



GST 46 – Concrete and Abstract Entities

Formal Description

Entities may be classified as concrete or abstract. Concrete entities are identifiable portions of physical reality that are normally instantiated as individual physical objects or processes, such as a tree, a bridge or a person. Abstract entities are identifiable portions of reality that are instantiated through one or more concrete entities sharing common properties, relationships, organisations or processes. Because these instantiations are often distributed, abstract entities do not normally possess a single characteristic physical appearance. The distinction between concrete and abstract entities concerns their mode of physical instantiation rather than their degree of reality. Both form part of reality and both are fundamental to General Systems Theory.

Plain English Explanation

Some entities are immediately recognisable because they have a distinctive physical appearance. A dog, a chair or a bicycle can usually be identified simply by looking at it. Although every example is slightly different, we recognise recurring features that allow us to classify them as belonging to the same general kind of thing. These are concrete entities.

Other entities are not recognised in this way because they have no single physical appearance. Friendship, competition, trust, justice and democracy all exist, but they cannot be identified simply by looking for a particular shape or object. Instead, we recognise them through recurring physical instantiations with common characteristics, relationships, organisations, processes, or patterns of behaviour. Taken together, these instantiations constitute the abstract entity and allow it to be recognised.

The distinction is not that one kind of entity is real and the other imaginary. Both are regarded as parts of reality. The difference lies in how we recognise and represent them. Concrete entities are often recognised by comparing them with a mental picture or prototype. Abstract entities are more commonly recognised by comparing a situation with familiar examples or by understanding the relationships involved.

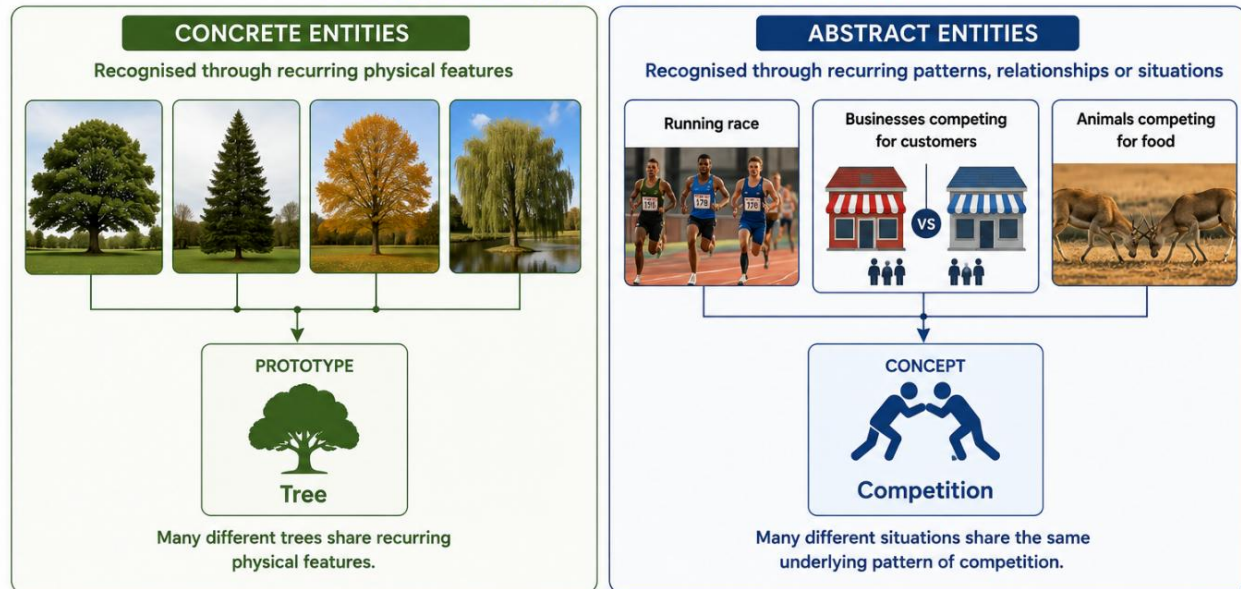
We often create visual representations of abstract entities to help us think about them. A graph represents changing values, a map represents geographical relationships, and a causal network represents interactions between events or processes. These diagrams are not the abstract entities themselves; they are representations that help us understand them.

The distinction between concrete and abstract entities is therefore one of emphasis rather than an absolute division. Some concrete entities are recognised through familiar examples, while some abstract entities gradually acquire widely recognised symbolic or visual forms. The important point is that both kinds of entity are needed if we are to understand and describe the world.



CONCRETE AND ABSTRACT ENTITIES

Entities can be recognised either through recurring physical form
or through recurring patterns, relationships or situations.



KEY POINT

Concrete entities are often recognised through recurring physical form.
Abstract entities are recognised through recurring patterns, relationships or situations.
Both kinds of entities are real and important in General Systems Theory.

Examples

A robin, an eagle and a penguin all look quite different, yet they possess enough recurring physical features for us to recognise them as birds. The concept bird therefore represents a concrete category recognised through recurring physical characteristics.

The abstract entity “competition” has no single physical appearance. A sporting contest, a business tender and an election all look very different, yet we recognise each as an example of competition because they share the same underlying pattern of rival parties seeking the same objective.

Provenance and Links

The distinction between concrete and abstract entities has long been recognised in philosophy and ontology. Aristotle distinguished between individual substances and more general concepts, while modern cognitive psychology has investigated how people recognise categories. Eleanor Rosch's work on prototype theory showed how familiar concrete categories are recognised through recurring features. Jerome Bruner distinguished between iconic and symbolic forms of representation, while later work on exemplars demonstrated how abstract concepts are often recognised through remembered instances rather than typical physical forms. Critical Realism, particularly through the work of Roy Bhaskar, provides the ontological basis for treating both concrete and abstract entities as aspects of reality rather than merely as linguistic constructions.



Practical Exercise

Create two lists containing five examples each. The first should contain concrete entities and the second abstract entities.

For each concrete entity, explain which recurring physical features allow it to be recognised. For each abstract entity, describe two different situations in which it might occur and explain why both are examples of the same underlying concept.

Finally, consider whether there are any entities that are difficult to classify as entirely concrete or entirely abstract. Explain your reasoning.