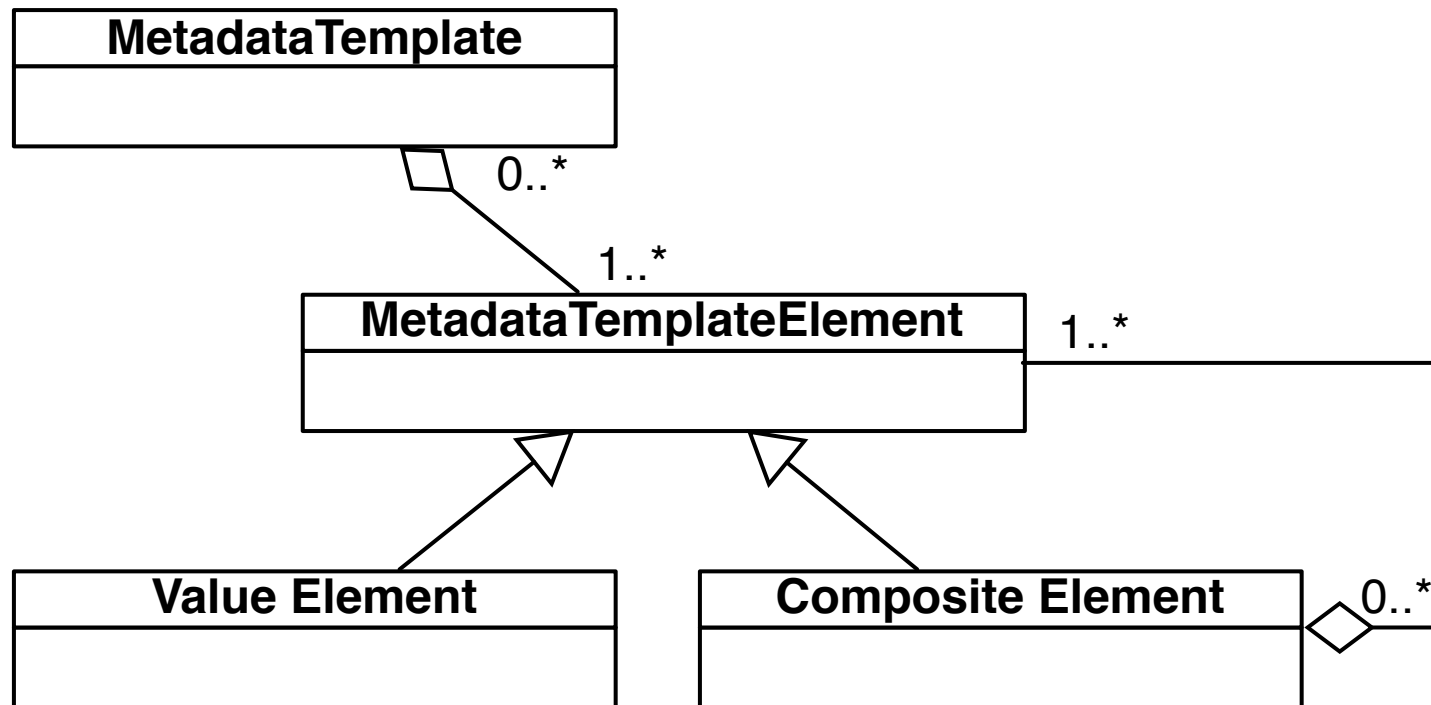# CEDAR's Information Models

And What To Call Them

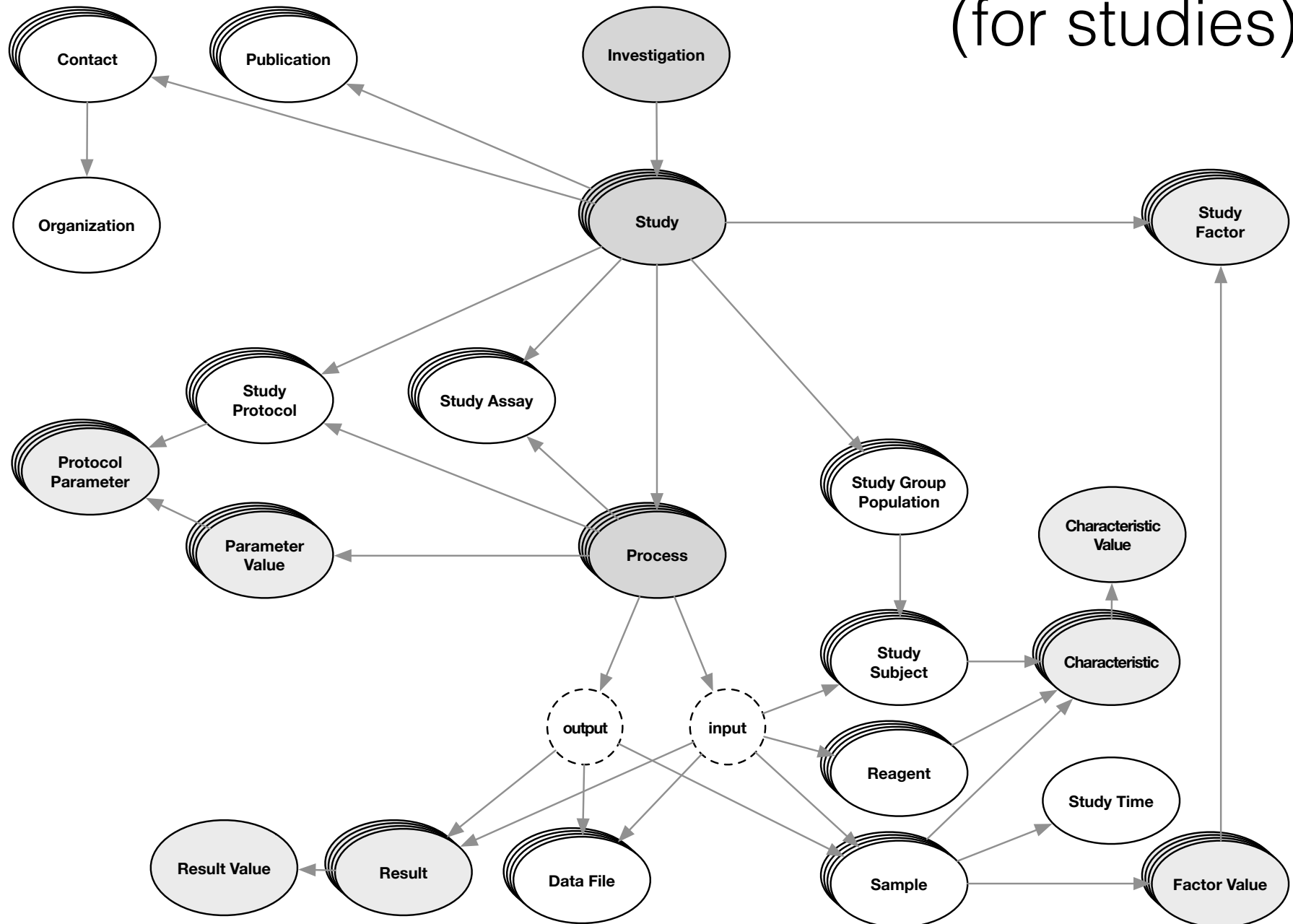2015.09.27

CEDAR Repository Element Model
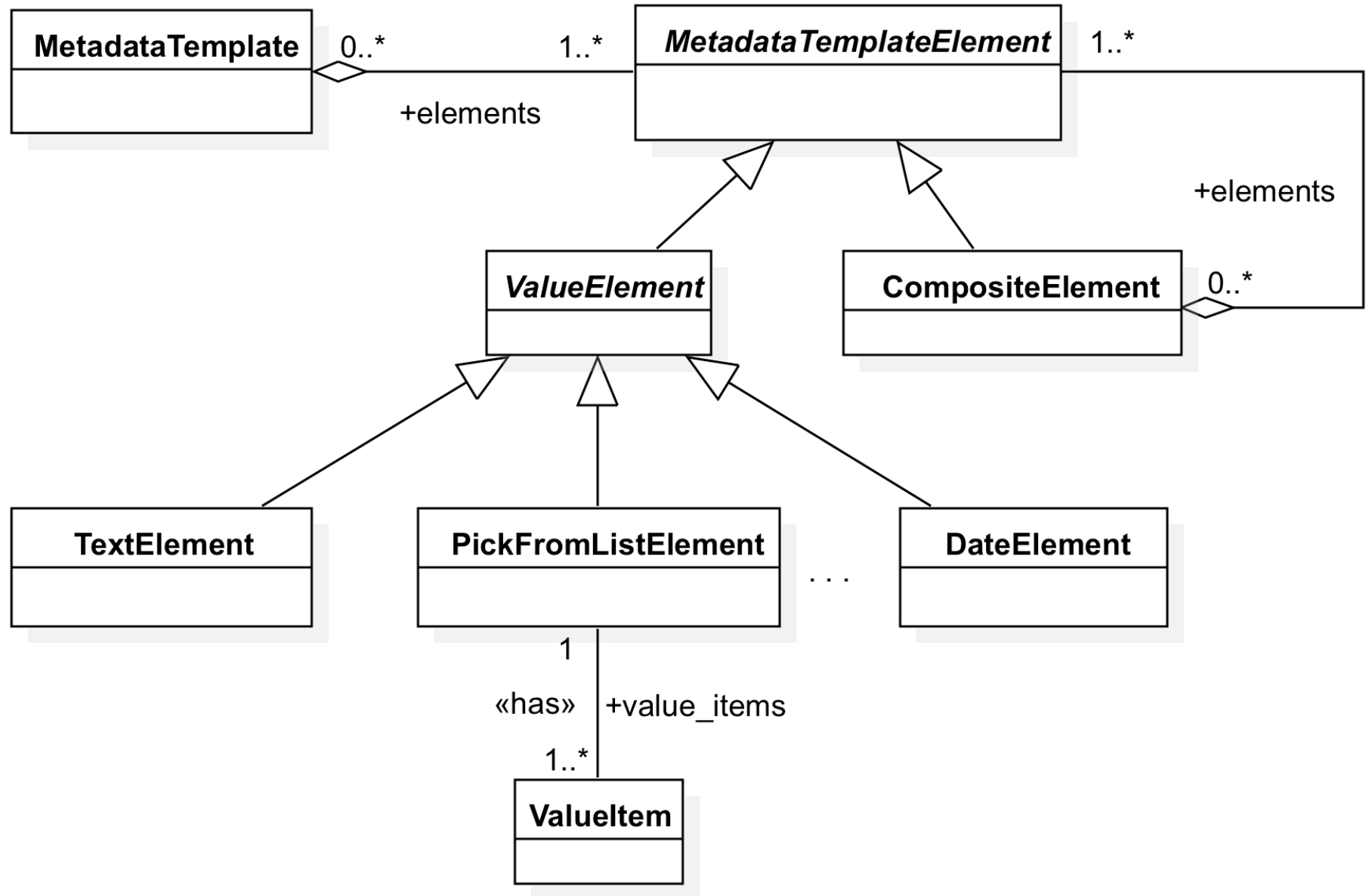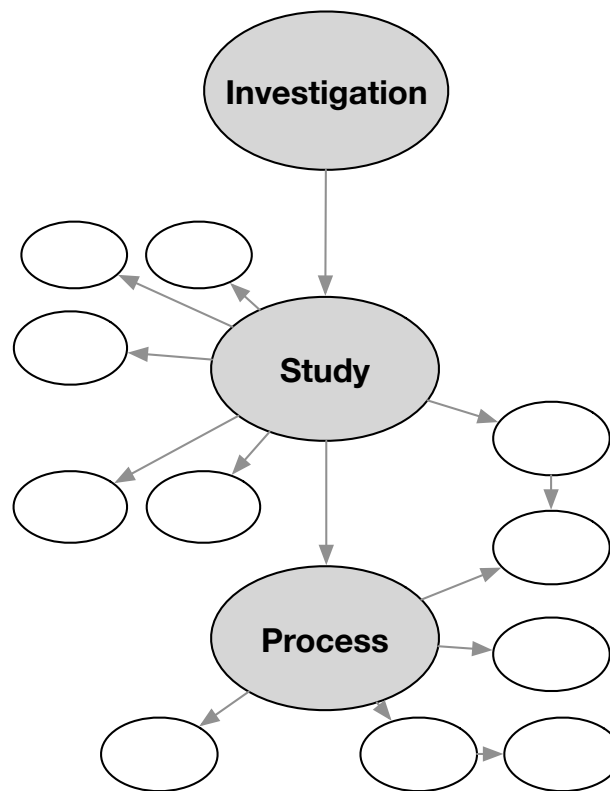
CEDAR Repository Element Model
Iconic

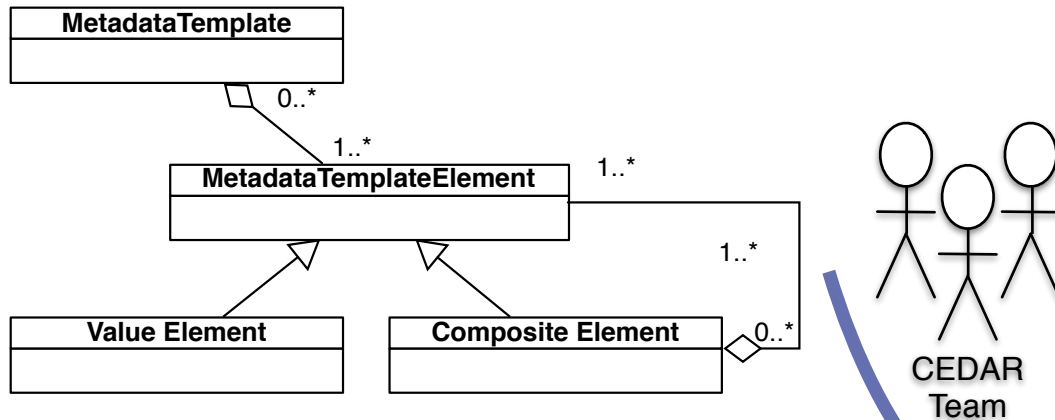# CEDAR General Domain Model
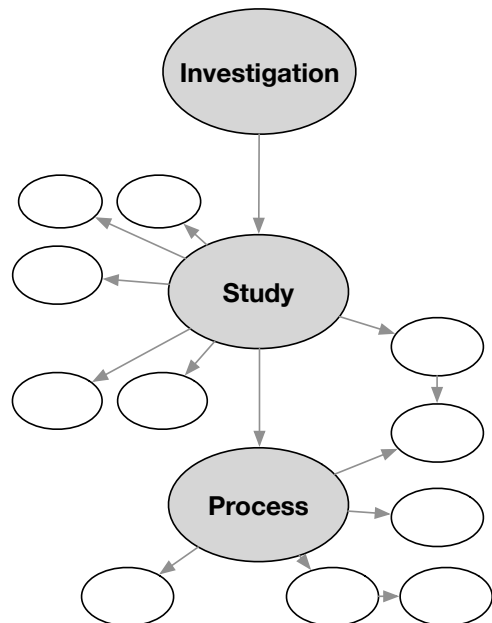## (for studies)

CEDAR General Domain Model
Iconic

CEDAR Domain Model Template
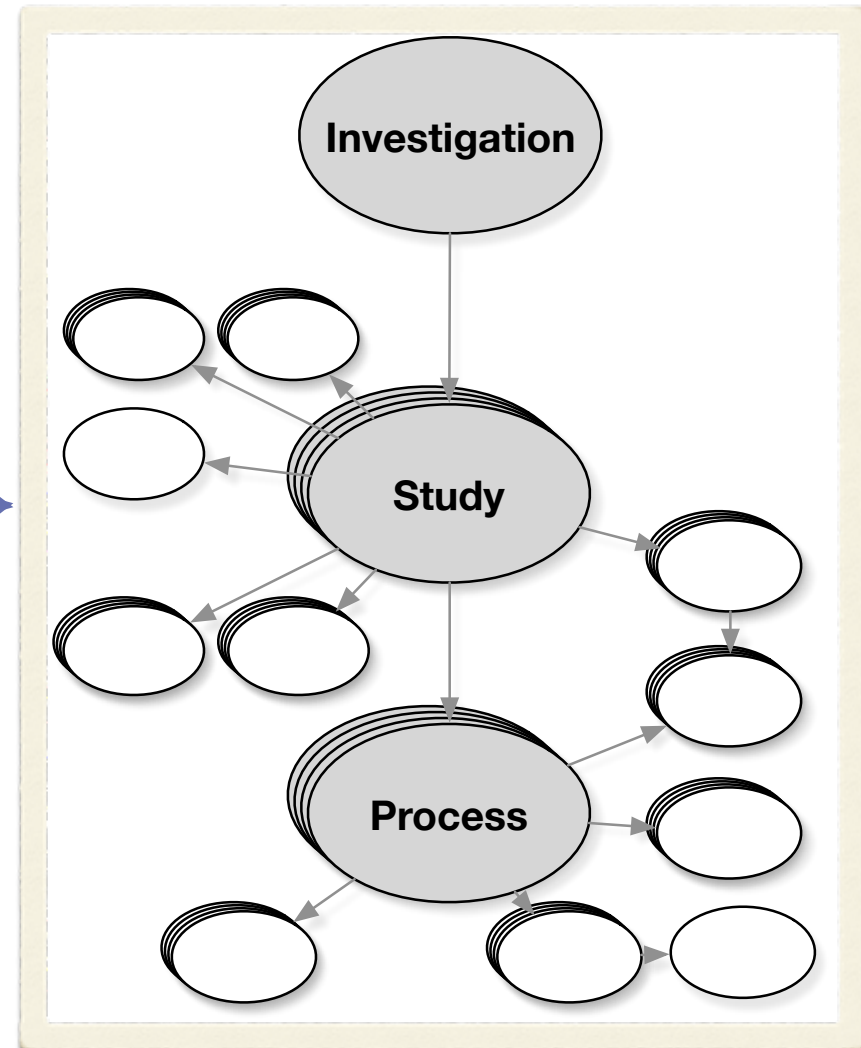
CEDAR Repository Element Model

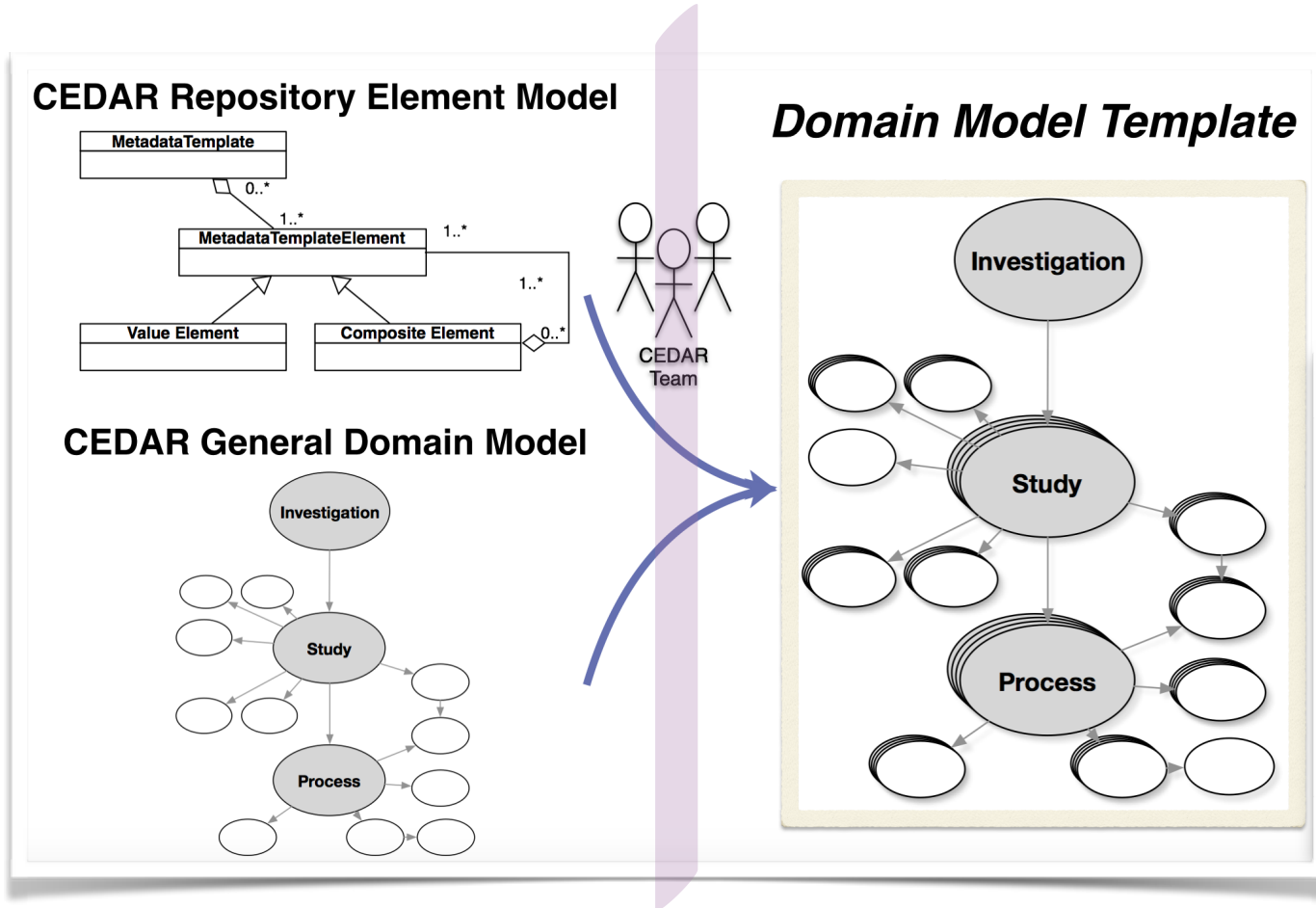## CEDAR General Domain Model

Domain Model Template

What's the Difference?

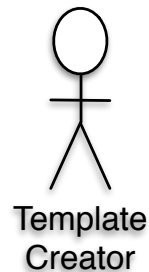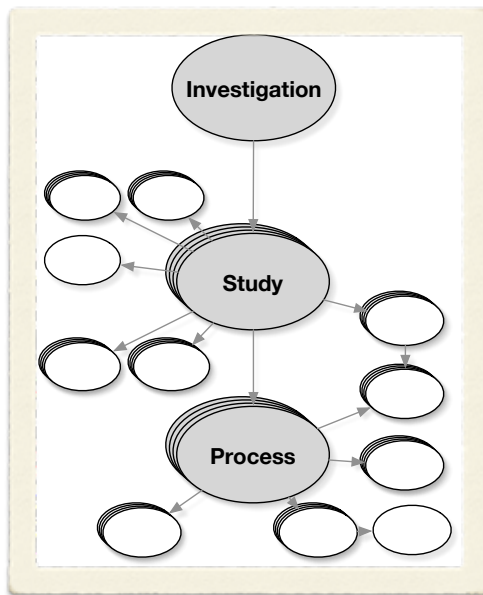*Abstract >*   *< Concrete*

The Domain Model Template
instantiates (implements)
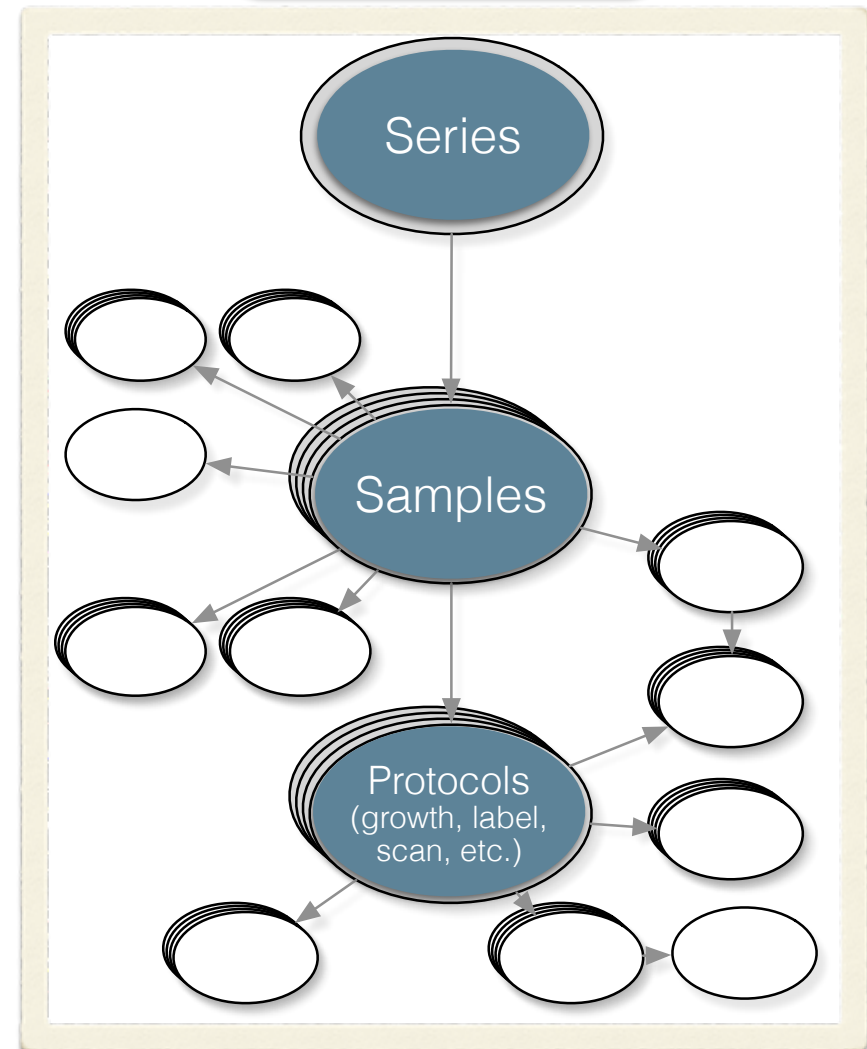the concepts in the General Domain Model
(using the Repository Element Model)

Creating a Specific Template Model

Domain Model Template

A Metadata Specification

Specific Study Template

e.g., for GEO

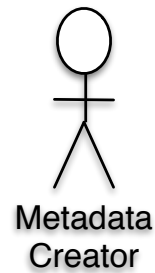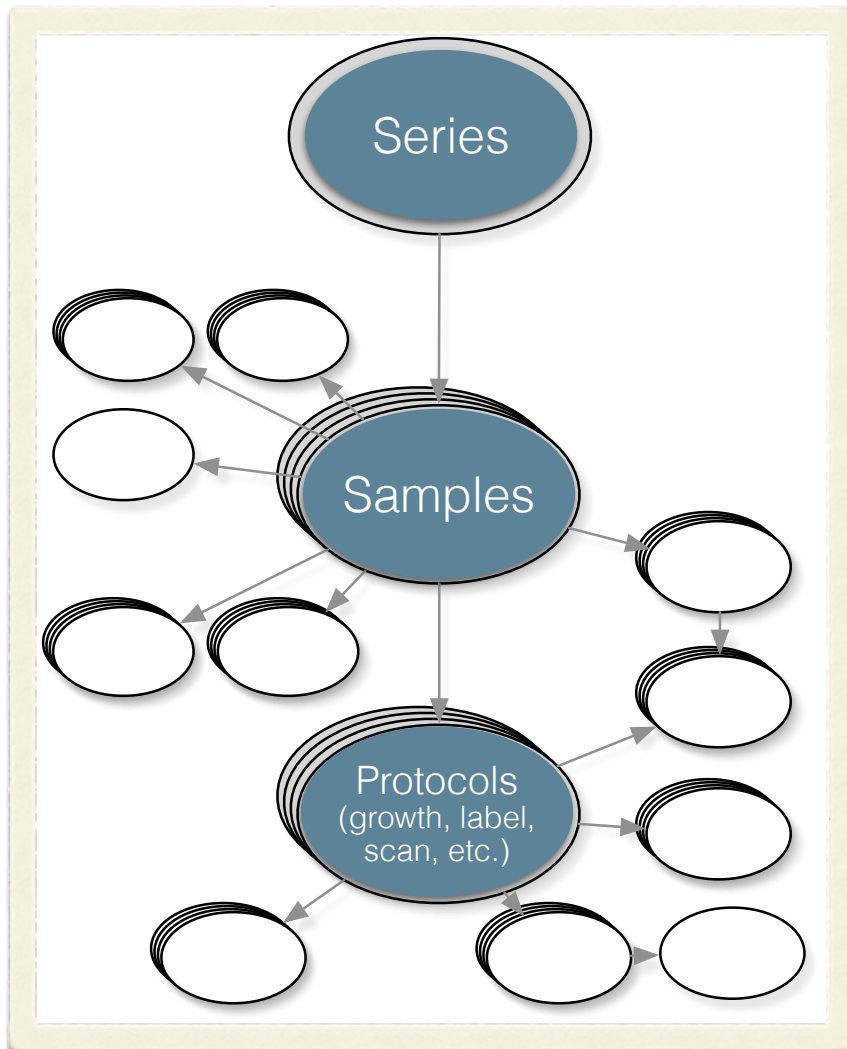Template Creator

Creating a Specific Template Model
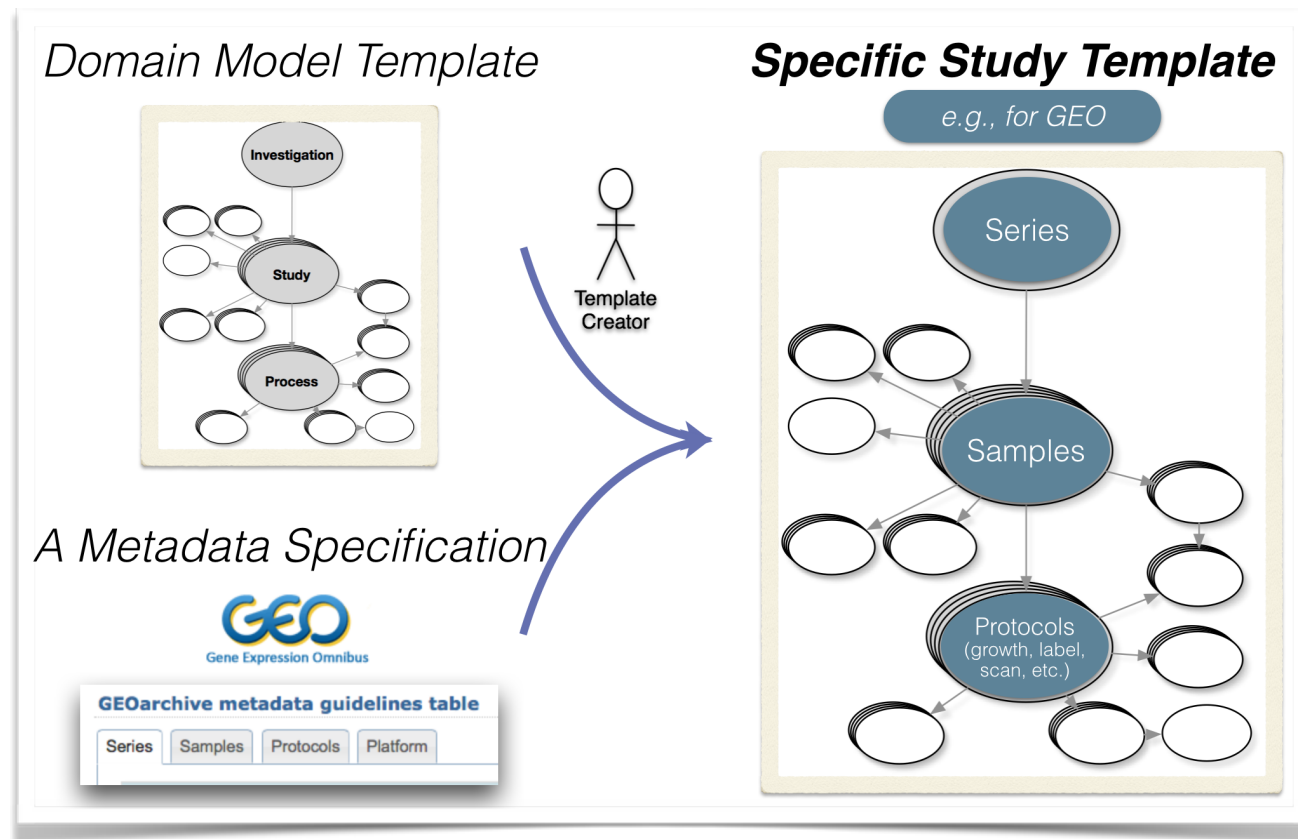
- The Specific Study Template extends the Domain Model Template
- The entity names follow the metadata specification's language, not the Domain Model terms
- The Specific Study Template constrains its users by specifying the number, roles, and content that are acceptable for each entity
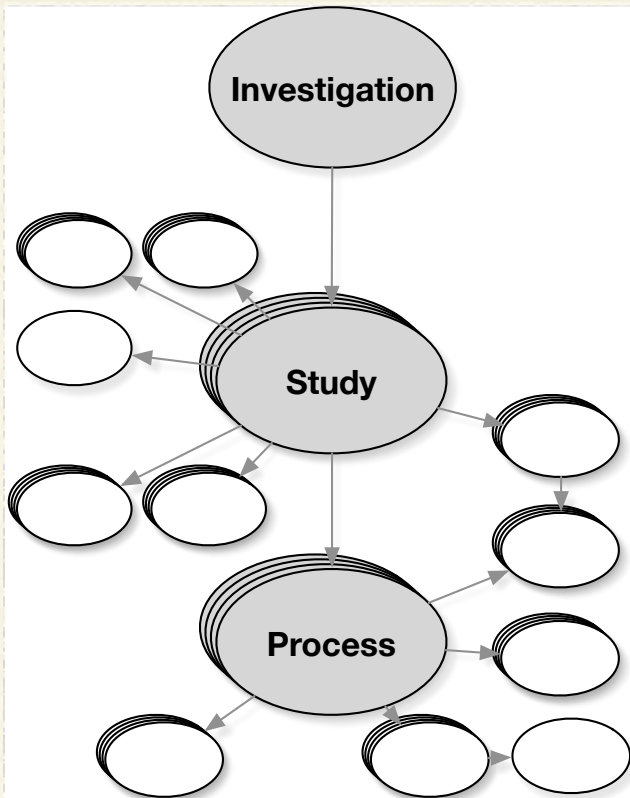
Fill In Instantiated Data Report

Review of Instantiated Models

Domain Model Template

Specific Study Template

Instantiated Data Report

How do we represent these in CEDAR?

Domain Model Template
(for biomedical studies)
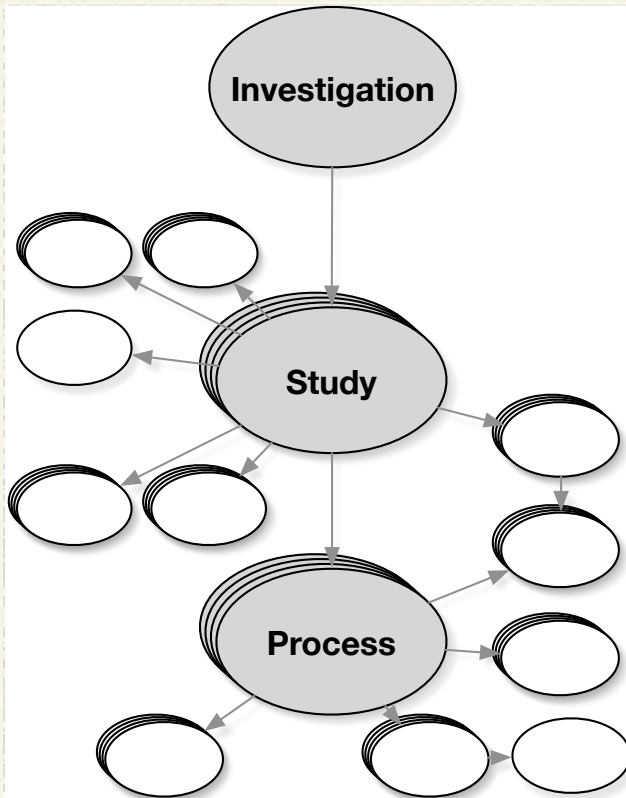
encoded in a JSON schema:

```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "properties": {
        "investigation": {
            "$schema": "http://json-schema.org/draft-04/
schema#",
            "type": "object",
            "@id": "https://repo.metadatacenter.org/UUID",
            "additionalProperties": true,
            "version": "1.0.0",
            "provenance": {},
            "title": "Investigation Template",
            "description": "JSON-LD/Schema Investigation
Template",
```

Specific Study Template
e.g., for GEO
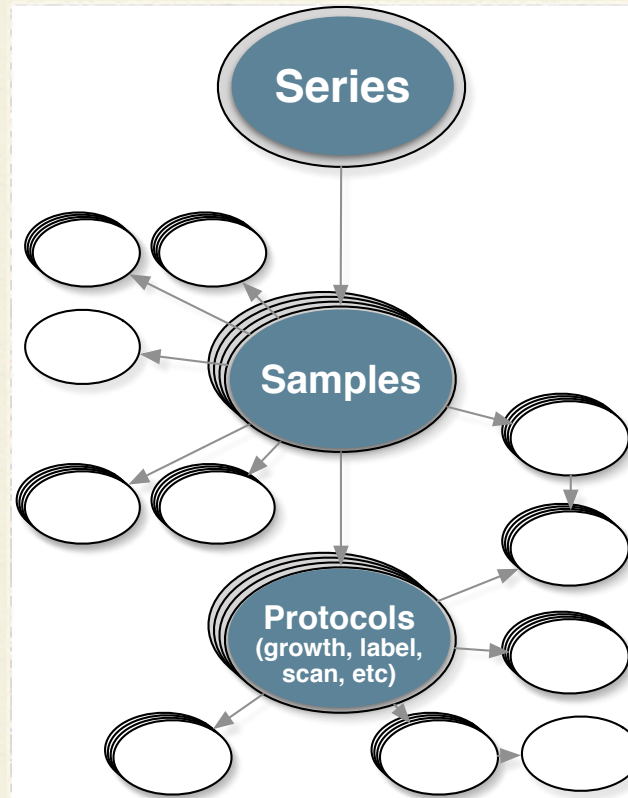

encoded in a JSON schema:

```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "properties": {
        "investigation": {
            "$schema": "http://json-schema.org/draft-04/
schema#",
            "type": "object",
            "@id": "https://repo.metadatacenter.org/UUID",
            "additionalProperties": true,
            "version": "1.0.0",
            "provenance": {},
            "title": "Investigation Template",
            "description": "JSON-LD/Schema Investigation
Template",
```

Instantiated Data Report
for a GEO series

encoded in JSON:

```
{
    "investigation": {
        "schemaID": "https://repo.metadatacenter.org/UUID"
        "@id": "https://repo.metadatacenter.org/UUID",
        "@type": "https://repo.metadatacenter.org/model/
Investigation",
        "@context": {
            "model": "https://repo.metadatacenter.org/model/"
```

following a JSON schema:

```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "properties": {
        "investigation": {
            "$schema": "http://json-schema.org/draft-04/
schema#",
            "type": "object",
            "@id": "https://repo.metadatacenter.org/UUID",
            "additionalProperties": true,
            "version": "1.0.0",
            "provenance": {},
            "title": "Investigation Template",
            "description": "JSON-LD/Schema Investigation
Template",
```