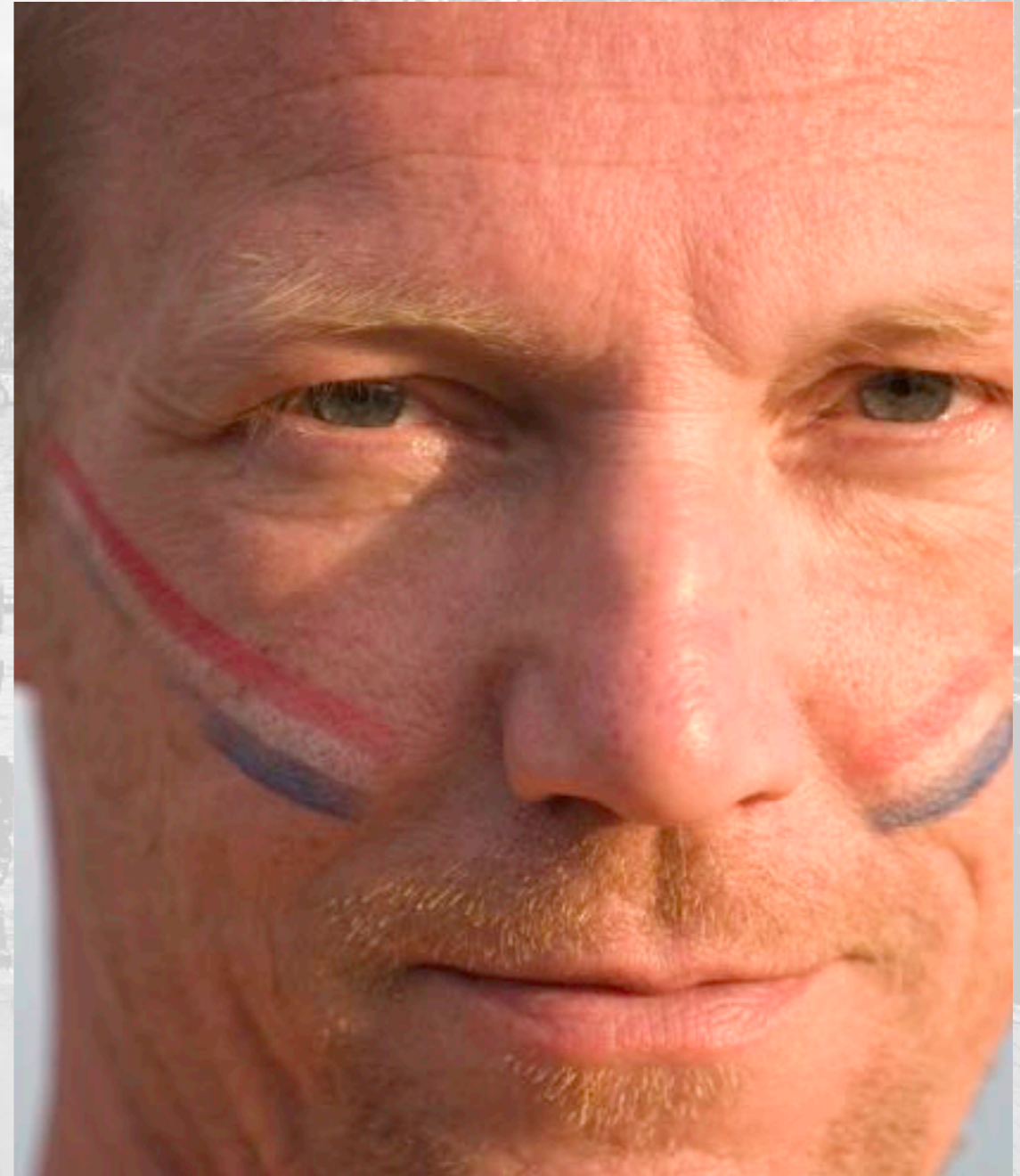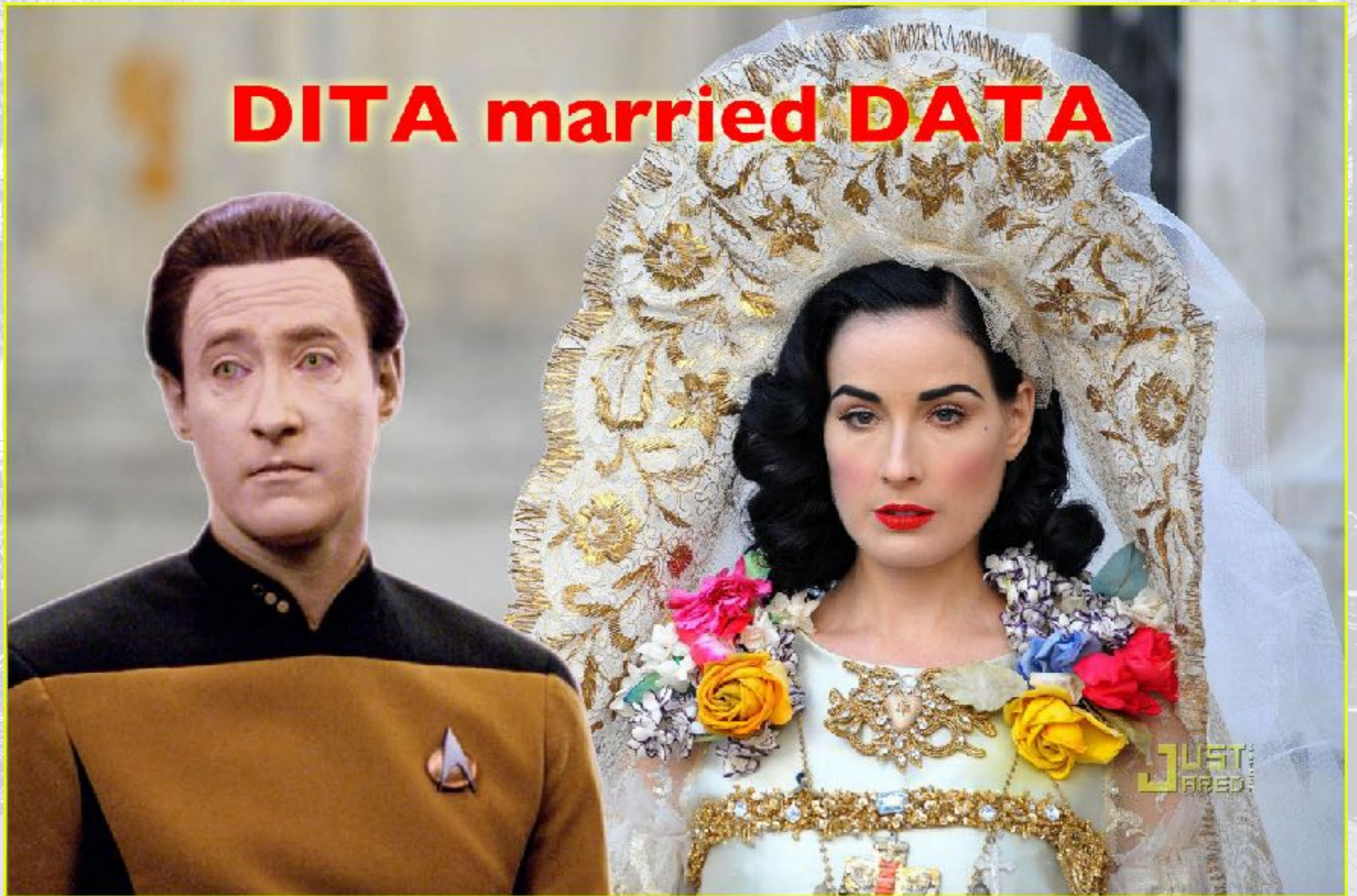# DCQL

Jang F.M. Graat
Smart Information Design

Who's talking ?

- **Jang F.M. Graat**

- **Physics, Psychology, Philosophy**

- **Geek Philosopher**

- **addicted to challenge**

- **using DITA since 2005**

- **live DITA documents**

DITA married DATA

DITA + DATA

- **adding database queries into DITA content**

- **abstracting query syntax**

- **assembling full queries from snippets**

- **using familiar cascading rules**

- **resolve at publish time or runtime**

- **current: SQL, future: XQuery**

DCQL

- **datadef**

  - **all info required to access database**

  - **controlling when data query is executed**

- **@dataref - pulling data in**

- **@datacontext - sql snippets**

- **cascading rules apply**

sql datasource

```
<datadef keys="data01" href="http://mydataserver/getmydata.php">
    <topicmeta>
        <data name="type" value="MySQL"/>
        <data name="userid" value="4everJang"/>
        <data name="password" value="*****"/>
        <data deliveryTarget="pdf" name="resolve" value="onpublish">
        <data deliveryTarget="ebook" name="resolve" value="onpublish">
        <data deliveryTarget="html" name="resolve" value="onload">
        <data deliveryTarget="html5" name="keepalive" value="yes">
        <data deliveryTarget="html5" name="writeback" value="yes">
    </topicmeta>
</keydef>
```

pulling a table

```
<table dataref="source(data01) table(productdata)
       fields(item,name,price,stock) order(name,stock)">
       <tgroup>
           <thead><row>
               <entry>Item</entry><entry>Name</entry>
               <entry>Price</entry><entry>Stock</entry>
           </row></thead>
           <tbody>
               <row><entry/><entry/><entry/><entry/></row>
            </tbody>
       </tgroup>
</table>
```

cascading queries

```
<topic datacontext="source(data01) item(1001)">
  …
  <section datacontext="table(productdata)">
   <p>The <ph dataref="field(name)">XY1001</ph>
     is the 4-cylinder version of the
     <ph dataref="item(42) field(name)">XY42</ph>.
   </p>
  …
  <section datacontext="table(maintenance)">
   <p>Replace the oil every
     <ph dataref="field(oilfrequency)">6</ph>months with
     <ph dataref="field(oilamount)">1.2</ph>liters of
     <ph dataref="field(oiltype)">10W-40</ph>.
   </p>
```

xml datasource

```xml
<datadef keys="data02" href="http://myexistserver/getmydata.xql">
    <topicmeta>
        <data name="type" value="exist-db"/>
        <data name="userid" value="4everJang"/>
        <data name="password" value="*****"/>
        <data deliveryTarget="pdf" name="resolve" value="onpublish">
        <data deliveryTarget="ebook" name="resolve" value="onpublish">
        <data deliveryTarget="html" name="resolve" value="onload">
        <data deliveryTarget="html5" name="keepalive" value="yes">
        <data deliveryTarget="html5" name="writeback" value="yes">
    </topicmeta>
</keydef>
```

pulling any element

```
<topic datacontext="doc('/db/products')/root()">
  …
  <section datacontext="products[@id='1001]">
   <p>The <ph dataref="name">XY1001</ph>
     is the 4-cylinder version of the
     <ph dataref="../products[@id='42']/name">XY42</ph>.
   </p>
  …
  <section dataref="maintenance[@id='1001']"/section>
```

todos ?

- **add more SQL options**

- **add NoSQL, other query languages (?)**

- **create DITA-OT plugin**

- **create writeback code for HTML5**

- **do some paid work**

queries ?

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