

# Multi-Level Modeling with Melanee

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# References

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- [www.melanee.org](http://www.melanee.org)
- Colin Atkinson, Ralph Gerbig Harmonizing Textual and Graphical Visualizations of Domain Specific Models 2013.
- Colin Atkinson, Ralph Gerbig Melanie Multi-level Modeling and Ontology Engineering Environment
- Colin Atkinson, Thoman Kuhne Rearchitecting the UML Infrastructure 2002.

# Overview

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- Melanie as textual and graphical domain specific language tool
- Components
- Tool
- Features

# Melanie as textual and graphical domain specific language tool

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## Visual-Based

- MetaEdit+
- Poseidon for DSLs
- Microsoft Visual Studio for DSLs
- AToM3/AToMPM

## Text+Graph

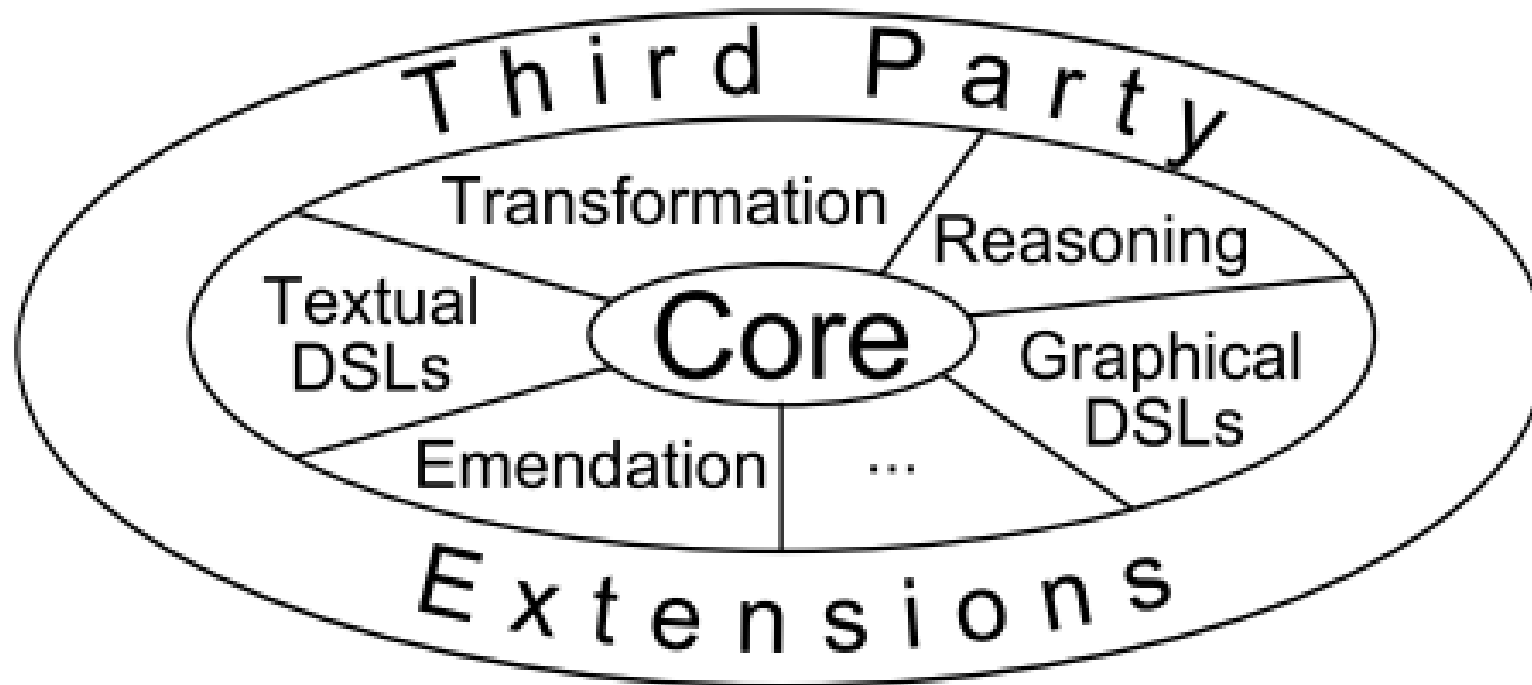
- Melanie

## Text-Based

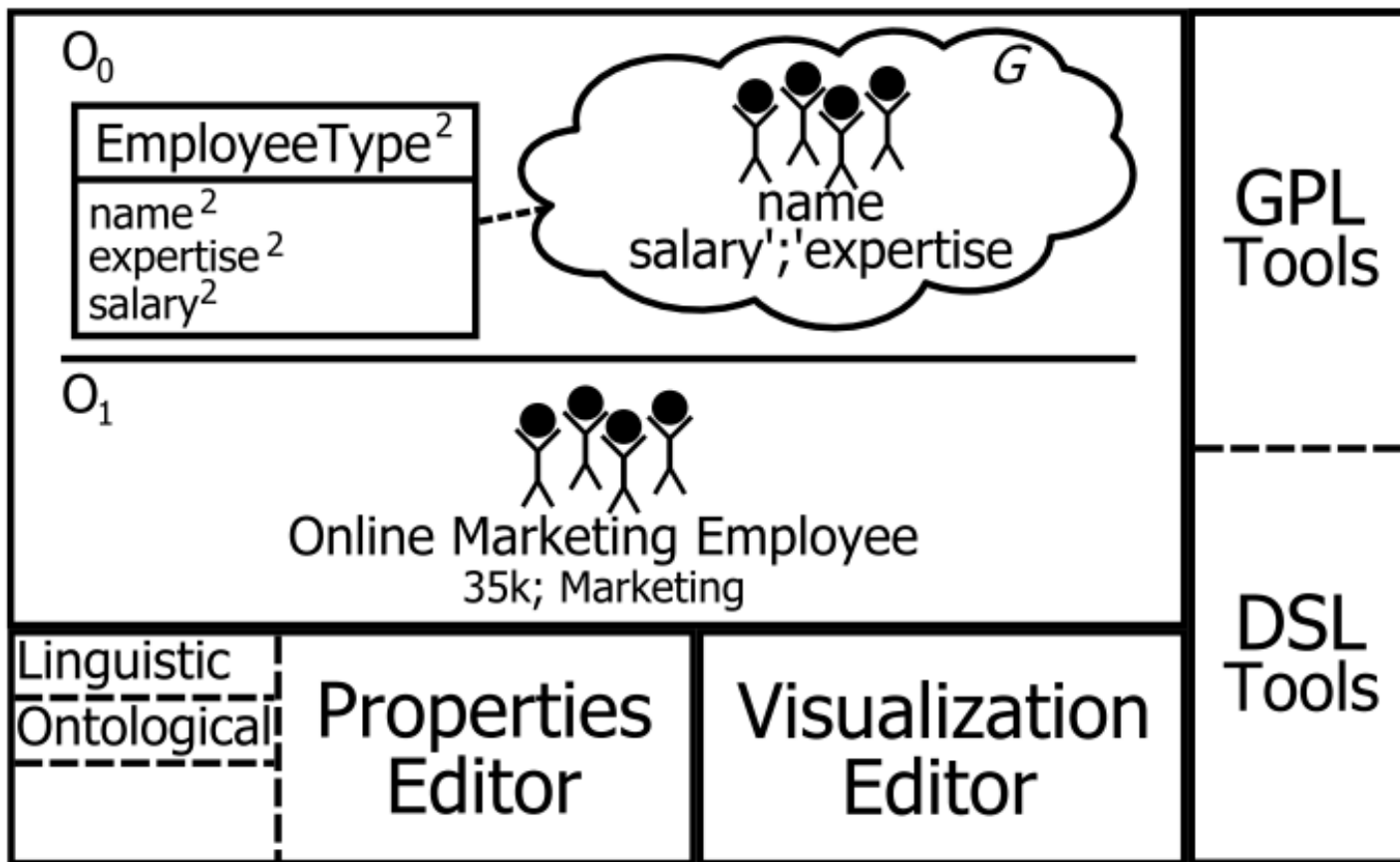
- XText
- JetBrains MPS
- Spoofox
- MetaDepth
- EMFText

# Components

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# Tool



# Tool

The screenshot displays the Melanee IDE interface. The main workspace shows a domain model diagram with the following components:

- Classes:**
  - CarType**: color:String, length:Integer, width:Integer
  - WheelType**: width:Integer
  - InformationType**: quality:Integer
  - SportsCar**: length:Integer, color:String, width:Integer
  - BroadWheel**: width:Integer
  - BroadWheelInformation**: quality:Integer
- Relationships:**
  - has**: SportsCar (1) to WheelType (\*)
  - is**: WheelType (1) to InformationType (\*)
  - is**: BroadWheel (1) to BroadWheelInformation (\*)
- Instances:**
  - MyCar**: width:Integer=90, color:String=red, length:Integer=120
  - rrota1**: BroadWheel, width:Integer=10
  - rrota1Info**: quality:Integer=60

The Properties table for **SportsCar** is shown below:

Linguistic	Property	Value
Ontological	color	red
Ontological	length	120
Visualization	width	90

# Features

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Two [or more] Dimensional Modeling Framework

CLAss oBJECT

Potency (Deep Instantantation)





Thank you!

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