

# Holonic (program) language

Tom Rochette <tom.rochette@coreteks.org>

November 2, 2024 — 36c8eb68

## 0.1 Context

## 0.2 Learned in this study

## 0.3 Things to explore

# 1 Overview

As the seed AI begin life, it will have to use the very lowest language available to it. As its ability to build more and more complex elements increases, so will its language evolve. Similarly to programming languages, the seed AI will most likely go from an assembly level of code to a more high level language such as C or C++, then possibly move on to more dynamic languages such as Python, Ruby or PHP to finally build higher and higher languages which can more succinctly express ideas using lower level constructs.

Given that many programming languages already exist, it would be valuable, both to us and the seed AI, that the seed AI be able to use these languages. For us, it is beneficial in the sense that it would allow us to use the seed AI to potentially produce code. For the seed AI, it would mean that existing code could be analyzed in order to extract meaningful new functionality. Furthermore, it's generally more effective to copy existing designs than start from scratch.

### 1.1 Binary code (1GL)

### 1.2 Machine code (1GL)

### 1.3 Assembly language (2GL)

### 1.4 Middle/High level languages (3GL)

### 1.5 Scripting/Interpreted languages (4GL)

### 1.6 Constraint-based languages

### 1.7 Natural languages (?GL)

## 2 See also

## 3 References