

# API Aesthetics

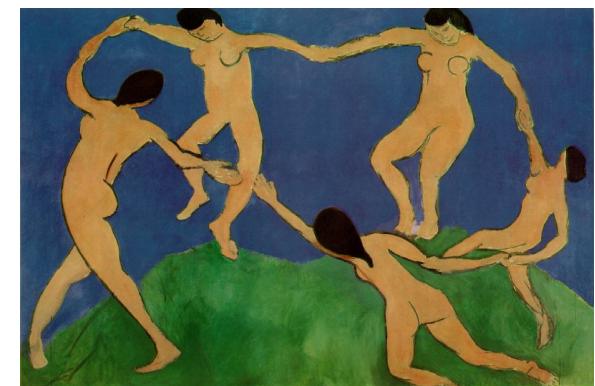
Post Modern Opinions  
for a Relative World

# About (the simulation of)

# Me

col@fauve.io

@wildfauve



# Post Modern: A Condensed Definition

I'm Wrong

You're Wrong

And its only Wrong to say we're Wrong

# A Brief History of Aesthetics

Aristotle   Function   Form   Greeks / Romans

Form   Form   Form

Coleridge   Feeling   Nietzsche

Whatever

# Rough History of API Aesthetics...

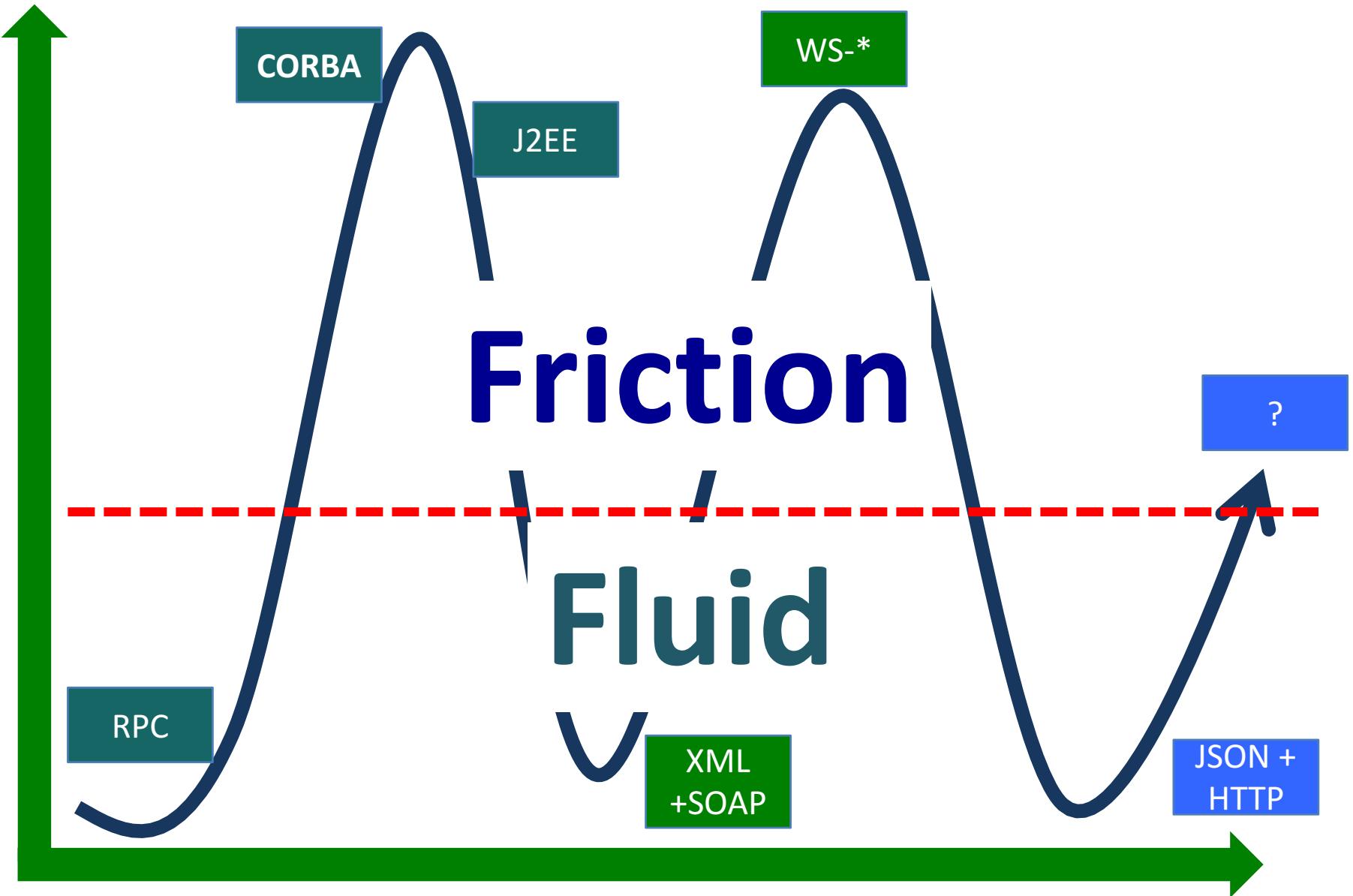
Function Schema Schema

Schema Schema

Schema Web Web

Web Web Function

# A Fictional Complexity Cycle

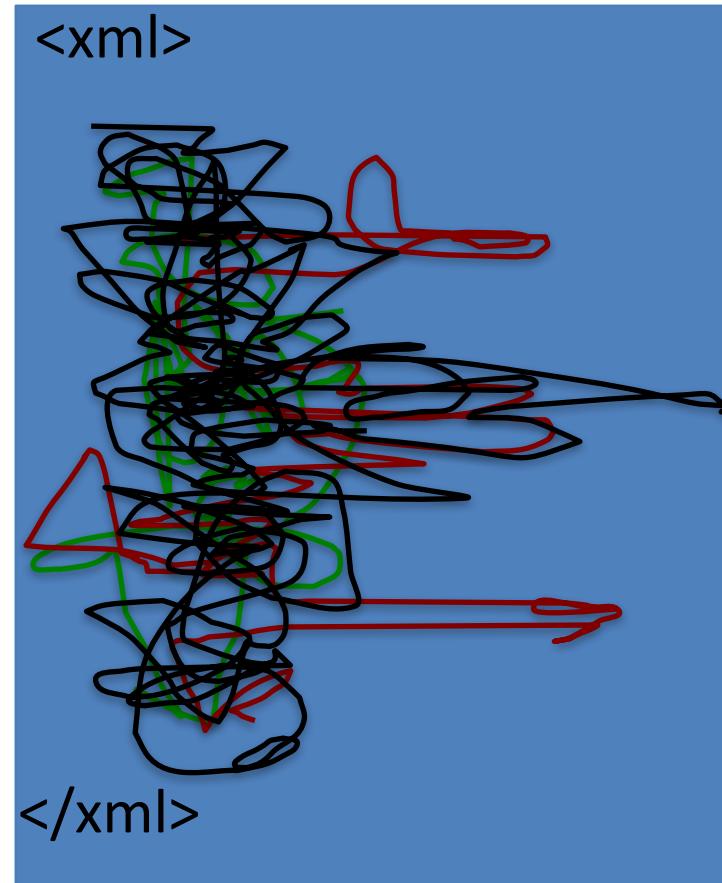


# The Document as an Interface



# The Document as an Interface

PORX\_EX122002UK31.xml



# Discourse: “Meaning” is Hard!

```
<suppliedLineItemQuantity classCode="SPLY" moodCode="EVN">
  <code codeSystem="2.16.840.1.113883.2.1.3.2.4.15" code="373784005"/>
  <quantity value="200" unit="1">
    <translation value="200" codeSystem="2.16.840.1.113883.2.1.3.2.4.15"
      code="258773002" displayName="ml"/>
  </quantity>
</suppliedLineItemQuantity>
<product typeCode="PROD" contextConductionInd="true">
  <suppliedManufacturedProduct classCode="MANU">
    <manufacturedSuppliedMaterial classCode="MMAT" determinerCode="INSTANCE">
      <code codeSystem="2.16.840.1.113883.2.1.3.2.4.15" code="239801100000110" displayName="Trifluoperazine 1mg/5ml oral solution sugar free" />
      <manufacturedSuppliedMaterial>
        </manufacturedSuppliedMaterial>
      </suppliedManufacturedProduct>
    </product>
  <pertinentInformation4 typeCode="PERT" contextConductionInd="true">
    <separableInd value="true"/>
    <pertinentChargePayment classCode="OBS" moodCode="EVN">
      <code codeSystem="2.16.840.1.113883.2.1.3.2.4.17.30" code="CP"/>
      <value value="false"/>
    </pertinentChargePayment>
  </pertinentInformation4>
  <pertinentInformation3 typeCode="PERT" contextConductionInd="true">
    <separableInd value="false"/>
    <pertinentDispensingEndorsement classCode="OBS" moodCode="EVN">
      <code codeSystem="2.16.840.1.113883.2.1.3.2.4.17.30" code="DE"/>
      <value codeSystem="2.16.840.1.113883.2.1.2.4.16.29" code="ZD"/>
    </pertinentDispensingEndorsement>
  </pertinentInformation3>
  <pertinentInformation1 typeCode="PERT" contextConductionInd="false">
    <separableInd value="false"/>
    <pertinentSupplyInstructions classCode="OBS" moodCode="EVN">
      <code codeSystem="2.16.840.1.113883.2.1.3.2.4.17.30" code="SI"/>
      <value>Take as directed</value>
    </pertinentSupplyInstructions>
```

codeSystem="2.16.840.1.113883.2.1.3.2.4.15"

code="2398011000001103" displayName="Trifluoperazine

1mg/5ml oral solution sugar free"

# Discourse: “Meaning” is Hard!

```
<suppliedLineItemQuantity classCode="SPLY" moodCode="EVN">
  <code codeSystem="2.16.840.1.113883.2.1.3.2.4.15" code="373784005"/>
  <quantity value="200" unit="1">
    <translation value="200" codeSystem="2.16.840.1.113883.2.1.3.2.4.15"
      code="258773002" displayName="ml"/>
  </quantity>
  <product typeCode="R" contextConductionInd="0">
    <suppliedManufacturedProduct classCode="MANU">
      <manufacturedSuppliedMaterial classCode="MMAT" determinerCode="INSTANCE">
        <code codeSystem="2.16.840.1.113883.2.1.3.2.4.15" code="230001100001103">
          <isOnlyLabel>1</isOnlyLabel>
          <value>1 mg/5 mL oral solution sugar-free</value>
        </manufacturedSuppliedMaterial>
      </suppliedManufacturedProduct>
    </product>
  <pertinentInformation typeCode="PERT" contextConductionInd="true">
    <separableInd value="true"/>
    <pertinentChargePayment classCode="OBS" moodCode="EVN">
      <code codeSystem="2.16.840.1.113883.2.1.3.2.4.17.30" code="CP"/>
      <value value="Take as directed"/>
    </pertinentChargePayment>
  </pertinentInformation4>
  <pertinentInformation3 typeCode="PERT" contextConductionInd="true">
    <separableInd value="false"/>
    <pertinentDispensingEndorsement classCode="OBS" moodCode="EVN">
      <code codeSystem="2.16.840.1.113883.2.1.3.2.4.17.30" code="DE"/>
      <value codeSystem="2.16.840.1.113883.2.1.2.4.16.29" code="ZD"/>
    </pertinentDispensingEndorsement>
  </pertinentInformation3>
  <pertinentInformation1 typeCode="PERT" contextConductionInd="false">
    <separableInd value="false"/>
    <pertinentSupplyInstructions classCode="OBS" moodCode="EVN">
      <code codeSystem="2.16.840.1.113883.2.1.3.2.4.17.30" code="SI"/>
      <value>Take as directed</value>
    </pertinentSupplyInstructions>
```

classCode="SPLY" moodCode="RQO"

quantity value="200" unit="1"

codeSystem="2.16.840.1.113883.2.1.3.2.4.15"

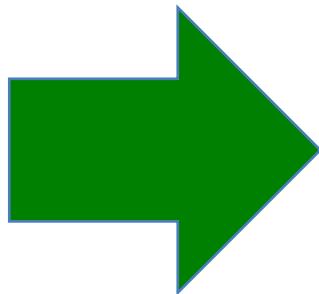
code="258773002" displayName="ml"

# Just Enough “Meaning”; Thinking in Microformats



# Just Enough “Meaning”; Thinking in Microformats

```
{  
  "price_per_day" : 10.00  
}
```



```
"price" : {  
  "amount" : "10.00",  
  "currency_code" : "nzd",  
  "reference_quantity" : {  
    "unit_code" : "day",  
    "value" : 1  
  }  
}
```

```
{  
  "type": ["h-event"],  
  "properties": {  
    "name": ["API Days"],  
    "start": ["2016-10-07T09:00:00 +1300"],  
    "end": ["2016-10-08T17:00:00 +1300"]  
  }  
}
```

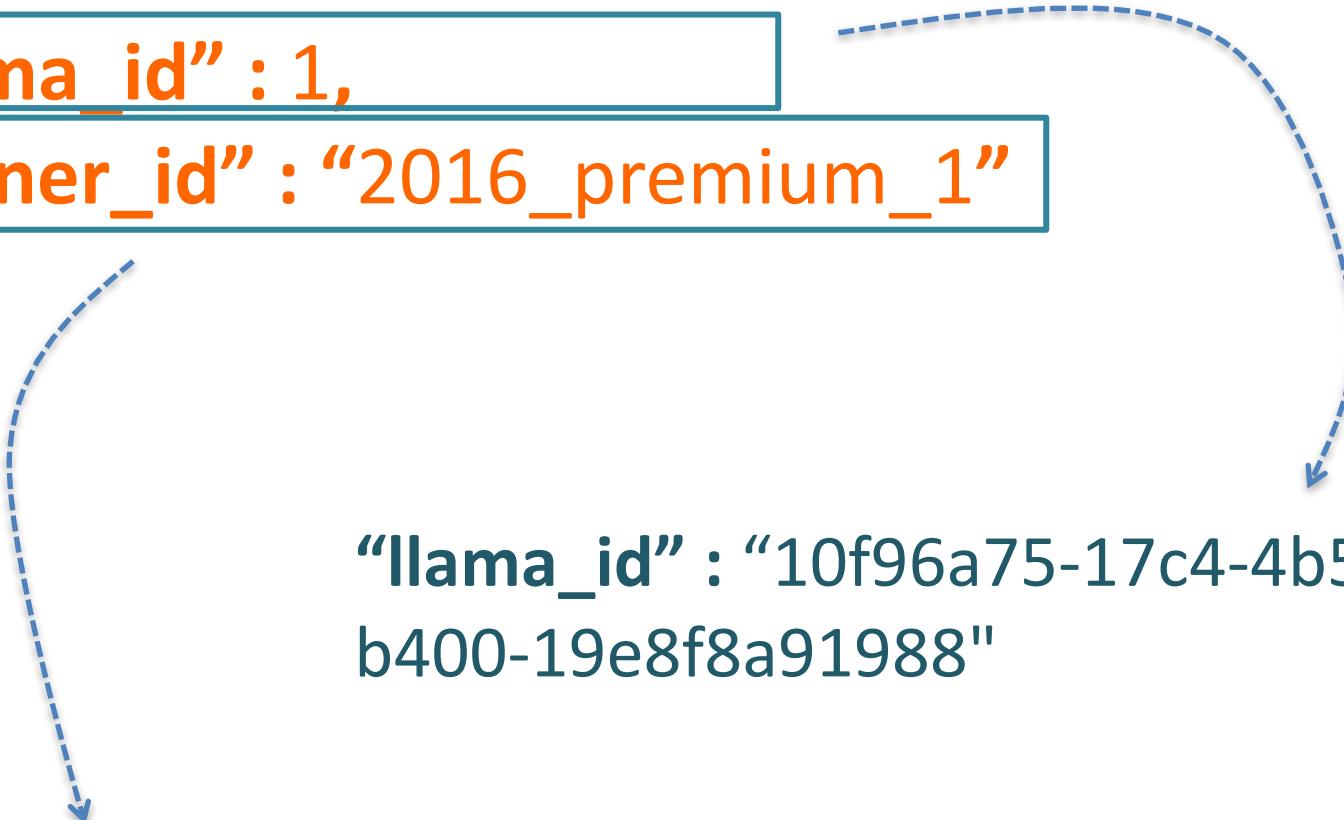


# The Hidden Resource and IDs that wont go away

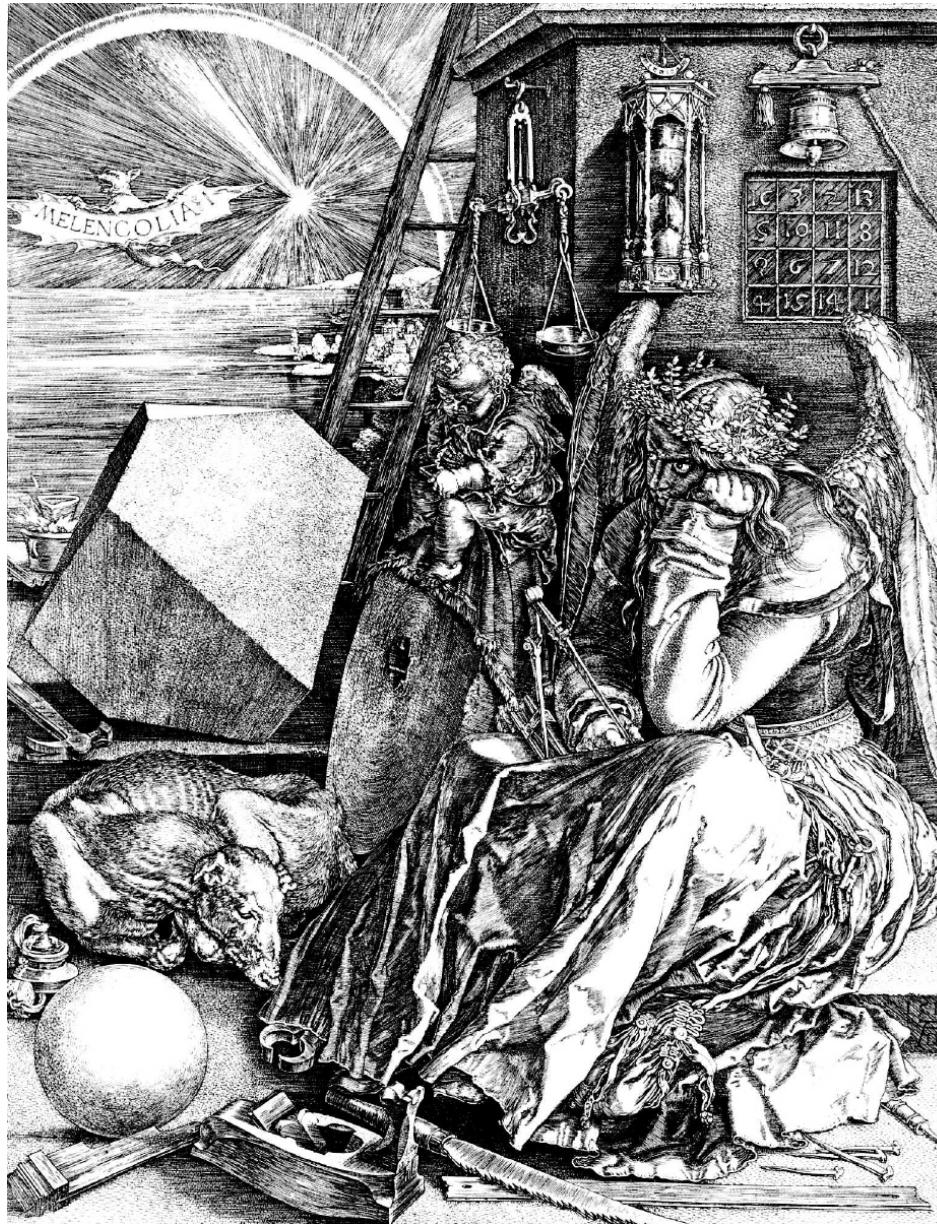


*Ceci n'est pas une pipe.*

# The Hidden Resource and IDs that wont go away

```
{  
  "llama_id" : 1,  
  "owner_id" : "2016_premium_1"  
}  
  
  
  "llama_id" : "10f96a75-17c4-4b52-  
  b400-19e8f8a91988"  
  
  "links" : {  
    "owner" : {"href" : "/owner/{id}"}}  
}
```

# To Client or Not to Client?



# To Client or Not to Client?

GET

```
/stuff/:id/related_stuff?stuff_tags=[ontologies]
```

```
{ }
```



POST

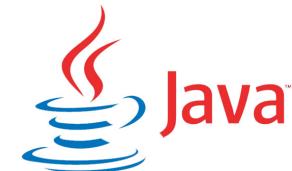
```
/stuff_process/:node_id/originations
```

```
{ }
```



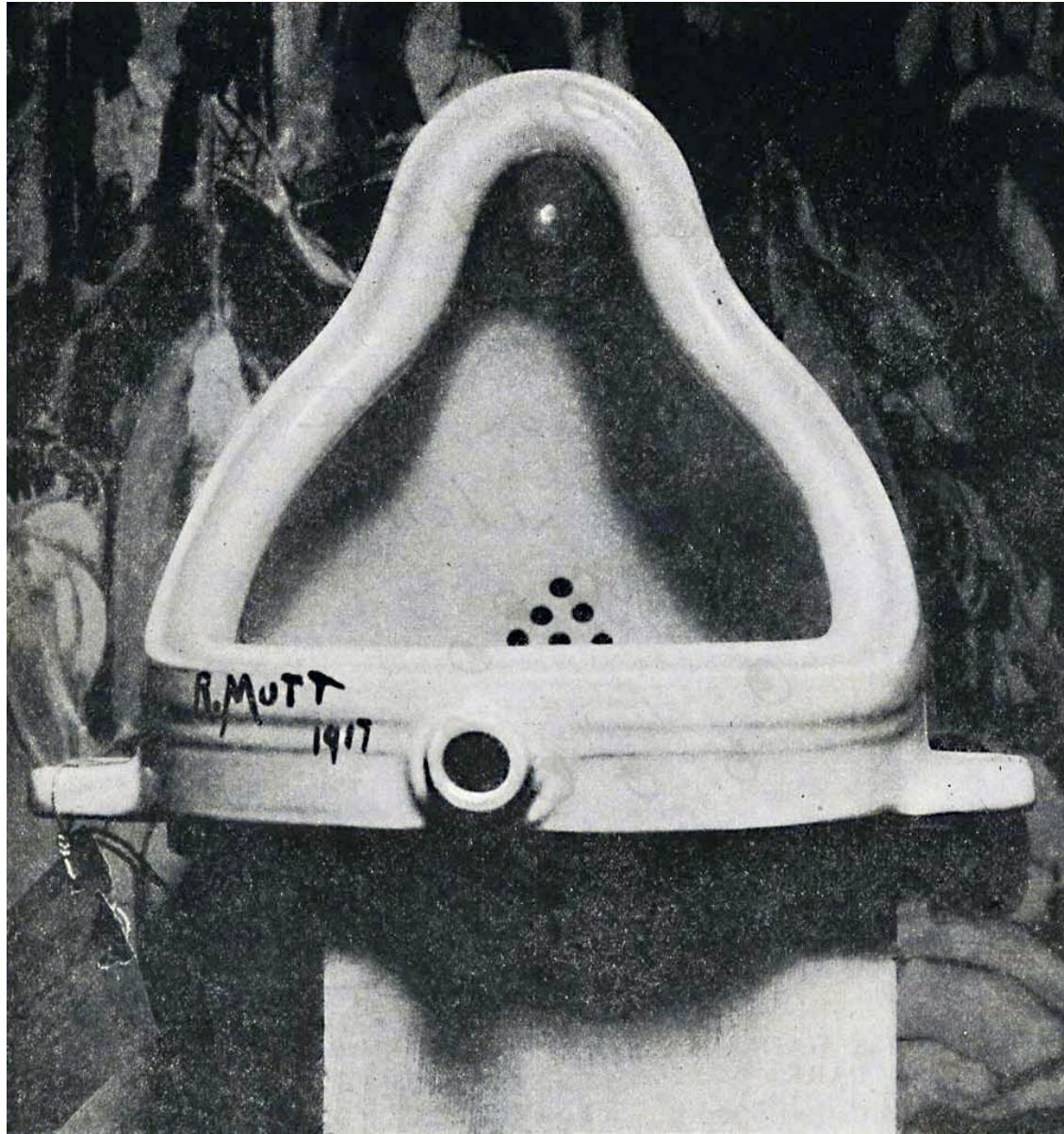
PUT /stuff/it\_all\_in\_here

```
{ }
```



Swift

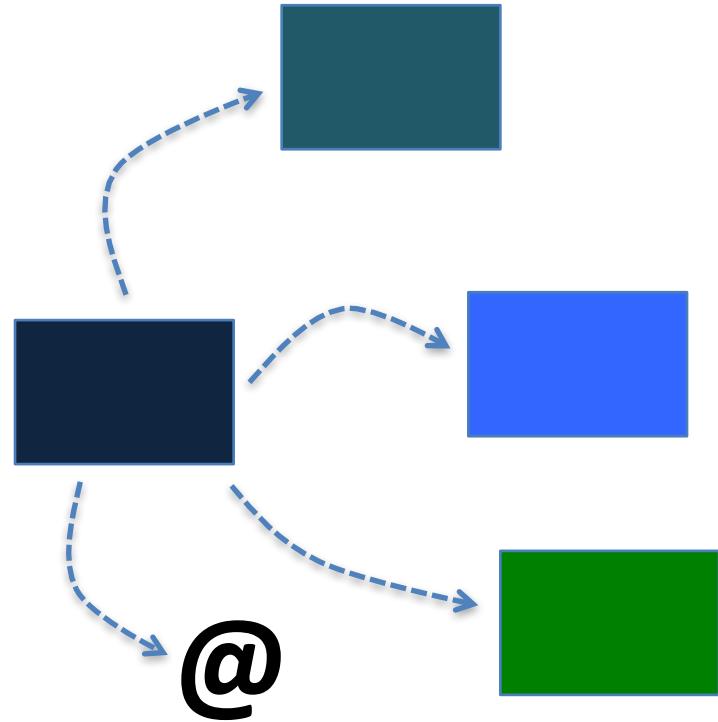
# Its Not all CRUD



# Its Not all CRUD

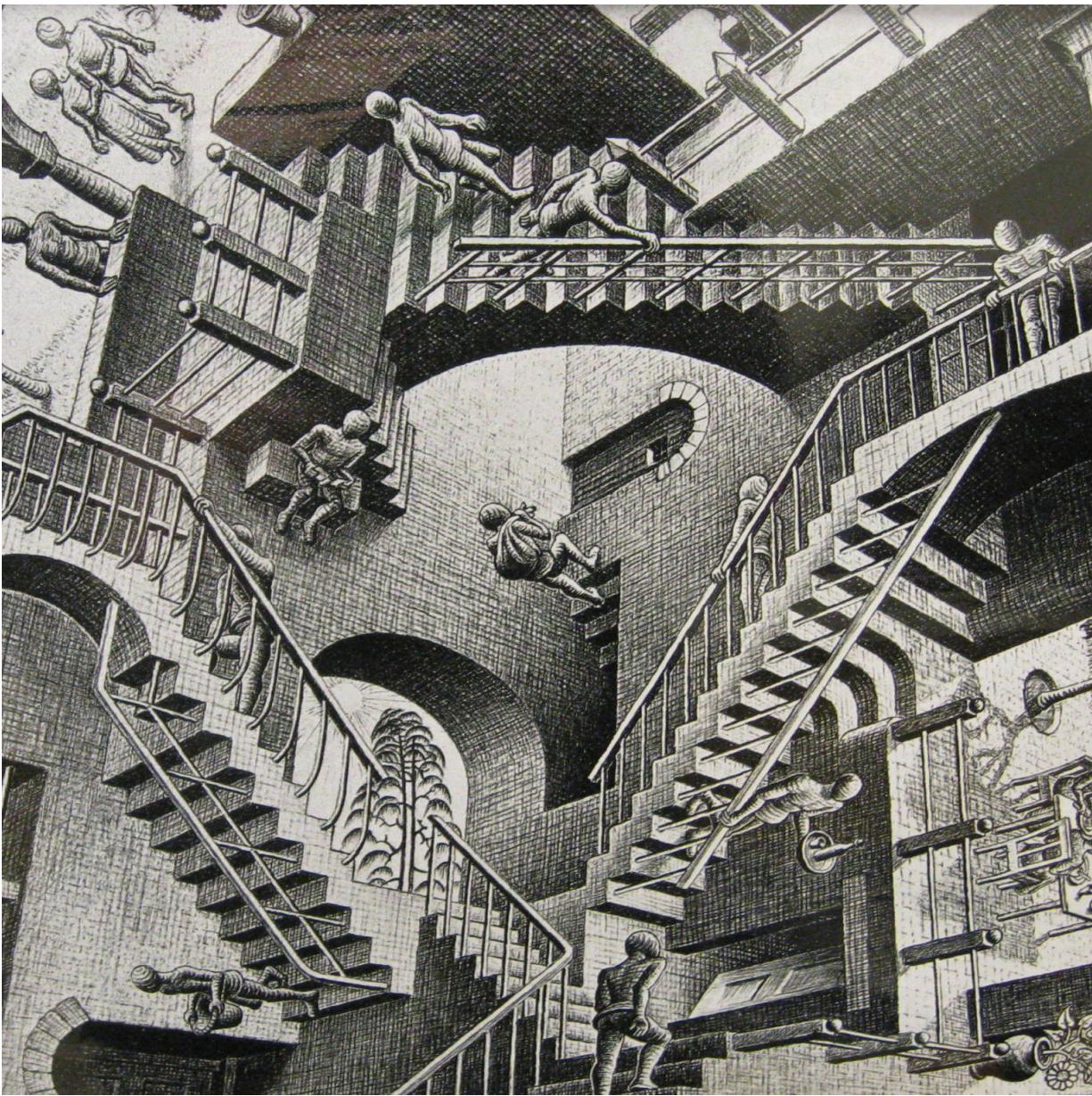
**PUT /owner/{id}**

```
{  
  "address" : {  
    "town" : "Ilamaville"  
  }  
}
```



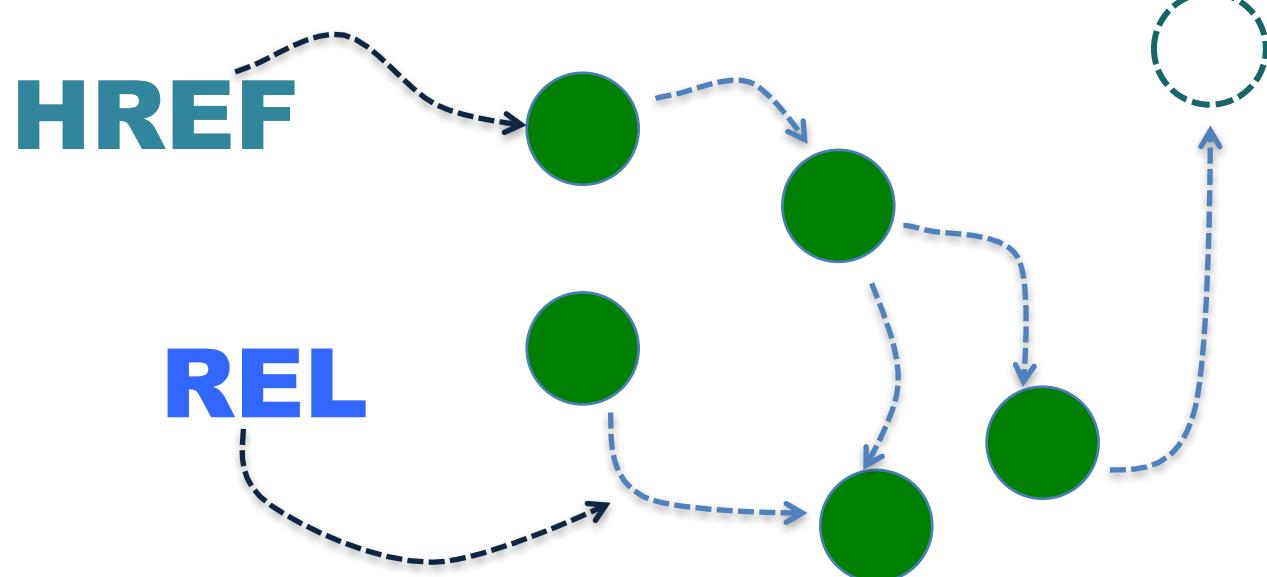
**POST /owner/{id}/change\_of\_address**

# Hyper-Reality: The API as a Graph



# Hyper-Reality: The API as a Graph

```
{  
  "id" : "https://api.hamster.com/hamsters/1",  
  "url" : "https://api.hamster.com/hamsters/1",  
  "pictures_link" : "https://api.hamster.com/hamsters/1/pictures"  
}
```



```
{
  "links" : {
    "self" : {"href" :"https://api.hamster.com/hamsters/1"},
    "pictures" : {"href" :"https://api.hamster.com/hamsters/1/pictures"}
  }
}
```

# Streams for the Web



# Streams for the Web

**order.shipped**

**compliance.assessed**

**account.opened**

**measurement.derived**

**POST /subscriptions**

```
{  
  "subscriptions" : ["orders.*"],  
  "token" : "password",  
  "links" : {  
    "self" : {"href" :"https://api.example.com/callbacks"}  
}
```

**POST /api.example.com/callbacks**

```
{  
  "event" : "order.shipped",  
  "signature" : "a_worthwhile_signature",  
  "the_event" : "...",  
  "links" : {  
    "self" : {"href" :"https://api.llama.io/events/{id}"},  
    "order" : {"href" :"https://api.llama.io/orders/{id}"}  
}
```

Subscribe

Web Hook

# Beauty Has Enemies

Cylinder Oriented Architectures

Enterprise Spaghetti Monster Crowd

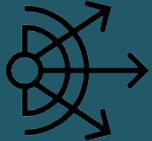
Projects not Products

Ritualistic Ownership of Systems

Lift and Shift

The CSV / PDF Culture

# What I'm learning?



Think Distributed



Be Lenient with “Master Data”



Help your Consumers



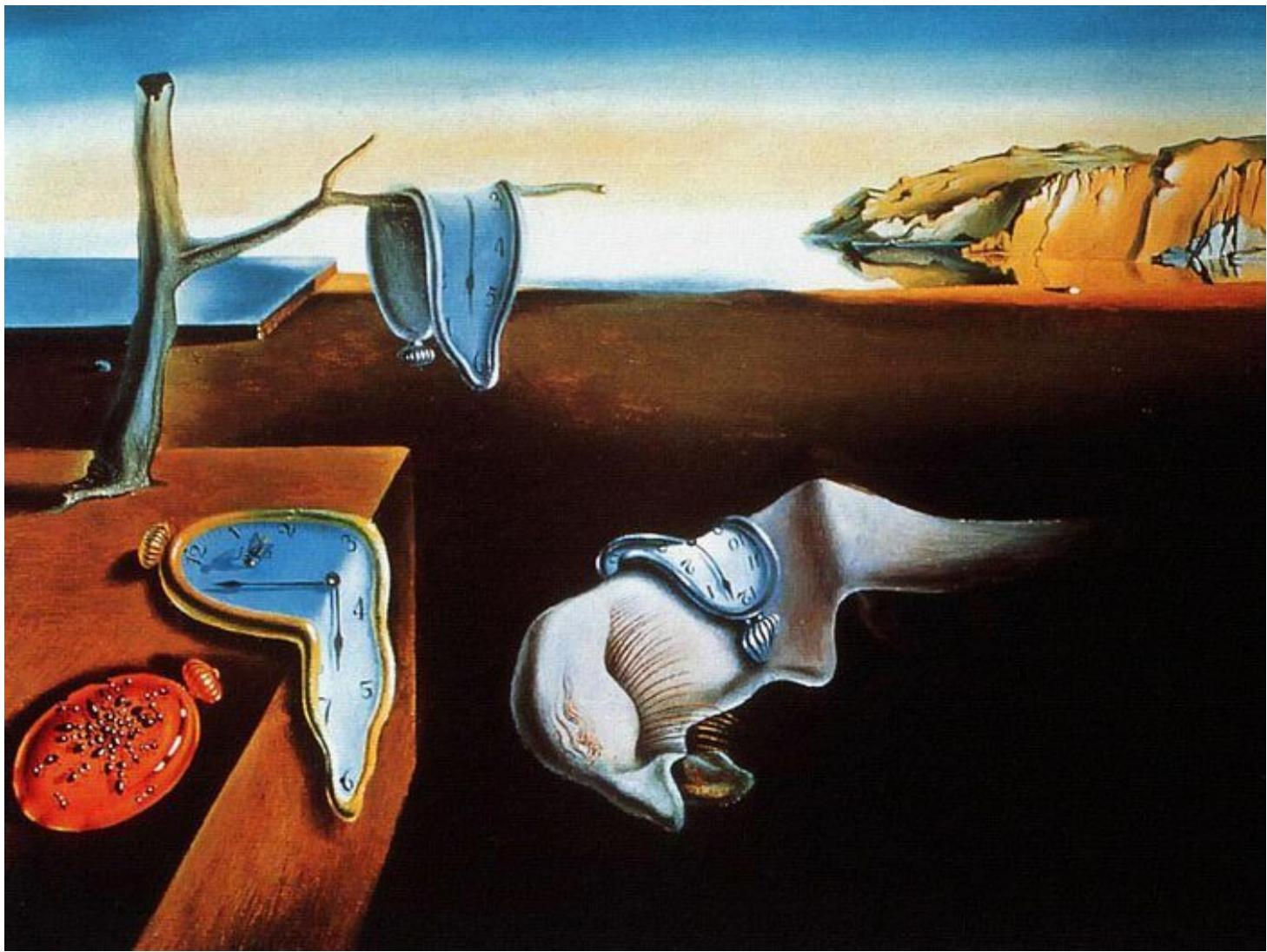
Integrate in 5 Minutes



Events Everywhere



Define your own Style



# The End of APIs?

thank you