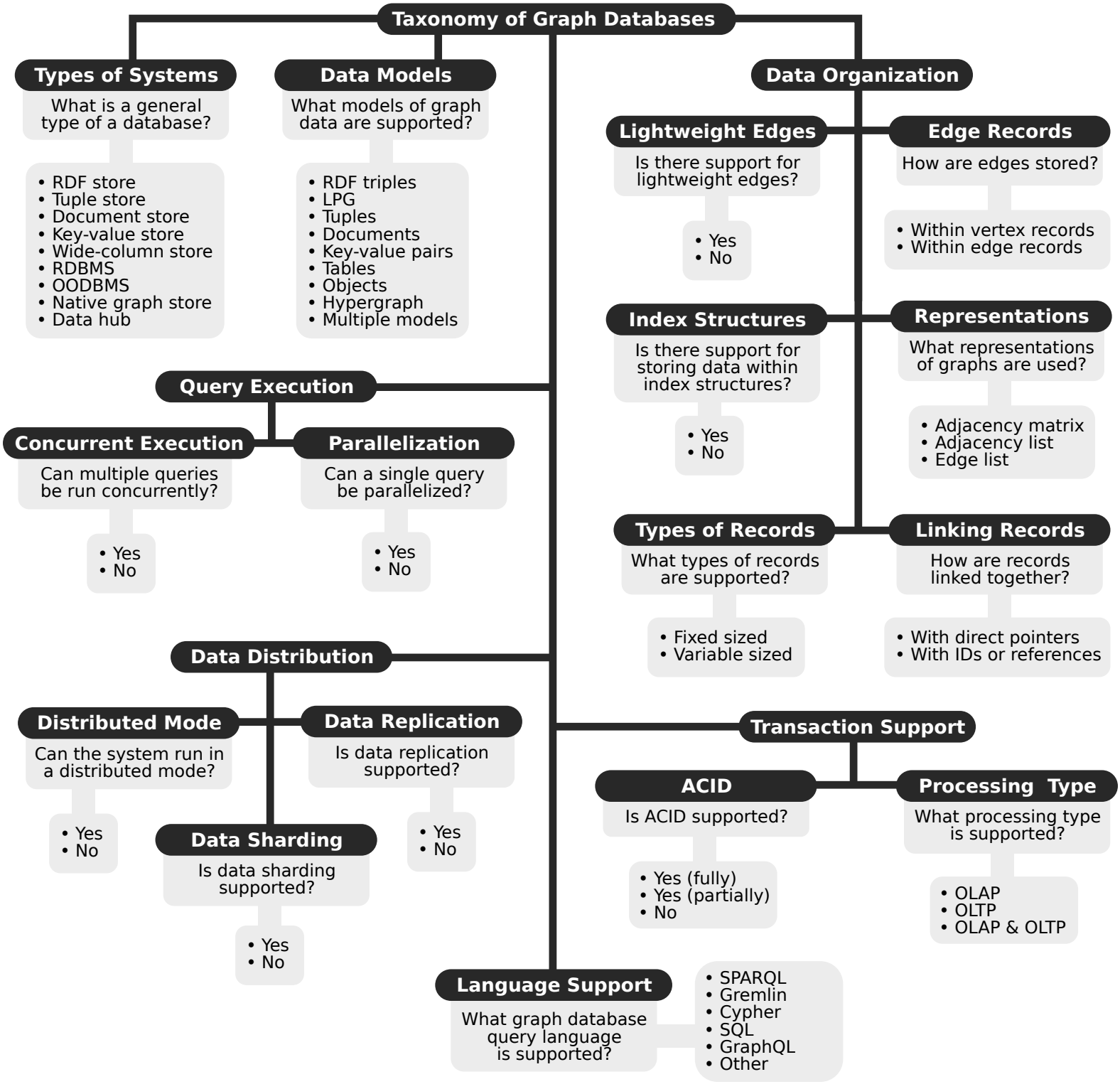
Taxonomy of Graph Databases
Types of Systems
What is a general type of a database?
• RDF store
• Tuple store
• Document store
• Key-value store
• Wide-column store
• RDBMS
• OODBMS
• Native graph store
• Data hub
Data Models
What models of graph data are supported?
• RDF triples
• LPG
• Tuples
• Documents
• Key-value pairs
• Tables
• Objects
• Hypergraph
• Multiple models
Data Organization
Lightweight Edges
Is there support for lightweight edges?
• Yes
• No
Edge Records
How are edges stored?
• Within vertex records
• Within edge records
Index Structures
Is there support for storing data within index structures?
• Yes
• No
Representations
What representations of graphs are used?
• Adjacency matrix
• Adjacency list
• Edge list
Types of Records
What types of records are supported?
• Fixed sized
• Variable sized
Linking Records
How are records linked together?
• With direct pointers
• With IDs or references
Query Execution
Concurrent Execution
Can multiple queries be run concurrently?
• Yes
• No
Parallelization
Can a single query be parallelized?
• Yes
• No
Data Distribution
Distributed Mode
Can the system run in a distributed mode?
• Yes
• No
Data Replication
Is data replication supported?
• Yes
• No
Data Sharding
Is data sharding supported?
• Yes
• No
Transaction Support
ACID
Is ACID supported?
• Yes (fully)
• Yes (partially)
• No
Processing Type
What processing type is supported?
• OLAP
• OLTP
• OLAP & OLTP
Language Support
What graph database query language is supported?
• SPARQL
• Gremlin
• Cypher
• SQL
• GraphQL
• Other