The underlying trihedral

**Space-based Computing:**
- Shared space for cooperation
- Few synchronous links
- Contractless communication

**Semantic Web:**
- Inference of knowledge from given facts
- Interpretation of the semantics of data
- Interaction on machine-to-machine level

**Ubiquitous Computing:**
- No federated database
- Mobility and weak connectivity
- Prefetching and smart updates

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The combined framework

**Ubiquitous Semantic Spaces:**
- Asynchronous and anonymous communication
- Consolidation of semantic data from heterogeneous sources
- Coordination of applications in weakly connected and computation poor environments
- Improvement of data availability
- Distribution of the space infrastructure
- Flexible integration of devices, sensors and services
- Automated and scalable service composition

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The application field

**Space**

**Storage**

Application

Semantic Web services

Location

Digital Enterprise Research Institute, Ubiquitous Services – http://ubiserv.deri.org