of perception, regardless of whether these perceptions are considered "normal" or "healthy" by conventional standards. These experiences are still interpretations of external information, albeit through a different cognitive lens.

Diversity of Illness and the Inclusivity of Extended Language: The concept of Extended Language transcends an individual's physiological or psychological state, encompassing all possible modes of perception. This means that perceptions in both healthy and diseased states are part of Extended

Language. Hallucinations or delusions experienced by individuals with mental illness can be seen as special ways in which the brain processes external information. Although these processing methods differ from conventional cognition, they still fall within the scope of Extended Language.

## 2.4.2.Age Differences

Extended Language can transcend age differences, including the varying perceptual experiences of newborns and the elderly. A newborn's brain is not yet fully developed, while an elderly person may experience a decline in perceptual abilities. However, the universality of Extended Language means that it can encompass the perceptual experiences of all age groups.

Perceptions of Newborns: A newborn's brain is still developing, and their mode of perception is significantly different from that of adults. Even though their perceptions may be more primitive and blurry, this does not mean that their perceptions fall outside the scope of Extended Language.

Perceptions of the Elderly: As people age, their perceptual abilities may gradually decline, including the deterioration of vision, hearing, and cognitive functions. However, the universality of Extended Language means that even with diminished perceptual capabilities, the experiences of the elderly remain part of Extended Language. Extended Language does not depend on the strength of an individual's perceptual abilities but encompasses all possible modes of perception.

Therefore, Extended Language can transcend age differences, encompassing all perceptual experiences from newborns to the elderly.

## 2.4.3. Transcending Species Boundaries

Different species have vastly different sensory systems. For example, bats use ultrasonic waves for echolocation, dogs have a sense of smell far superior to humans, and birds can perceive the Earth's magnetic field. These sensory methods are drastically different from human sensory methods; however, if we define Extended Language as a global representation that transcends individual perception, then these sensory methods of different species can all be considered part of Extended Language.

Cross-species Extended Language: The universality of Extended Language means that it can encompass the perceptual experiences of all species. Whether it is the echolocation of bats or the olfactory system of dogs, these sensory methods are ways in which the brain or nervous system interprets external information. Therefore, Extended Language is not exclusive to humans but is cross-species. The sensory methods of different species are merely different "slices" of Extended Language, extracting different dimensions from the global information field to construct their own perceptual experiences.

Perceptual Commonalities Across Species: Despite the significant differences in sensory methods among species, there are commonalities to some extent. All sensory systems are forms of interpreting external information, whether through light, sound, touch, or other senses. Therefore, Extended Language can be seen as a kind of "language" that spans species, encompassing all possible sensory methods, with different species' sensory systems extracting different information from it.

## 2.5. The Brain-in-a-Vat Problem

Under the framework of Extended Language, the Brain-in-a-Vat problem can be explained and expanded from several perspectives. The concept of Extended Language extends language to include multi-dimensional symbolic systems that encompass perception, emotion, memory, cultural symbols, and more, transcending Traditional Language. Thus, the framework of Extended Language can offer new insights into the Brain-in-a-Vat problem, especially when exploring the relationships between perception, symbolic experience, consciousness, and reality.

## 2.5.1. The Perception and Symbolization Experience of Extended Language

Within the framework of Extended Language, perception itself is a process of symbolization. Physical signals from the external world (such as light, sound, touch, etc.) enter the brain through sensory systems, are processed by the brain, and are symbolized into meaningful experiences. Therefore, Extended Language is not just a system of communication involving symbols, words, and language; it also includes the symbolization process of all perceptual signals.

In the thought experiment of the "Brain-in-a-Vat," even though the brain no longer has direct contact with the real physical world, it still receives "perceptual experiences" through signals generated by a computer. These signals are processed by the brain and symbolized into visual, auditory, tactile, and other experiences. Therefore, from the perspective of Extended Language, the Brain-in-a-Vat is still "experiencing" Extended Language, as the brain continues to process perceptual signals and symbolize them into meaningful experiences.

The Symbolization Process of Perception: Under the framework of Extended Language, perception is not a direct reflection of the external world but rather a symbolized interpretation by the brain of sensory signals. Therefore, the perceptual experiences of the Brain-in-a-Vat, although simulated by a computer, are still symbolized experiences. The brain does not distinguish whether the source of these signals is real; it processes these signals and converts them into a meaningful symbolic system.

The symbolization process of Extended Language does not depend on the authenticity of the external physical world but rather on how the brain processes the signals.

## 2.5.2. The Reality and Virtuality of Extended Language

A core perspective of Extended Language is that perception, emotion, memory, and more are all symbolic processes by which the brain interprets external information. Therefore, under the framework of Extended Language, "reality" itself is a symbolic construction. We receive signals from the external world through our sensory systems and symbolize them into meaningful experiences. Thus, reality is not the physical world that directly exists before us, but rather an experience constructed through symbolic systems.

The "Virtual Reality" of the Brain-in-a-Vat: In the scenario of the Brain-in-a-Vat, even though the signals received by the brain are false, the brain still symbolizes these signals into a "reality." Therefore, from the perspective of Extended Language, the experience of the Brain-in-a-Vat is no more "false" than our everyday experiences. Whether the signals are real physical signals received through the senses or virtual signals generated by a computer, the brain symbolizes these signals into meaningful experiences. Thus, the distinction between reality and virtuality becomes blurred within the framework of Extended Language. Reality is our symbolized experience, not the external world itself.

The Constructive Nature of Reality: Extended Language emphasizes the constructive nature of perception and reality. Whether it is the experience of the Brain-in-a-Vat or the everyday experiences of ordinary humans, reality is constructed through symbolic systems. The Brain-in-a-Vat problem reveals our dependence on reality: we cannot directly access the "thing-in-itself" (a term from Kant referring to the essence of the world); we can only experience the world through the reality that is symbolized by our perceptual systems. Therefore, within the framework of Extended Language, the experience of the Brain-in-a-Vat is still a form of "reality," with its symbolization process relying on virtual signals rather than physical signals.

## 2.5.3. The Consciousness and Subjectivity of Extended Language

Under the framework of Extended Language, consciousness is the primary experiencer of Extended Language. Consciousness receives external signals through sensory systems and symbolizes them into meaningful experiences. In the scenario of the Brain-in-a-Vat, even though the brain is isolated in a virtual environment, it still possesses consciousness and symbolizes the signals generated by the computer into virtual experiences.

The Symbolizing Function of Consciousness: A core perspective of Extended Language is that consciousness is not just passively receiving information; it actively participates in the symbolization process. In the case of the Brain-in-a-Vat, the consciousness, while receiving virtual signals, still symbolizes these signals into meaningful experiences. Therefore, the symbolizing function of consciousness does not depend on the authenticity of the signals but rather on their processability. As long as the brain can process these signals, consciousness will symbolize them into "reality."

The Construction of Subjectivity: Extended Language also addresses the issue of subjectivity. The thought experiment of the Brain-in-a-Vat raises questions about subjectivity and the self: if all the experiences received by the brain are false, is the existence of the "I" also false? Within the framework of Extended Language, subjectivity itself is constructed through symbolic systems. Regardless of whether the brain receives virtual signals or physical signals, subjectivity is constructed through the symbolization of perceptions and experiences. Therefore, the subjectivity of the Brain-in-a-Vat does not disappear due to the virtual nature of the signals; subjectivity remains a product of the brain's symbolized experiences.

## 2.5.4. The Epistemological Significance of Extended Language and the Brain-in-a-Vat Problem

The framework of Extended Language provides a new epistemological perspective on the Brain-in-a-Vat problem. This problem raises fundamental questions about how we know that the world we inhabit is real. From the perspective of Extended Language, regardless of whether the external world is real, perception and experience are themselves symbolic constructions. Therefore, the reality of the external world is not a necessary condition for our perceptual experiences.

The Separation of Perception and Reality: The perspective of Extended Language is that perception and the symbolization process do not depend on the authenticity of the external world. Even if we are in a virtual environment, our perceptual experiences are still "real" because they are constructed through symbolic systems. The Brain-in-a-Vat problem highlights the separation between perception and reality: we cannot directly access the real world; we can only experience a symbolized reality through symbolic systems.

The Relativity of Epistemology: The perspective of Extended Language also indicates the relativity of epistemology: our understanding of the world is always mediated through symbolic systems, whether these systems are based on physical signals or virtual signals. The Brain-in-a-Vat problem further underscores this point: even if we live in a virtual world, our knowledge is still acquired through symbolized experiences. Therefore, within the framework of Extended Language, the central epistemological question is not "whether the world is real," but "how we construct our understanding of the world through symbolic systems."

Regardless of whether the signals originate from a real physical environment or a virtual one generated by a computer, the brain processes them and symbolizes them into meaningful experiences.

## 2.6.A Slice of Extended Language Is Not Equivalent to Reality

Just as one cannot say that things unseen from behind do not exist, reality is not defined by an individual's slice of Extended Language at a certain time and place, let alone the fact that an individual's slice of Extended Language is very prone to bias. The following are three examples to help understand how an individual's slice of Extended Language can be biased.

## Visual Illusions

Visual illusions are one of the most common examples. In visual illusions, our brain incorrectly symbolizes external visual signals, causing what we see to be inconsistent with the actual physical reality. For example, in the M ü ller-Lyer illusion, two lines of equal length appear to be of different lengths due to the addition of different arrowheads.

#### Hallucinations

Hallucinations refer to perceptual experiences that an individual has in the absence of external stimuli. For example, individuals with mental illness may hear voices or see objects that do not exist. In such cases, hallucinations are symbolic experiences generated by the brain itself, entirely

## independent of the external physical reality

In hallucinations, individuals mistake the symbolically generated experiences (i.e., products of Extended Language) for objective external realities. This confusion indicates that the symbolization process of Extended Language does not always rely on external physical stimuli, and we often misinterpret these symbolized experiences as the real external world.

### Confusion between dreams and waking reality

Dreams are another typical example that illustrates the confusion between Extended Language and so-called reality. In dreams, our brain generates a virtual "reality" through the symbolization process, even though this "reality" is unrelated to the physical world experienced during wakefulness.

In dreams, we are completely immersed in the symbolized experiences generated by the brain, which seem "real" within the dream. However, these experiences are actually the result of symbolization produced by the brain in the absence of external stimuli. Upon waking, we realize that these experiences are not part of the actual physical reality, but during the dream, we often mistake these symbolized experiences for "reality."

## 2.7. Extended Language Is Not Equivalent to Reality?

## 2.7.1.The Transcendence of Reality

Reality transcends individuals, species, and spacetime: it is a holistic, complex, and vast existence. Reality is not merely the partial information we experience through our sensory and symbolic systems but is a complete, overarching existence. Reality does not depend on our perception or symbolization processes.

The independence of reality: Reality does not depend on any individual's perception or symbolization processes; it is an existence independent of individuals and species. Therefore, reality is not the "sliced" experience we construct through our symbolic systems but is a complete, unrepresentable whole.

The complexity of reality: Reality is far more complex and extensive than Extended Language. Even though Extended Language encompasses multi-dimensional symbolization processes including perception, emotion, and memory, it still cannot fully capture the complexity of reality. Reality includes not only the parts we can perceive but also those we cannot perceive, and even dimensions that surpass our capacity for symbolization.

## 2.7.2. The Representational Nature of Extended Language

Although Extended Language is broader than Traditional Language, encompassing multi-dimensional symbolized experiences, it remains a representation or mapping of reality.

Extended Language symbolizes certain dimensions of reality into meaningful experiences through sensory systems, symbolic systems, and cultural symbols, but it cannot be equated with reality itself.

The limitations of symbolization: Although Extended Language is more extensive than Traditional Language, it still relies on symbolic systems to process and express information. Symbolic systems are inherently simplifications and abstractions of reality, and therefore, Extended Language cannot fully capture the entire complexity of reality. Some dimensions of reality may be beyond our capacity for symbolization, and Extended Language can only symbolize certain aspects of reality, not its entirety.

The locality of representation: The symbolization process of Extended Language can only capture certain dimensions or slices of reality. Although Extended Language transcends individual limitations and encompasses symbolization processes across species and spacetime, it remains a kind of "sliced" representation of reality, rather than a complete reproduction of it.