Table 2.1.: Comparison of ontological commitments for each foundational ontology.

Term (and very brief descriptions of its meaning)	DOLCE	BFO	GFO	SUMO	YAMATO	GIST
Universals vs. Particulars (Universals can have instances, particulars do not)	Particulars	Universals	Universals, particulars	Universals, particulars	Particulars	Unclear
Descriptive vs. Realist (Descriptive: represent the entities underlying natural language and human common-sense; Realist: represent the world as is)	Descriptive	Realist	Descriptive, realist	Descriptive	Realist	Descriptive, realist
Multiplicative vs. Reductionist (Multiplicative: different objects can be co-located at the same time; Reductionist: only one object may be located at the same region at one time)	Multiplicative	Reductionist	Unclear	Multiplicative	Multiplicative	Multiplicative
Endurantism vs. Perdurantism (Endurantism: an object is wholly present at all times; Perdurantism: an object has temporal parts)	Endurantism and perdurantism	Endurantism and perdurantism	Endurantism and perdurantism	Endurantism and perdurantism	Endurantism and perdurantism	Endurantism and perdurantism
Actualism vs. Possibilism (everything that exists in the ontology is real vs. objects are allowed independent of their actual existence)	Possibilism	Actualism	Unclear	Unclear	Actualism	Possibilism
Eternalist stance (the past, present, future exist)	Eternalist	Eternalist	Eternalist	Eternalist	Non-eternalist	Eternalist
Concrete & Abstract entities (Concrete: entities that exist in space and time; Abstract: entities that exist neither in space nor time)	Concrete, abstract	Concrete	Concrete, abstract	Concrete, abstract	Concrete, abstract	Concrete, abstract
Mereology (theory of parts)	GEM	Own mereology	Own mereology	Own mereology	Own mereology	Own mereology
Temporal aspects (e.g., time-indexed axioms)	Provided	Not provided	Provided	Provided	Provided	Provided
Granularity (different levels of detail contained in an ontology)	High level	Sensitive to granularity	Unclear	Unclear	High level	High level
Properties and values ('attribute'; e.g., the colour of an apple)	Included	Not included	Included	Included	Included	Included
Model for space and time (Consists of time and space regions and boundaries)	Not included	Not included	Included	Not included	Not included	Not included
One-layered vs. Three-layered architecture (a basic level only; an abstract top level, abstract core level and basic level)	One-layered	One-layered	Three-layered architecture	One-layered	One-layered	One-layered
Situations and situoids (Situation: an aggregate of facts that can be comprehended as a whole and satisfies certain conditions of unity; Situoid: is a part of the world that is a comprehensible whole and can exist independently)	Not included	Not included	Included	Not included	Not included	Not included

Table 2.2.: Comparison of representation languages and software engineering properties for each foundational ontology.

Term	DOLCE	BFO	GFO	SUMO	YAMATO	GIST
Representation Languages						
OWL DL	Yes	Yes	Yes	Yes	Yes	Yes
OWL 2 DL	Yes	Yes	Yes	-	-	Yes
OWL 2 EL	Yes	Yes	Yes	-	-	-
OWL 2 QL	Yes	Yes	Yes	-	-	-
OWL 2 RL	Yes	Yes	Yes	-	-	-
FOL	Yes	Yes	-	-	-	-
DAML	Yes	-	-	-	-	-
KIF	Yes	-	-	-	-	-
SUO-KIF	-	-	-	Yes	-	-
OBO	-	Yes	-	-	-	-
HOZO	-	-	-	-	Yes	-
Software engineering properties						
Number of classes in ontology	37	39	78	630	2311	105
Number of object properties in ontology	70	0	67	217	829	128
Number of axioms in ontology	349	95	323	1894	10790	997
Modular: Lighter/more-detailed versions	Yes	No	Yes	Yes	No	Yes (for clients, not freely available)
Modular: Separate branches for 3D and 4D entities	Yes	Yes	No	Yes	Yes	No
Modular: Functions and roles	No	No	Yes	No	Yes	No
Modular: Built-in domain support	Yes	No	No	Yes	Yes	No
Modular: OWL 2 profiles	Yes	Yes	Yes	No	No	No
Registerable on the OBO Foundry	No	Yes	No	No	No	No
Freely available	Yes	Yes	Yes	Yes	Yes	Yes
Actively maintained	Yes	Yes	Yes	Yes	Yes	Yes