* Ternary Semiotic Mappings
* Ternary Functional Encoding Functional Ternary Mappings Population:
* Ternary Mapping Form:
* Resource : (Resource, Resource);
* Graph Statement:(Node : S, Type : Ctx, Arc : P, Node : O);
* Parse Statements / Inputs.
* Mapping (A, B, C): Populate Contexts. Aggregate / Permutate Contexts recursively (data, schema, behavior layers roles).
* Hierarchy: Sign / Arc : Concept / Type : Object / Node;
* Monads / Lambdas / Functors: Sign, Concept, Object.
* Contextual Traversal Browsing of Resources / Kinds / State. Aggregation of Data, Schema, Behavior Augmentations: Aggregation, Activations, Alignments.
* Behavior:
* Behavior : Sign / Arc. Signs.
* Sign Mapping: (Concept Mapping, Object Mapping);
* Sign Mapping: Ternary Relations for Objects / Concepts Relation Mappings Contexts.
* Graph: Arcs / Signs.
* Schema:
* Schema: Concept / Type. Concepts.
* Concept Mapping: (Sign Mapping, Object Mapping);
* Concept Mapping: Ternary Relations for Object / Signs Relation Mappings Contexts.
* Graph: Concept / Types.
* Data:
* Data: Resource. Node / Object. Objects.
* Object Mapping: (Sign Mapping, Concept Mapping);
* Object Mapping: Ternary Relations for Resource / Resources Relation Mappings Contexts.
* Graph: Nodes / Resources.
* Mappings: CSPOs Resources Sign, Concept, Object Occurrences Mappings Contexts. Context Mappings Matching Sign, Concept, Object Contexts: Occurrences.
* Aggregated Mappings Browsing of Resources, Kinds / State Roles Relation. Functional Aggregation of Data, Schema, Behavior Augmentations: Aggregation, Activations, Alignments.
* Persist Quads. URNs Encoding allowing for HTTP REST HATEOAs / Functional Transforms / Traversal. Signatures (discovery / browse) contextual reactive event driven state APIs.
* Functional: Semiotic Ternary Mappings Layers Roles, Quads Parsing / Ternary Mappings Populations:
* Mappers:
* ObjectMapping (SignMapping : Occurrence, ConceptMapping : Context);
* ConceptMapping (SignMapping : Occurrence, ObjectMapping : Instance);
* SignMapping (ConceptMapping : Context, ObjectMapping : Instance);
* Mappings: Parse Quads. APIs.
* Resource : (URN, Referrer / Context);
* Resource : (Resource, Occurrences);
* Occurrences : Resource;
* Occurrence : Occurrences;
* Occurrences : Dereferenceable reified Resources URN with a set of Occurrence Mappings. Resource Mappings / Graph Statements.
* Occurrence : Mapping Item within a set of Occurrences. Context Occurrence Resource for further Next / Nil lists Occurrence Mappings. Mapping / Graph Items: Resource URNs plus Context.
* Context: Role of Resource in Occurrence Statement.
* Dataflow.
* Facets: Resource for Role in Mappings.
* Role: Kinds / CSPOs.
* Sign Example: Sign Context, Occurrence Resource: Concept Concept Occurrence Resource: Object. Object Occurrence Resource: Sgn. Statements: Multiple Mappings Graph Reification.
* (Peter : Object, Loves : Sign, PeterLoves : Concept);
* (PeterLoves : Concept, Loved : Sign, Mary : Object);
* Encode Layers Quads Mappings: Meta Model / Dimensional / Discrete Relations.
* Ternary Semiotic Mappings
* Ternary Functional Encoding Functional Ternary Mappings Population:
* Ternary Mapping Form:
* Resource : (Resource, Resource);
* Graph Statement:(Node : S, Type : Ctx, Arc : P, Node : O);
* Parse Statements / Inputs.
* Mapping (A, B, C): Populate Contexts. Aggregate / Permutate Contexts recursively (data, schema, behavior layers roles).
* Hierarchy: Sign / Arc : Concept / Type : Object / Node;
* Monads / Lambdas / Functors: Sign, Concept, Object.
* Contextual Traversal Browsing of Resources / Kinds / State. Aggregation of Data, Schema, Behavior Augmentations: Aggregation, Activations, Alignments.
* Semiotics: DCI / MVC Augmentations / Dataflow:
* Upper Layers (hierarchical / contextual) domain driven entities / gestures / forms APIs.
* Ordered Graphs.
* Data:
* MVC: Model.
* DCI: Data.
* Graph: Nodes.
* Grammar: Terminal. Object.
* Functional: Monads wrapped Values.
* Augmentation: Aggregation (Data Matching).
* Component: Index. CDI CI Resolved bindings: Schema / Behavior Services Interfaces.
* Protocol: CRUD. Semantic Relations Queries. (e.g.: same as, data matching). Augmentations.
* Entities: Nodes. Data. Resources. Models / State. Arcs Recognition (Behavior). Objects From Schema. (Concept) to Behavior (Sign) Mappings. Model Resource Monads Values / Transforms.
* Schema:
* MVC: View.
* DCI: Context.
* Graph: Type / Context (Attributes).
* Grammar: Non Terminal. Concept.
* Functional: Monads wrapped Value Types.
* Augmentation: Activation (Schema Matching).
* Component: Registry. CDI DI Resolved bindings: Data / Behavior Services Interfaces.
* Protocol: Forms. Dataflow. Functional Flows: Initial / Contextual Form, Transforms (Graph Naming domain / range) arcs population (Index) Naming gives next populated state Form (Index retrieved state).
* Entities: Type / Context. Schema. Kinds / Roles. Node Recognition (Data). Concepts From Behavior (Sign) to Data (Object) Mappings. Domain Resource Monads Values / Transforms.
* Behavior:
* MVC: Controller.
* DCI: Interaction.
* Graph: Arcs.
* Grammar: Rules / Productions. Sign (recursion).
* Functional: Monads Transforms.
* Augmentation: Alignment (Behavior Matching).
* Component: Naming. CDI DC Resolved bindings: Data / Schema Services Interfaces.
* Protocol: IDs. Semantic Models (Graph, Dimensional, Discrete) Reactive Endpoints Encoding. Graph Name Flows Resolution / Entailments. Hierarchical Graphs Order Relations. Functional / Grammars Contextual (Transforms) state flows.
* Entities: Arcs. Behavior. Statements Kinds / NER Aggregation. Context Types / Relationships / Dimensions Recognition (Schema). Signs From Data (Object) to Schema (Concept) Mappings. Model / Domain Resource Monads Transforms Dataflow: Fixtures.
* Encoding: Semiotics Ternary URNs Mappings. Functional directed Ternary Mappings. Aggregation: Monads Traversal / Transforms Flows:
* Graph: (Node : Object, Type : Concept, Arc : Sign, Node : Object);
* Directional Mappings:
* Object : Node (Type : Concept, Arc : Sign); Data.
* Type : Concept (Arc : Sign, Node : Object); Schema.
* Arc : Sign (Node : Object, Type : Concept); Behavior.
* Graph Ternary Mappings URNs:
* ResourceID: (ResourceID, Occurrence ID);
* OccurrenceID : ResourceID;
* Graph URNs dereferenceable CSPOs Resources
* Funtional Ternary Semiotic Mappings URNs Naming Relations: Resource Encoding Roles / DCI Occurrences.
* DCI Models Encodings:
* (Occurrence, Context, Aggregated Type Attributes, Attributes Values : Occurrences);
* Graph Model: (Node : Data, Type : Context, Arc : Interaction, Node : Type Value);
* Dimensional Model: (Measure, Dimension, Unit, Value : Measure);
* Discrete Model: (Relation, Relationship, Kind, Entity : Relation);
* Labeled Property Graph: Arc : Node.
* Graph Model Dimensional / Discrete Models axes hierarchicaly ordered Measures / Relations relations Dataflow.
* Functional APIs:
* Model Monads: Models layers CSPOs / Semiotic Wrapper / Wrapped Types / Values. Layers Contexts. Augmentations.
* ResourceID:
* OccurrenceID:
* REST HATEOAS Dataflow:
* Graph URNs: Dereferenceable CSPOs / Ternary encoded Resources.
* Functional Dataflow: Monads / Transforms. Reactive REST HATEOAS. Dataflow Domain / Range Models / Domains Subscriptions.
* Domain Monads: DOM (Dynamic Object Model) Context Instances (Model Values) Entities.
* Functional Protocol: Dataflow / Parsing. Monads Wrapper / Wrapped Types / Values: Sign, Concept, Object Monads Contexts / Transforms Mappings. MVC / DCI Graph (Node, Type / Context, Arc, Node); Discrete / Continuous Models CSPOs Monads / Transforms. Model driven (Types Domain / Range ordered contexts) Monads / Transforms (Augmentations).
* Domain Monads: DOM (Dynamic Object Model) Context Instances (Model Values) Entities.
* Sample Statement:
* (NodeRID:OccurID, TypeRID:OccurID, ArcRID:OccurID, NodeRID:OccurID);
* Graph: Hierarchical Order / Dataflow.
* Graph: (Node, Type, Sign, Node);
* Events: (Relation. Relationship, Kind, Relation);
* Continuous: (Measure, Dimension, Unit, Measure);
* URNs: Resources / Occurrences. Encode CSPOs IDs: Ternary Dataflow Mappings. RIDs:OIDs: Roles IDs:
* CSPO Resource (Resource, Occurrence);
* Occurrence : Resource;
* Resolve entailments / inferences via Mappings Ternary Encoding Traversal ID Roles Augmentation / Aggregation / Activation / Alignments (Services).
* Ternary Mappings DCI Roles: Metaclass, Class, Instance, Occurrence, Context, Role.
* Co relations (Algebras / CoSQL / NoSQL / LInQ):
* Models. Layers: Augmentation steps reification. Layers Statements Roles.
* Base Model:
* (Context, Occurrence / Statement, Attribute / Kind, Value / Entity);
* Discrete Layers Model: (Relationships / Assertions). Continuos CEP: 0 Duration Measures / Axis Events Relations.
* (Relationship, Relation, Kind, Entity);
* Context, Roles, Causal, etc. Relations.
* Continuous Layers Model: (Dimensions / Measures).  Discrete CEP: Order / Containment Relations.
* (Dimension, Measure, Unit, Value);
* Distance, Equivalence, Transportation, etc. Relations.
* Functional DCI: Monads / Functors / Data.
* Wrapper Types (Data Roles). Encoding.
* Wrapped types (Data Values). Encoding.
* Functors: Dataflow Domain / Range specifications (Contexts). Encoding.
* Monads: Dataflow implementations (Interactions). Encoding.
* Functional Roles. Wrapped Models Resources Monads Wrappers Encoding (Dataflow Entities):
* DCI Data (ETL / Ontology Mappings). Layers: Augmentation steps reification. Layers Statements Roles.
* Class / Metaclass
* Role / Occurrence
* Value / Instance
* Attribute / Context
* Arcs: (Instance, Occurrence / Node Class, Attribute, Value); Data.
* Nodes: (Class, Metaclass, Context, Role); Contexts.
* Mappings: Models. Interactions.
* Layers Hierarchy: Role : Class; Value : Instance. Property Graphs.
* Layers:
* Arcs: (Role, Instance, Metaclass, Context); DCI Interactions.
* (Context, Role, Instance, Class);
* (Class, Context, Role, Instance);
* Nodes: (Instance, Class, Context, Role); DCI Contexts.
* Type: Class / Metaclass IDs
* Kind: Role / Occurrence IDs
* Node: Value / Instance IDs
* Arc: Attribute / Context IDs
* Layers:
* Arcs: (Arc, Node, Type, Kind); DCI Interactions.
* (Kind, Arc, Node, Type);
* (Type, Kind, Arc, Node);
* Nodes: (Node, Type, Kind, Arc); DCI Contexts.
* Models / Encoding:
* Layer Roles: (Context, Subject, Predicate, Object);
* Context: Kind Statements.
* Subject: Node Statements.
* Predicate: Arc Statements.
* Object: Node Statements.
* Type: Matching / Inferences.
* Encodings:
* Models: Quads / Property Graphs. DCI / Dataflow.
* Lists Model. Roles / Order.
* Hierarchical Graph Encoding.
* Sets.
* Functional DCI / Layers abstraction.
* Functional Parser. CUD. (data) of Grammar (Functional scheme) Dataflow Entities.
* Functional Parser. Grammar (Functional scheme) Dataflow Entities.
* Functional Parser. Parse (executions / behavior). Dataflow interactions instances.
* Codat: Dataflow / Protocol Prompts (run at).
* Protocol:
* Stateful I/O (ordered contexts). Reactive encoded Message driven gestures (CQRP).
* CDI / ESB Runtime. Backends. Connectors. CAM / CAN / DIDs.
* Dataflow HATEOAS.
* Augmentations / Alignments:
* Aggregation. Contexts / Occurrences.
* Activation. Roles / Types / Kinds.
* Alignment. Attributes / Values.
* Co relations (Algebras / CoSQL / NoSQL / LInQ):
* Models. Layers: Augmentation steps reification. Layers Statements Roles.
* Base Model:
* (Context, Occurrence / Statement, Attribute / Kind, Value / Entity);
* Discrete Layers Model: (Relationships / Assertions). Continuos CEP: 0 Duration Measures / Axis Events Relations.
* (Relationship, Relation, Kind, Entity);
* Context, Hierarchies, Roles, Causal, etc. Relationships / Relations.
* Continuous Layers Model: (Dimensions / Measures).  Discrete CEP: Order / Containment Relations.
* (Dimension, Measure, Unit, Value);
* Distance, Equivalence, Transportation, etc. Relations.
* Functional DCI: Monads / Functors / Data.
* Wrapper Types (Data Roles). Encoding.
* Wrapped types (Data Values). Encoding.
* Functors: Dataflow Domain / Range specifications (Contexts). Encoding.
* Monads: Dataflow implementations (Interactions). Encoding.
* Functional Roles. Wrapped Models Resources Monads Wrappers Encoding (Dataflow Entities):
* DCI Data (ETL / Ontology Mappings). Layers: Augmentation steps reification. Layer Statements Roles.
* Type: Class / Metaclass IDs
* Kind: Role / Occurrence IDs
* Node: Value / Instance IDs
* Arc: Attribute / Context IDs
* Arcs: (Instance, Occurrence / Node Class, Attribute, Value); Data.
* Nodes: (Class, Metaclass, Context, Role); Contexts.
* Mappings: Models. Interactions.
* Layers Hierarchy: Role : Class; Value : Instance. Property Graphs.
* Layers:
* Arcs: (Role, Instance, Metaclass, Context); DCI Interactions.
* (Context, Role, Instance, Class);
* (Class, Context, Role, Instance);
* Nodes: (Instance, Class, Context, Role); DCI Contexts.
* Layers:
* Arcs: (Arc, Node, Type, Kind); DCI Interactions.
* (Kind, Arc, Node, Type);
* (Type, Kind, Arc, Node);
* Nodes: (Node, Type, Kind, Arc); DCI Contexts.
* Mappings: Models. Interactions.
* Layers Hierarchy: Node : Arc;. Property Graphs.
* Models / Encoding:
* Layer Roles: (Context, Subject, Predicate, Object);
* Context: Kind Statements.
* Subject: Node Statements.
* Predicate: Arc Statements.
* Object: Node Statements.
* Type: Matching / Inferences.
* Encodings:
* Models: Quads / Property Graphs. DCI / Dataflow.
* Lists Model. Roles / Order.
* Hierarchical Graph Encoding.
* Sets.
* Functional DCI / Layers abstraction.
* Functional Parser. CUD. (data) of Grammar (Functional scheme) Dataflow Entities.
* Functional Parser. Grammar (Functional scheme) Dataflow Entities.
* Functional Parser. Parse (executions / behavior). Dataflow interactions instances.
* Codat: Dataflow / Protocol Prompts (run at).
* Protocol:
* Stateful I/O (ordered contexts). Reactive encoded Message driven gestures (CQRP).
* CDI / ESB Runtime. Backends. Connectors. CAM / CAN / DIDs.
* Dataflow HATEOAS.
* Augmentations / Alignments:
* Aggregation. Contexts / Occurrences.
* Activation. Roles / Types / Kinds.
* Alignment. Attributes / Values.
* Ontologies: Gods / Products / Needs. Showcase. Transaction. Learning / Inference / Entailments, Workflows. Domains Alignments. Campaigns. Support Systems / Services Protocols Alignment Ontologies.
* Funtional Semiotic Mappings. Relations: Resouce Encoding Roles Roles / Occurrences:
* Metaclass
* Class
* Instance
* Context
* Occurrence
* Role
* Models. Layers: Augmentation steps reification. Layers Statements Roles.
* Base Model:
* (Context, Occurrence / Statement, Attribute / Kind, Value / Entity);
* Discrete Layers Model: (Relationships / Assertions). Continuos CEP: 0 Duration Measures / Axis Events Relations.
* (Relationship, Relation, Kind, Entity);
* Context, Hierarchies, Roles, Causal, etc. Relationships / Relations.
* Continuous Layers Model: (Dimensions / Measures).  Discrete CEP: Order / Containment Relations.
* (Dimension, Measure, Unit, Value);
* Distance, Equivalence, Transportation, etc. Relations.
* Functional DCI: Monads / Functors / Data.
* Wrapper Types (Data Roles). Encoding.
* Wrapped types (Data Values). Encoding.
* Functors: Dataflow Domain / Range specifications (Contexts). Encoding.
* Monads: Dataflow implementations (Interactions). Encoding.
* Functional Roles. Wrapped Models Resources Monads Wrappers Encoding (Dataflow Entities):
* DCI Data (ETL / Ontology Mappings). Layers: Augmentation steps reification. Layer Statements Roles.
* Type: Class / Metaclass IDs
* Kind: Role / Occurrence IDs
* Node: Value / Instance IDs
* Arc: Attribute / Context IDs
* Arcs: (Instance, Occurrence / Node Class, Attribute, Value); Data.
* Nodes: (Class, Metaclass, Context, Role); Contexts.
* Mappings: Models. Interactions.
* Layers Hierarchy: Role : Class; Value : Instance. Property Graphs.
* Layers:
* Arcs: (Role, Instance, Metaclass, Context); DCI Interactions.
* (Context, Role, Instance, Class);
* (Class, Context, Role, Instance);
* Nodes: (Instance, Class, Context, Role); DCI Contexts.
* Layers:
* Arcs: (Arc, Node, Type, Kind); DCI Interactions.
* (Kind, Arc, Node, Type);
* (Type, Kind, Arc, Node);
* Nodes: (Node, Type, Kind, Arc); DCI Contexts.
* Mappings: Models. Interactions.
* Layers Hierarchy: Node : Arc;. Property Graphs.
* Models / Encoding:
* Layer Roles: (Context, Subject, Predicate, Object);
* Context: Kind Statements.
* Subject: Node Statements.
* Predicate: Arc Statements.
* Object: Node Statements.
* Type: Matching / Inferences.
* Augmentations / Alignments:
* Aggregation. Contexts / Occurrences.
* Activation. Roles / Types / Kinds.
* Alignment. Arcs. Attributes / Values.