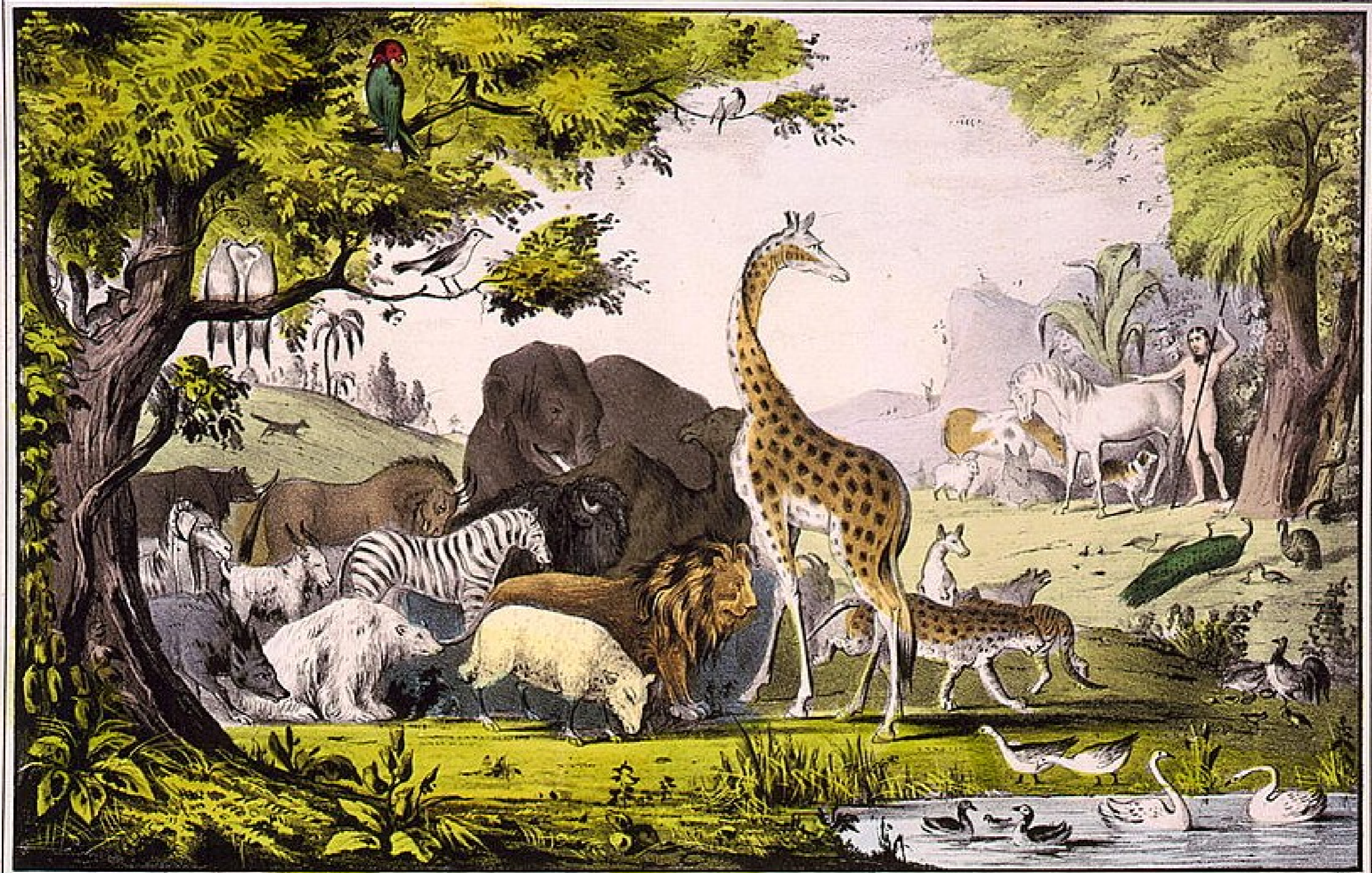


`<title>` Abstract Generic Microformats
for Coverage, Comprehensiveness,
and Adaptability `</title>`

`<gloss>` Or, extension in the instance
for fun and profit `</gloss>`

`<name>` Wendell Piez `</name>`
`<affiliation>` Mulberry Technologies, Inc. `</affiliation>`
`<event>` *Balisage: The Markup Conference 2011* `</event>`
`<place>` Montréal, Québec `</place>`
`<date>` August 3, 2011 `</date>`

Waking up in an untouched world

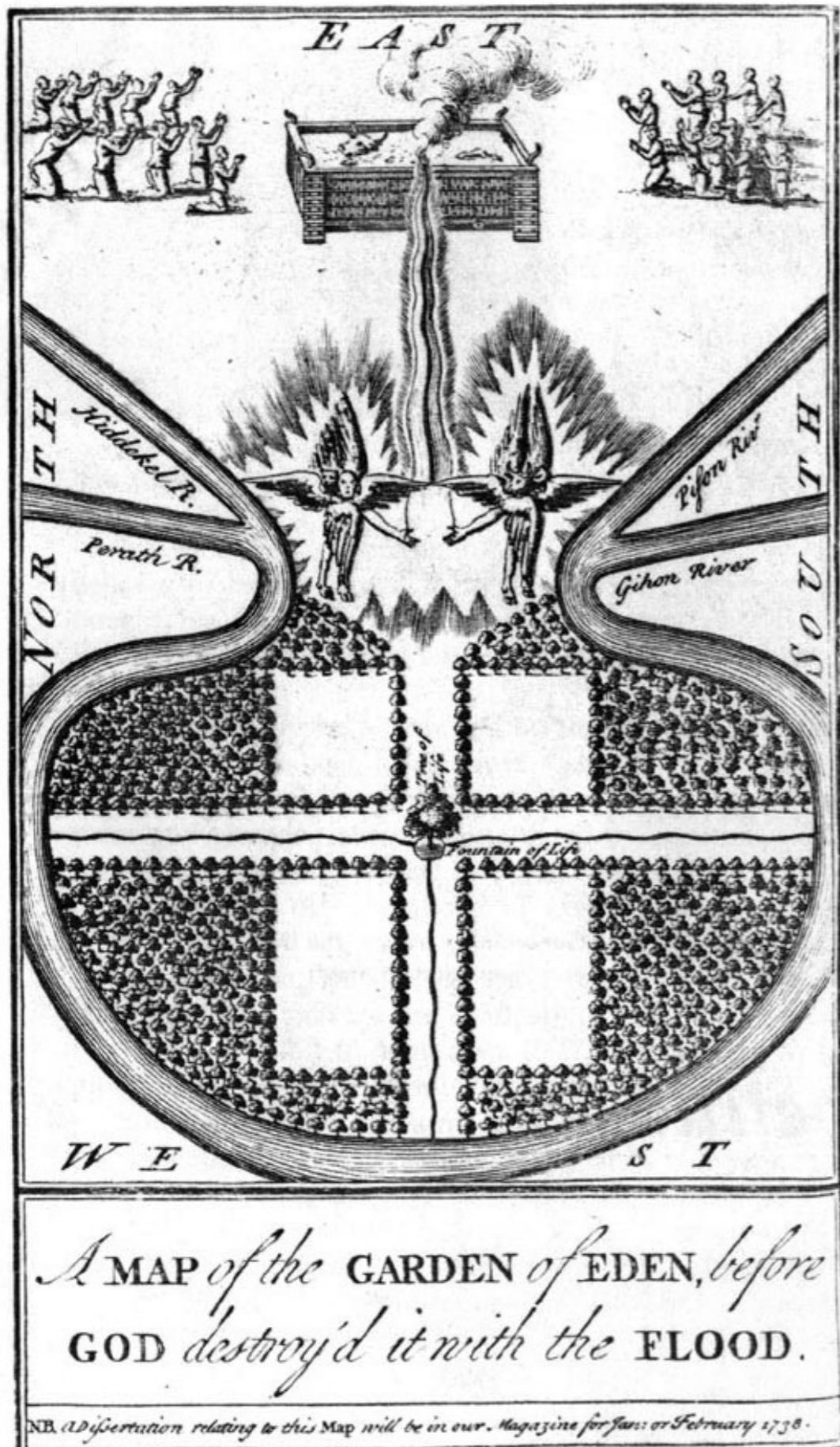


LITH. & PUB. BY N. CURRIER

Entered according to Act of Congress in the year 1847 by N. Currier, in the Clerk's office of the District Court of the Southern District of New-York.

102 NASSAU ST. COR. OF SPRING N.Y.

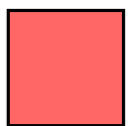
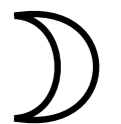
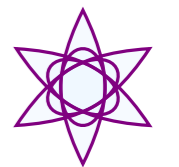
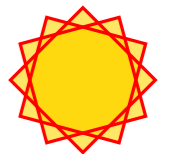
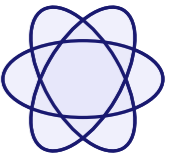
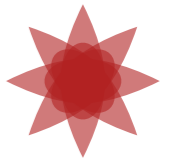
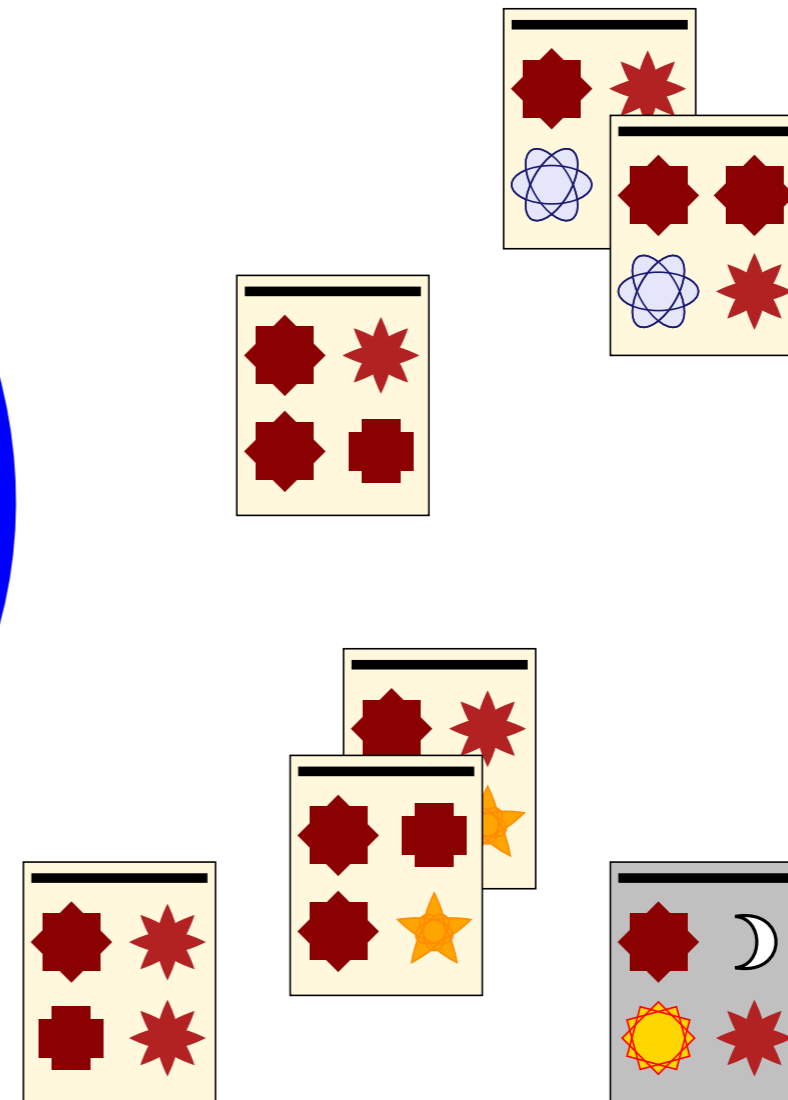
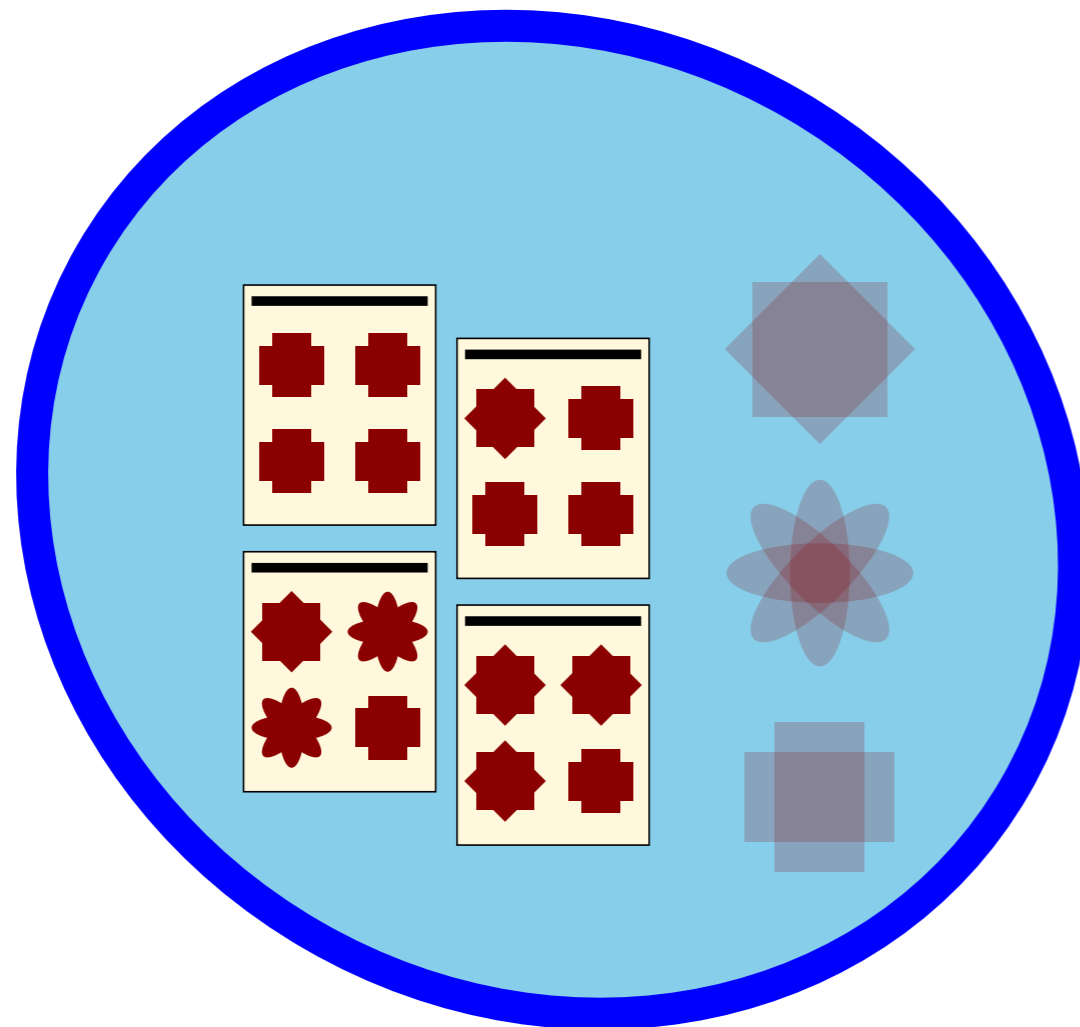
ADAM NAMING THE CREATURES.



Something named
is something ordered

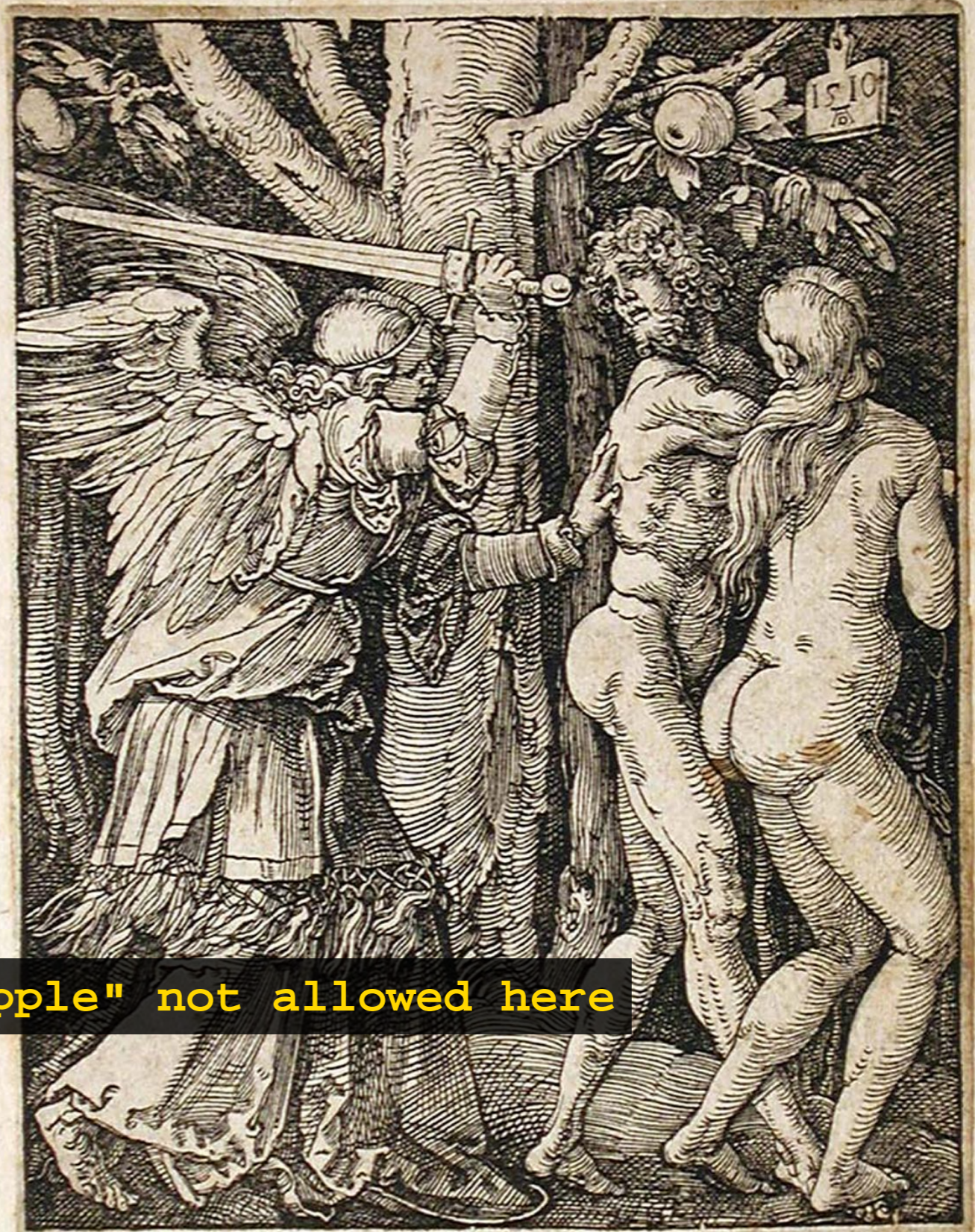
<!ELEMENT garden
((path | stream | woods)*, tree) >

Regularity enables automation



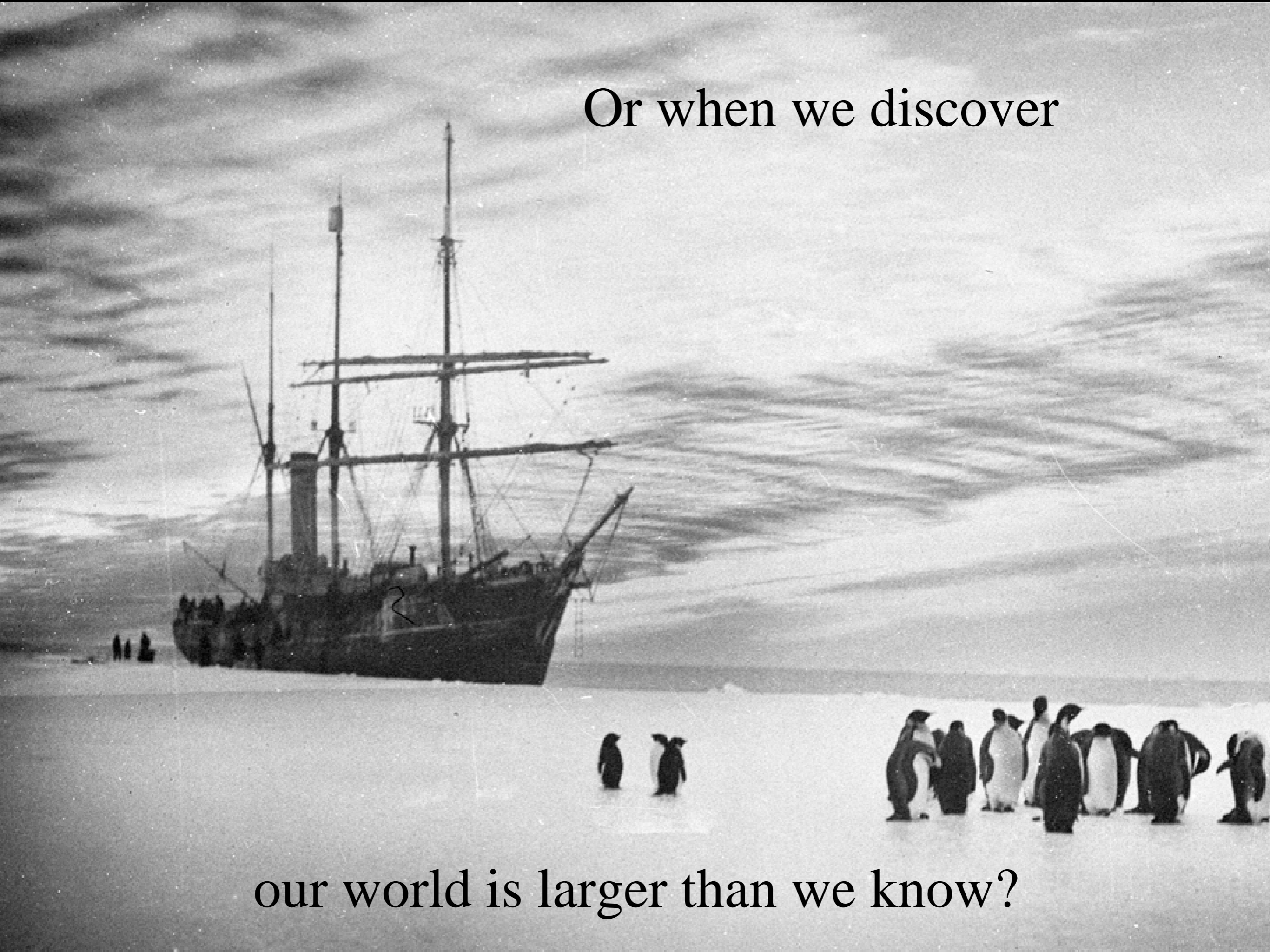
Specifying criteria for inclusion
(establishing a boundary between inside and out)
gives us control over what we haven't seen yet

*But what happens
when we don't follow
the rules?*

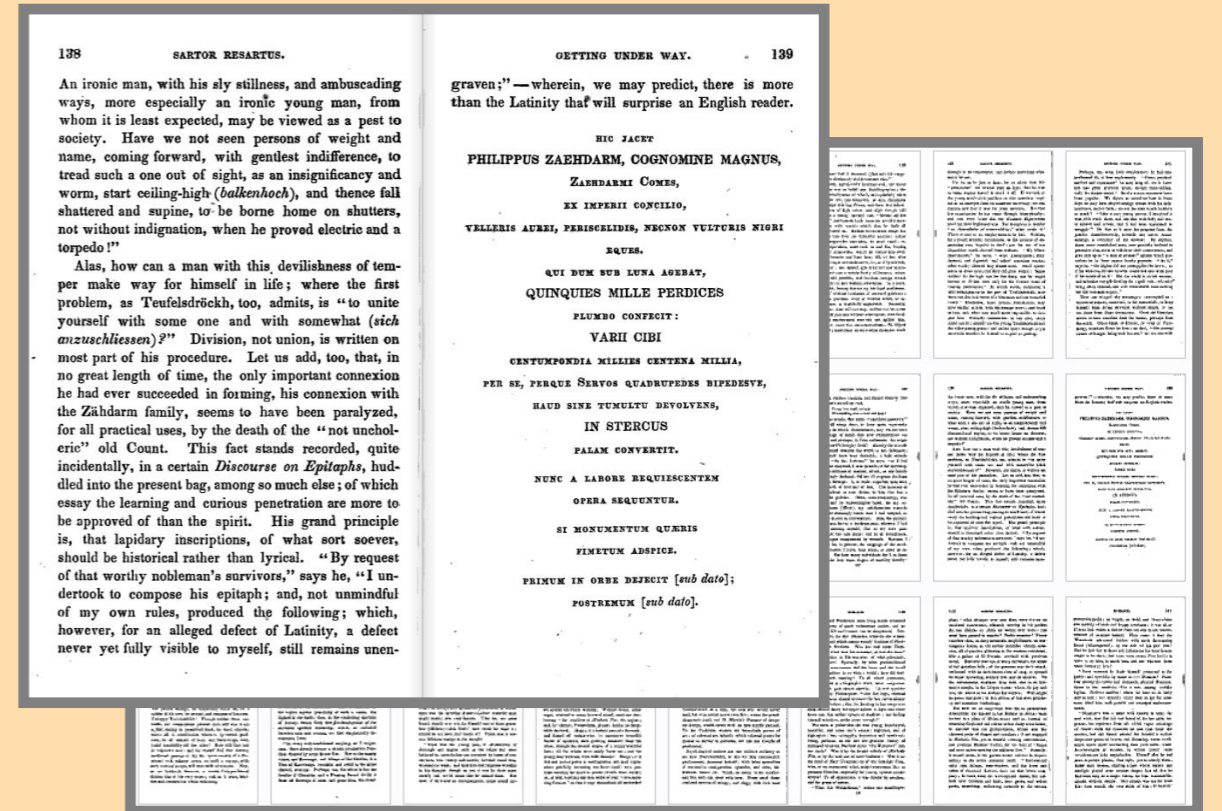
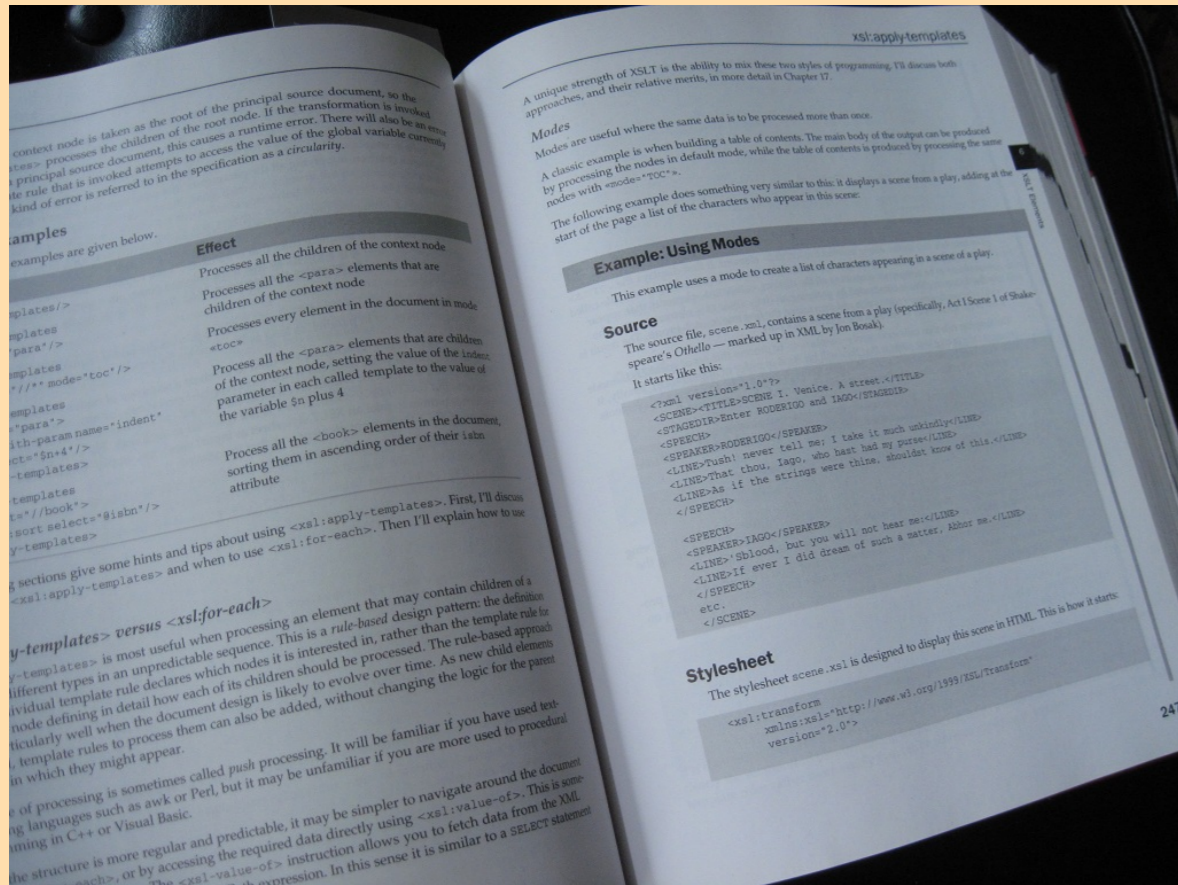


VALIDATION ERROR: element "apple" not allowed here

Or when we discover



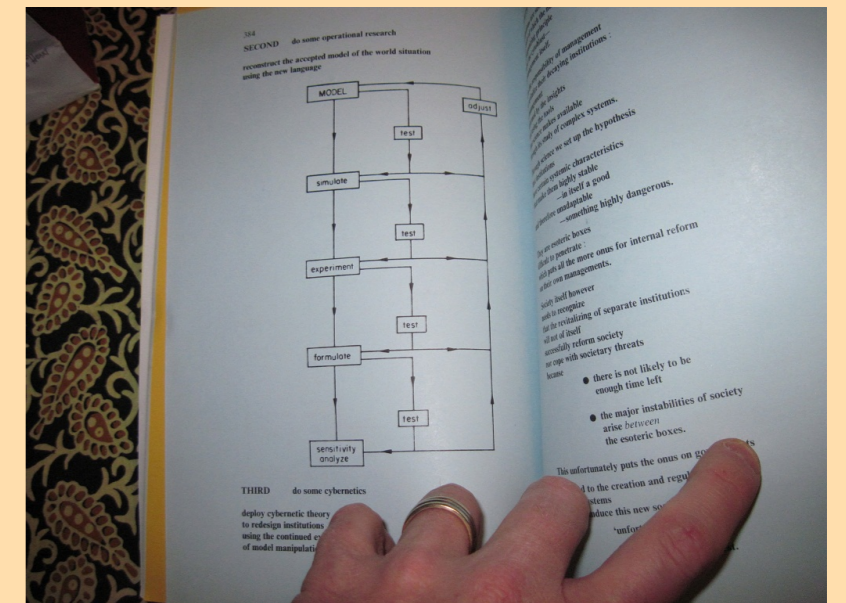
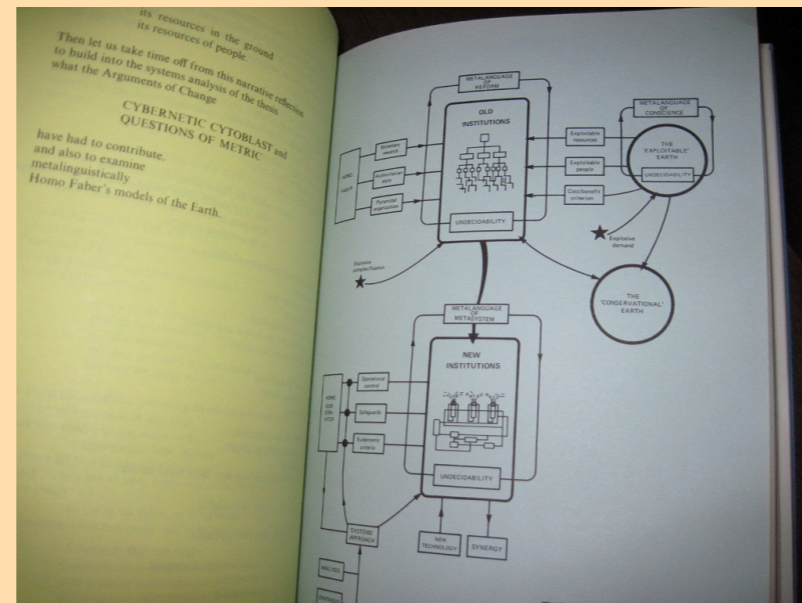
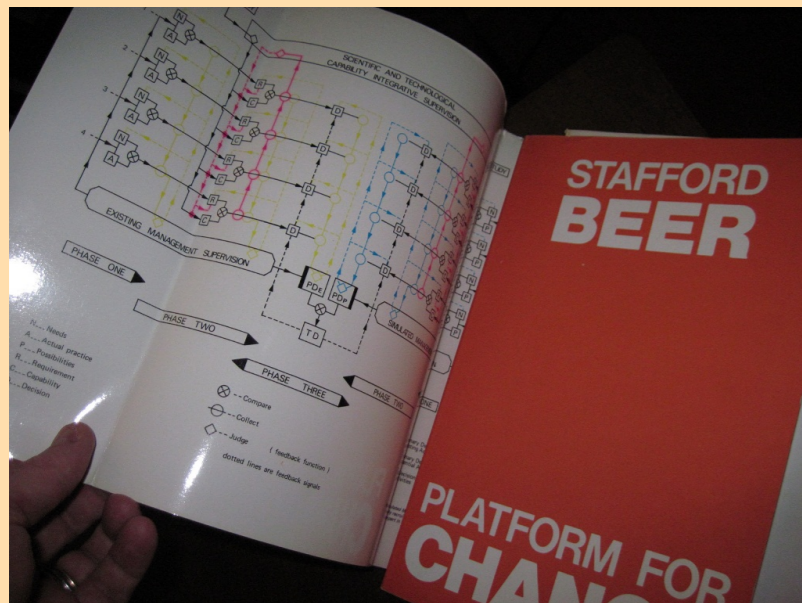
our world is larger than we know?



Pages from *Sartor Resartus*, by Thomas Carlyle

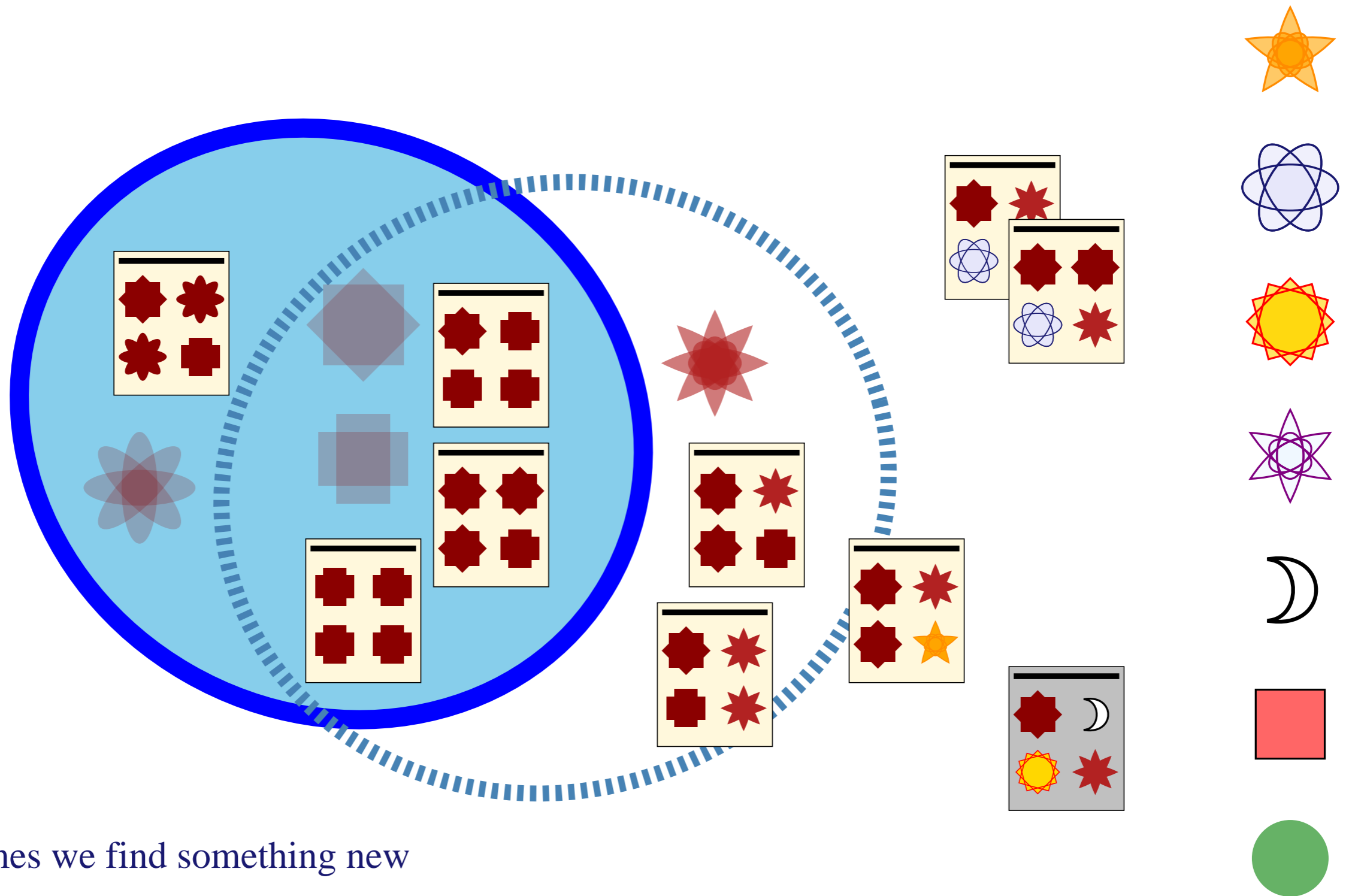
A Wrox Programmer to Programmer volume

What's an anomaly ... depends on the level of scale



Stafford Beer, Platform for Change

Boundaries can be contested

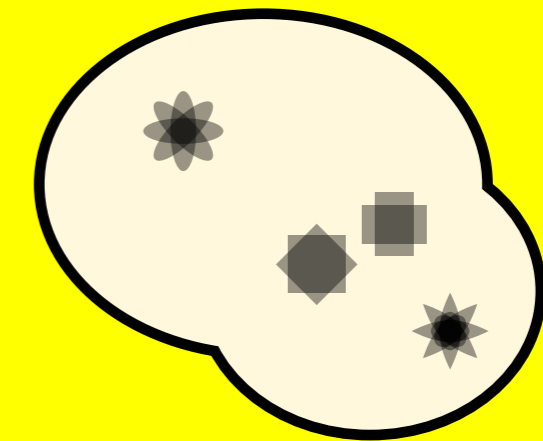
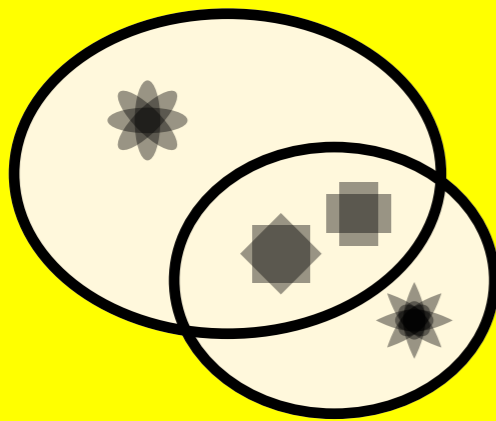


Sometimes we find something new
(or it finds us)

Devil's Choice

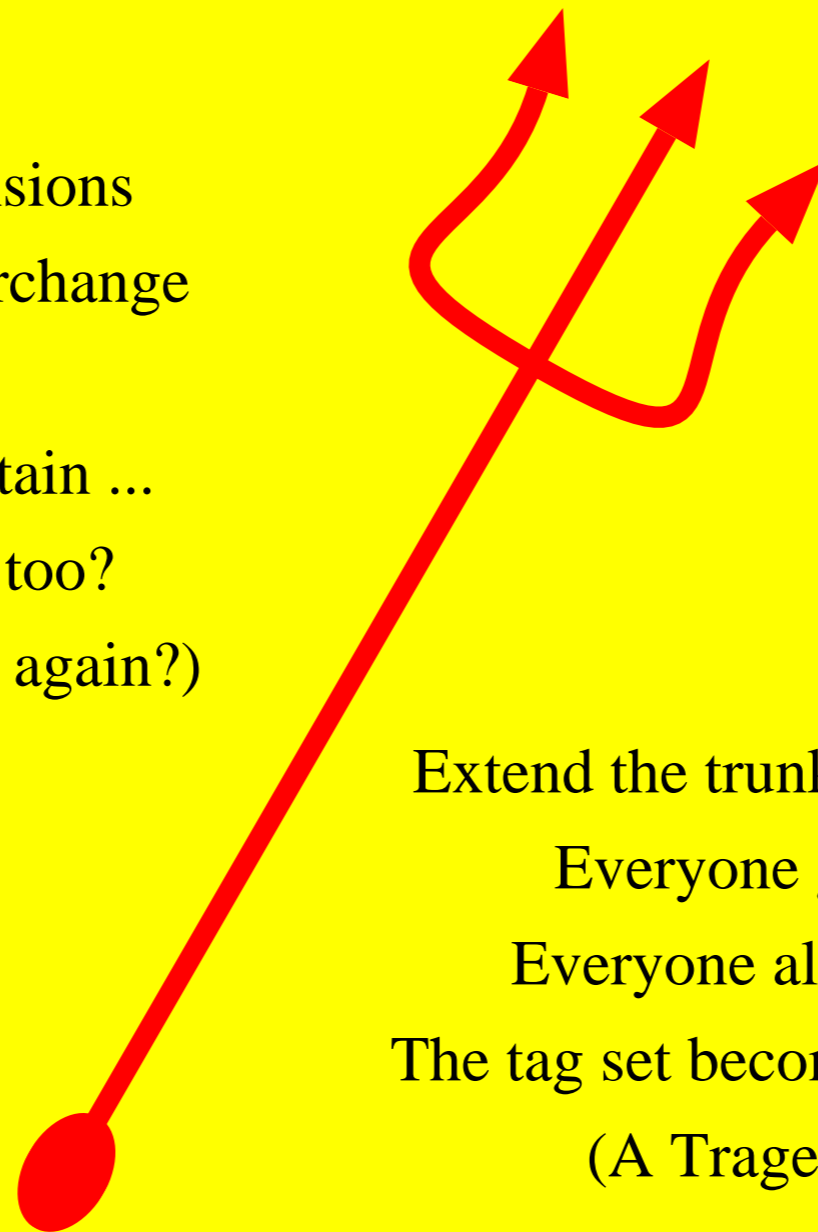
Fork

Make your own local extensions
Compromise portability, interchange
You're on your own!
... Design, implement, maintain ...
The schema, and the delta too?
(Why are we using a standard again?)



Bloat

Extend the trunk of the community schema
Everyone gets the new elements
Everyone also gets everyone else's!
The tag set becomes large, unwieldy, opaque
(A Tragedy of the Commons)





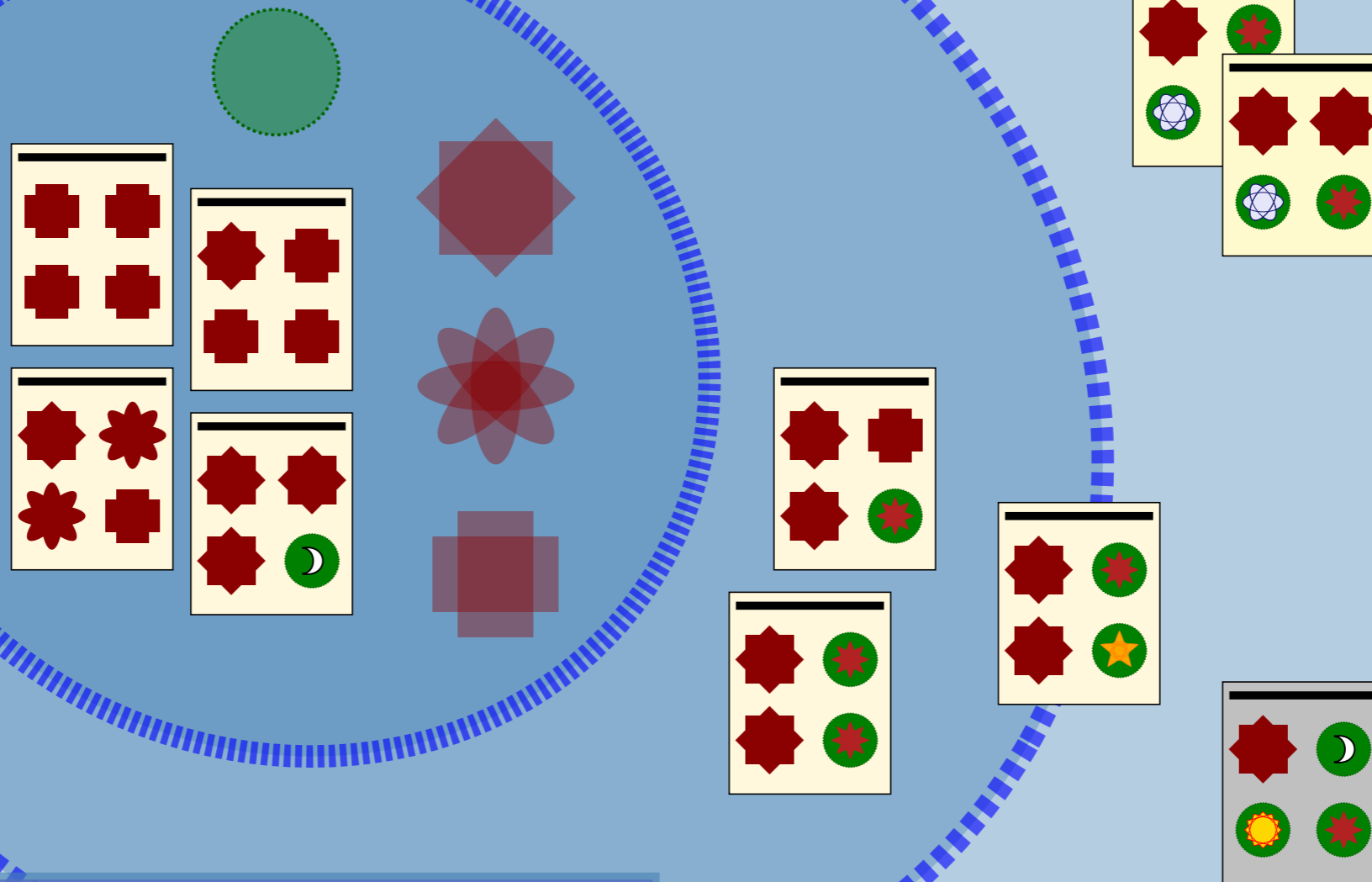
*Then too
many markup practitioners do not want
to become Sorcerer's Apprentices*

“Schema, make me new elements!”

```
ERROR: The markup declarations must be well-formed
```

“But I’m an editor (writer, designer),
not a computer programmer....”

An idea: use an element whose semantics are uncommitted
Recruit available attributes for class or type bindings



Boundary becomes more permeable
Layered validation can provide local control

This is what people are doing anyway

@role

Illegitimately ...

Being “creative” with available elements

(a slippery slope to tag abuse)

and hiding the problem

@

... And legitimately

Using general-purpose elements

to contrive “microformats”

both implicitly and explicitly

<statement>

<sec>

<named-content>

@class

<div>

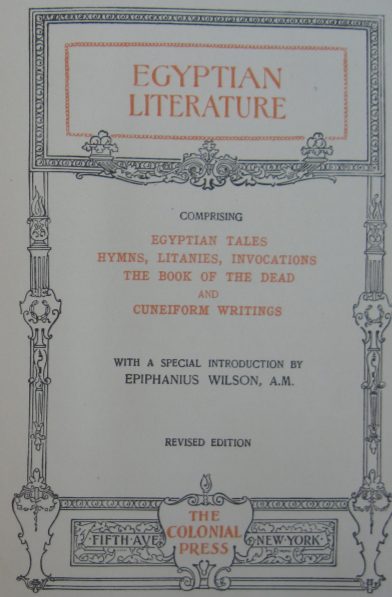
Why not provide for this in the schema?

Abstract generic elements offering open-ended extensibility

in the instance, with just a few elements and attributes

An example

From a nineteenth-century translation of an ancient manuscript



NEI... my flesh nor my mem-
bers be gashed with knives, let me not be wounded by knives
by you. I have come, I have been judged, I have come forth
therein, [I] have power with my father, the Old man, Nu.
He hath granted that I may live, he hath given strength unto
me, and he hath provided me with the inheritance of my father
therein."

DOMINION OVER ELEMENTS

[From the Papyrus of Ani (British Museum No. 10,470, sheet 16).]

THE CHAPTER OF BREATHING THE AIR AND OF HAVING DO-
MINION OVER THE WATER IN THE UNDERWORLD. Osiris Ani
saith:

"Open to me." Who art thou? Whither goest thou?
What is thy name? "I am one of you." Who are those with
thee? "The two serpent goddesses *Merti*. Separate thou
from him, head from head, when [thou] goest into the divine
Mesqen chamber. He letteth me set out for the temple of the
gods who have found their faces. 'Assembler of Souls' is
the name of my boat; 'Making the hair to stand on end' is
the name of the oars; 'Goad' is the name of the hold; 'Mak-
ing straight for the middle' is the name of the rudder; like-
wise [the boat] is a type of my being borne onward in the
pool. Let there be given unto me vessels of milk, together
with cakes, and loaves of bread, and cups of drink, and flesh
in the Temple of Anpu."

IF HE (I.E., THE DECEASED) KNOWETH THIS CHAPTER, HE
SHALL GO INTO, AFTER COMING FORTH FROM, THE UNDER-
WORLD OF THE [BEAUTIFUL AMENTET].

of, Nu, triumphant, saith:
in thy name of 'Divider of
I may have dominion over
whom thou had power over Osiris
gods. Grant thou that I may
who have their habitations
foundation, even as they have
of whose name they are ig-
power even as [he hath let
u," or (as others say), "My
d in Tātāu, and I have my
my house; it was built for
the god Khnemu set it up
his heaven it cometh by the
his heaven it cometh by the
his heaven it cometh by the

```

<?xml version="1.0" encoding="UTF-8"?>
<div type="chapter">
  <line type="head">Dominion Over Elements</line>

  <line type="bibl">From the Papyrus of Ani (British Museum
  No. 10,470, sheet 16).</line>
  <div class="excerpt">

    <ab class="opener"><span class="argument">The Chapter
    of breathing the air and of having dominion over the
    water in the underworld.</span> Osiris Ani saith:</ab>

    <ab type="text"><span class="quote">Open to me.</span>
    Who art thou? Whither goest thou? What is thy name?
    <span class="quote">I am one of you.</span> Who are
    those with thee? <span class="quote">The two serpent
    goddesses <span class="name">Merti</span>. Separate
    thou from him, head from head, when <span
    class="supplied">thou</span> goest into the divine
    <span class="name">Mesqen</span> chamber. He letteth me
    set out for the temple of the gods who have found their
    faces. <span class="appellation">Assembler of
    Souls</span> is the name of my boat; <span
    class="appellation">Making the hair to stand on
    end</span> is the name of the oars; <span
    class="appellation">Goad</span> is the name of the
    hold; <span class="appellation">Making straight for
    the middle</span> is the name of the rudder; likewise
    <span class="supplied">the boat</span> is a type of my
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    me vessels of milk, together with cakes, and loaves of
    bread, and cups of drink, and flesh in the Temple of
    Anpu.</span></ab>

    <ab class="closer">if he (i.e., the deceased) knoweth
    this chapter, he shall go into, after coming forth
    from, the underworld of the <span class="supplied">
    beautiful amentet</span>.</ab>
  </div>
</div>

```

NEVER AGAIN... my flesh nor my mem-
bers be gashed with knives, let me not be wounded by knives
by you. I have come, I have been judged, I have come forth
therein, [I] have power with my father, the Old man, Nu.
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    thou from him, head from head, when <span
    class="supplied">thou</span> goest into the divine
    <span class="name">Mesqen</span> chamber. He letteth me
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    Souls</span> is the name of my boat; <span
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    end</span> is the name of the oars; <span
    class="appellation">Goad</span> is the name of the
    hold; <span class="appellation">Making straight for
    the middle</span> is the name of the rudder; likewise
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  </div>
</div>

```

With the help of a little XSLT and CSS, we can display in a browser.

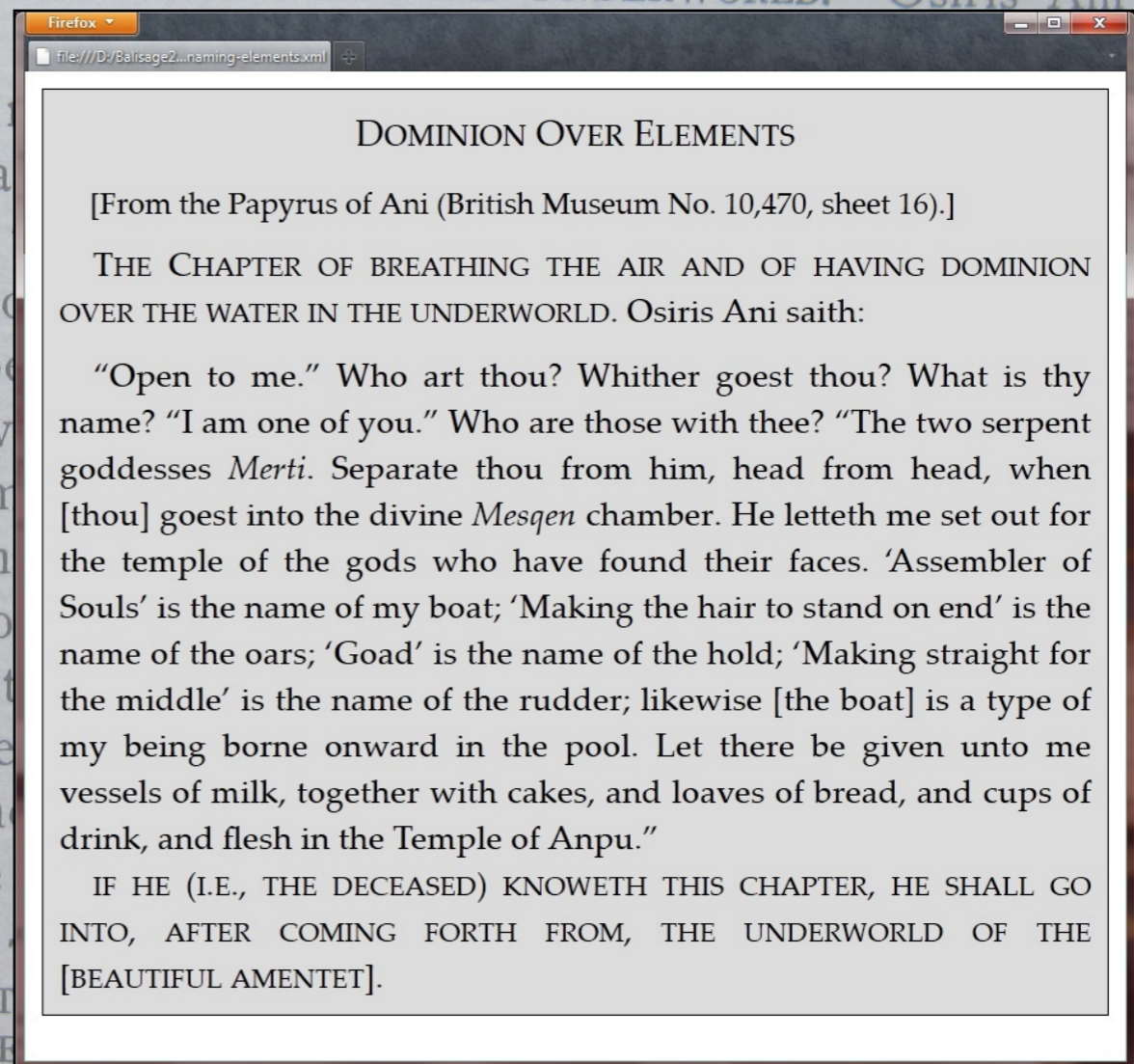


Photo of stacked amphorae from Wikimedia Commons (uploaded by user AdMeskens)

Issues

- Integration with descriptive tag sets: loose or tight?
- Dealing with attributes
- Validation, interchange and workflow

A (throw-away) design

<div> — contains blocks*

<ab> — block containing mix of block-level and inline*

<line> — block containing only inline

<pair> — an arbitrary pair

<ap> — a sequence of pairs

**** — appears inline*

<link> — appears inline, carries XLink apparatus

@type — a type assignment (across documents)

@class — a class assignment (within a document)

@xml:id — a unique id (within a document)

@which — an implicit reference (IDREFS)

@style — arbitrary styling (CSS)

* A recursive structure

`<box class="neversaidit">`

I don't mean to suggest

Microformats are a panacea!

Microformats should replace proper element types!

(Everyone should use them for everything!)

We should have a standard way of doing this!

`</box>`

`<box class="fordiscussion">`

This can be a useful complement to schema extension especially when schema extension is impractical.

It can also:

- Relieve pressure on a community standard to be everything to everyone;
- Accommodate needs and desires that otherwise lead to tag abuse;
- And empower practitioners for the real thing: disciplined use of descriptive markup.

`</box>`

What's your garden like?

