What if ... ?

Some commonly asked questions

What if the technology we use fails?

Chance of Failure

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Risk = Likelihood x Severity

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in unit Time

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in unit

varies through

Time

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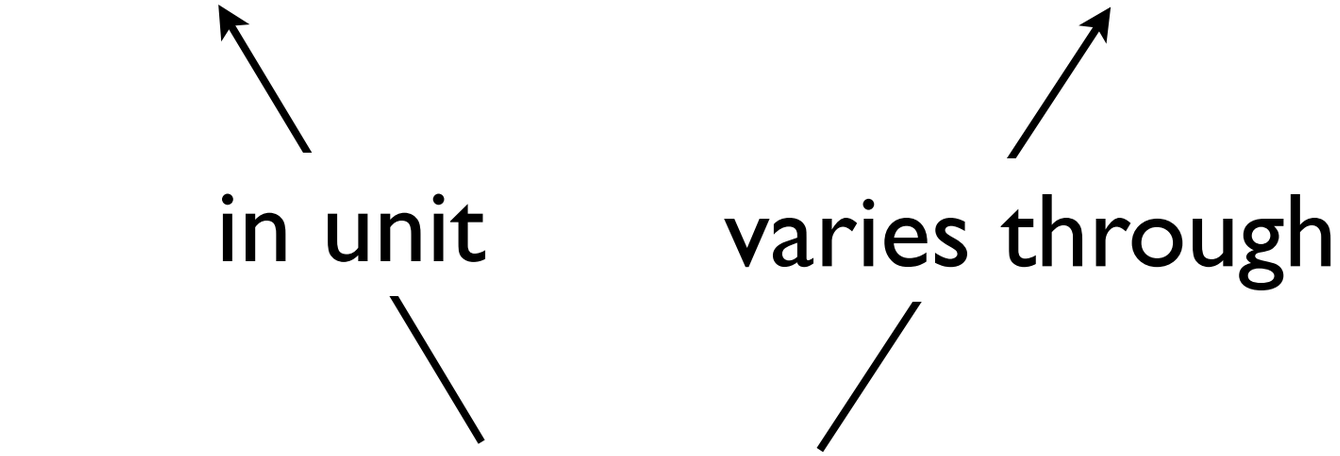

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- But severity may be unpredictable

Chance of Failure

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Time

- As time tends to infinity so risk tends to 100%
- But severity may be unpredictable
- Not a helpful way to think of identifiers

Given long enough change is inevitable

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Nothing lasts forever

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Nothing lasts forever

Question is whether it will be replaced
by something compatible

Stability

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Continuity = Usefulness x Ubiquity

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People will replace something
that they need

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The more people use it
the more likely someone
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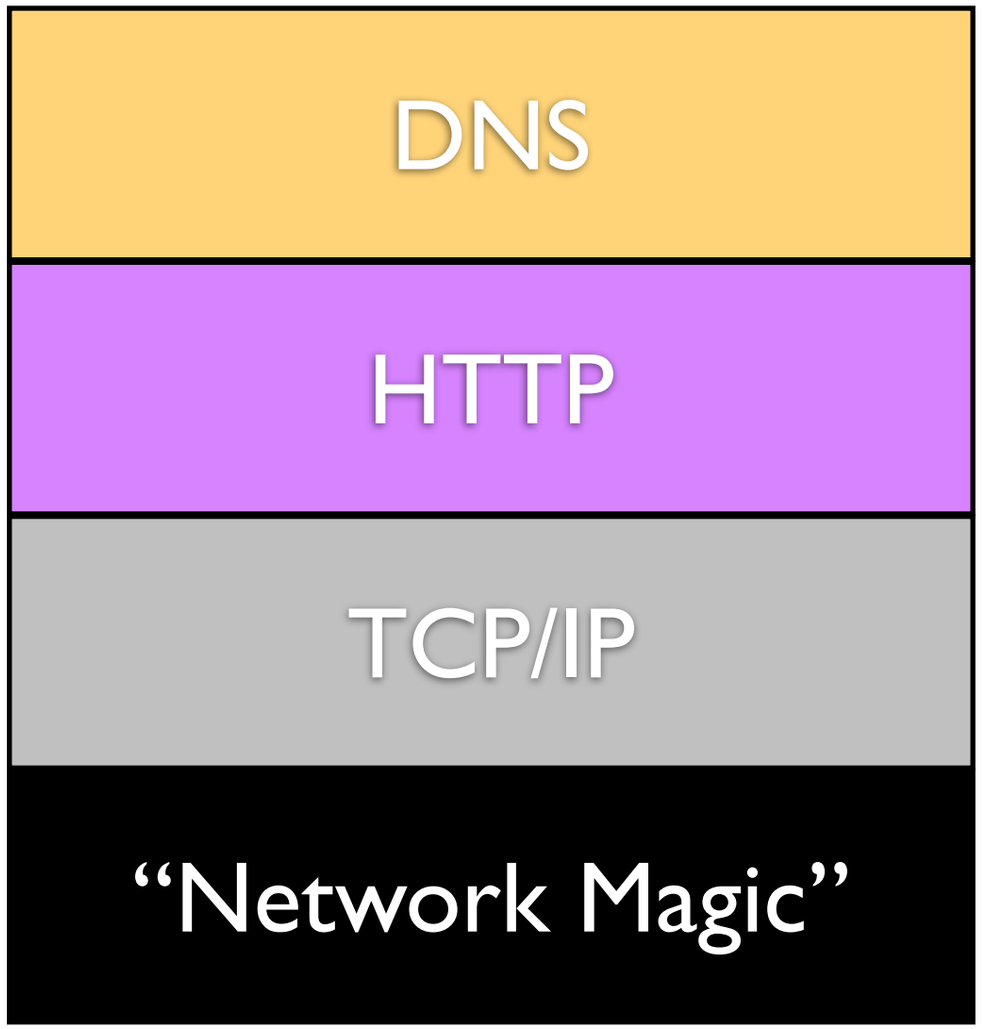
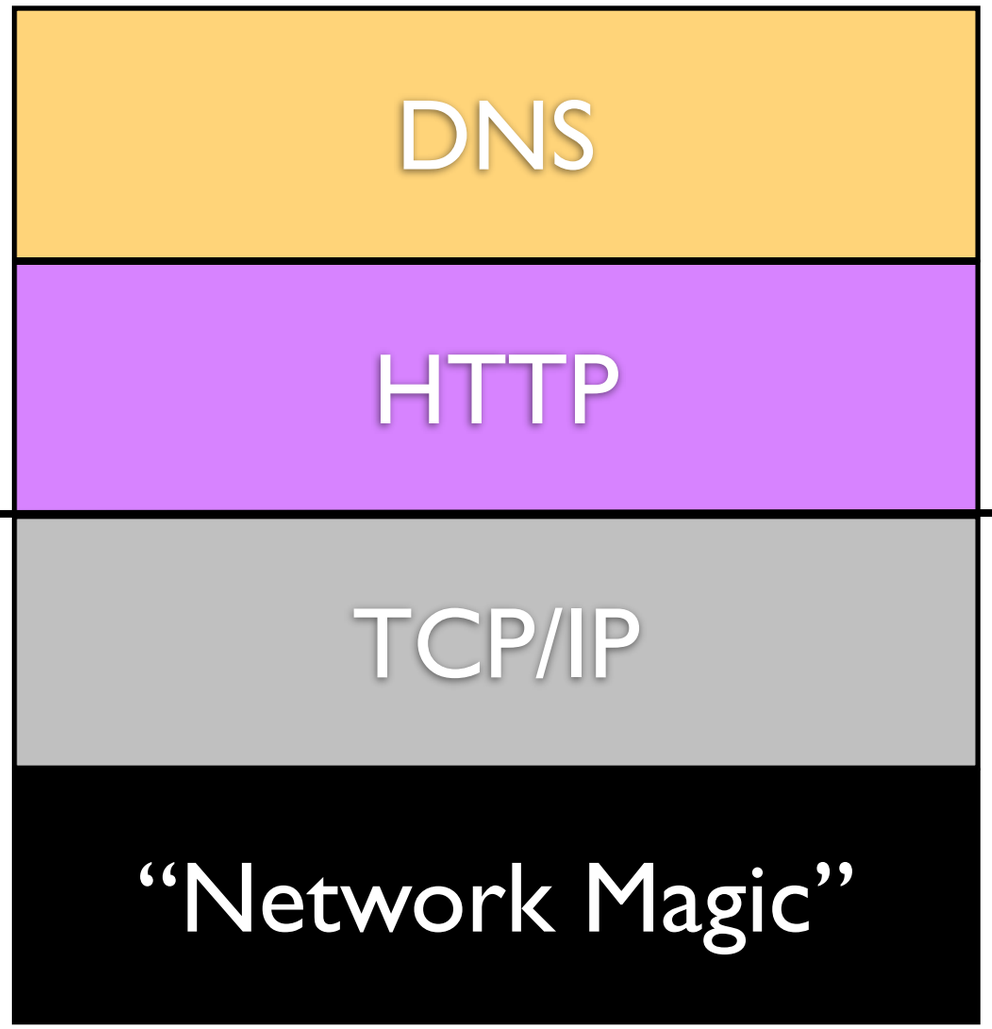
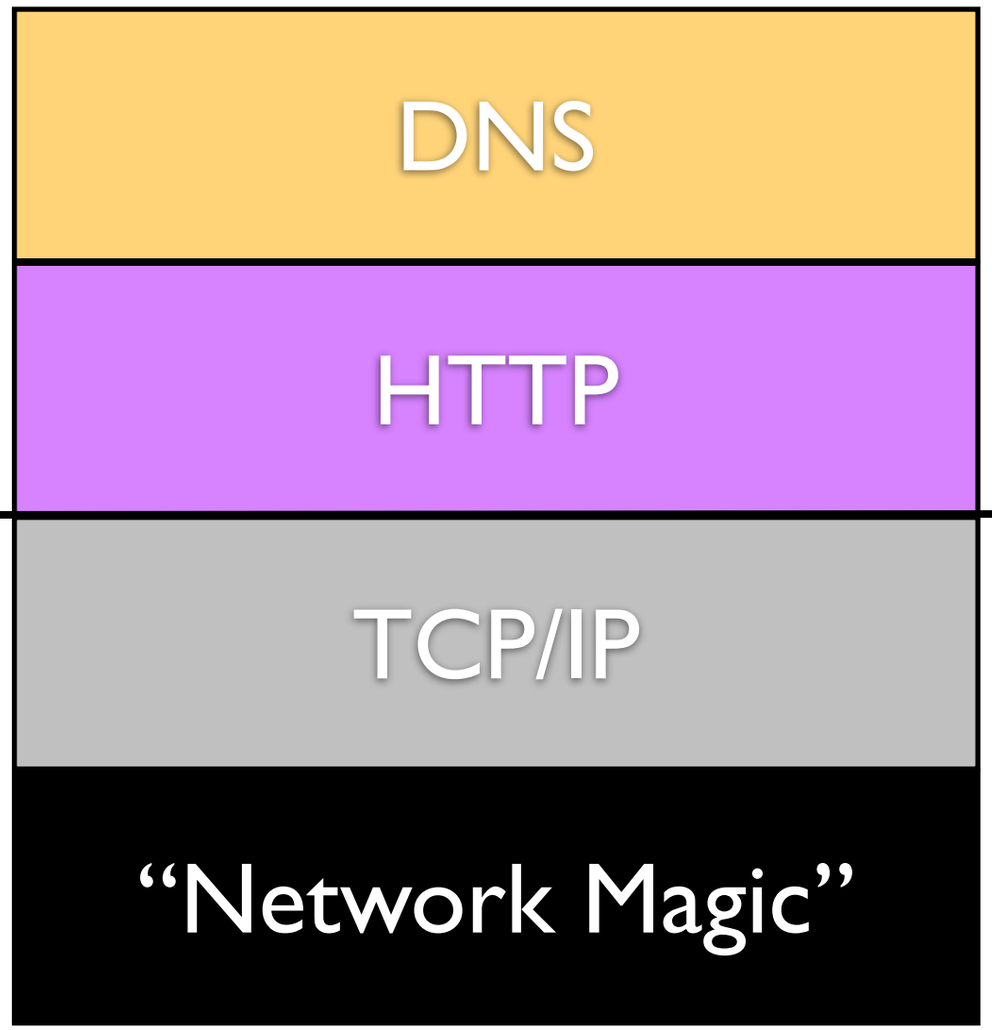
(Could include simplicity)


DNS
HTTP
TCP/IP
“Network Magic”



Our World



Our World

Nothing to do with us

HTTP

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- Extremely Useful

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- Point to point protocol

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- Point to point protocol
- Only requires server and client to understand protocol
- We could maintain it within our community

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- Extremely Useful
- *c.f.* Trademarks, Copyright, Patenting
- Depends on root servers - not just point to point
- Community could easily set up own root servers if needed

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- Both Useful and Ubiquitous at the moment
- Both free and easy at the moment
- Both highly likely to continue in some form
- Both could be replicated within specialist community if needed
- ~ Difficult to think of an alternative?

What if I get a 5xx: Server Error?

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- Bad things happen

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- We can't legislate against this

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- See discussion on institutional responsibility

5xx: Server Error

- Bad things happen
- We can't legislate against this
- See discussion on institutional responsibility
- What if the museum burns down or the staff don't turn up etc.

What if the data license changes?

Data License Change

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- Supplier could just say "Insert your credit card number here"

Data License Change

- Just because you can access data today doesn't mean you can access it tomorrow
- Supplier could just say "Insert your credit card number here"
- Not our business - we just deal with identifying data not with access rights

What if the hosting institution fails?

Institution Failure

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- It applies equally to physical specimens
- Collections could moved to other institutions - dealt with later
- This is not our business

What if there is social failure within an institution?

Social Failure

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- Ubiquity - the more institutions that do maintain identifiers the more pressure to maintain them

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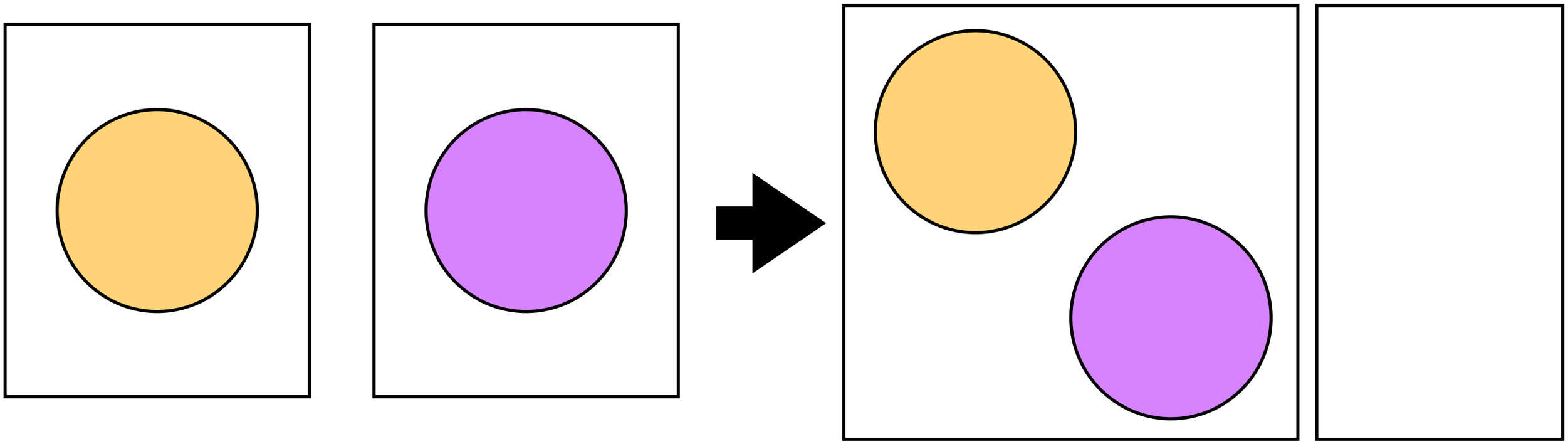
Social Failure

- Management may not value the URIs and not resource their maintenance
- Ubiquity - the more institutions that do maintain identifiers the more pressure to maintain them
- Usefulness - you don't kill something you need
- We can't do anything about this other than build a good system and promote it

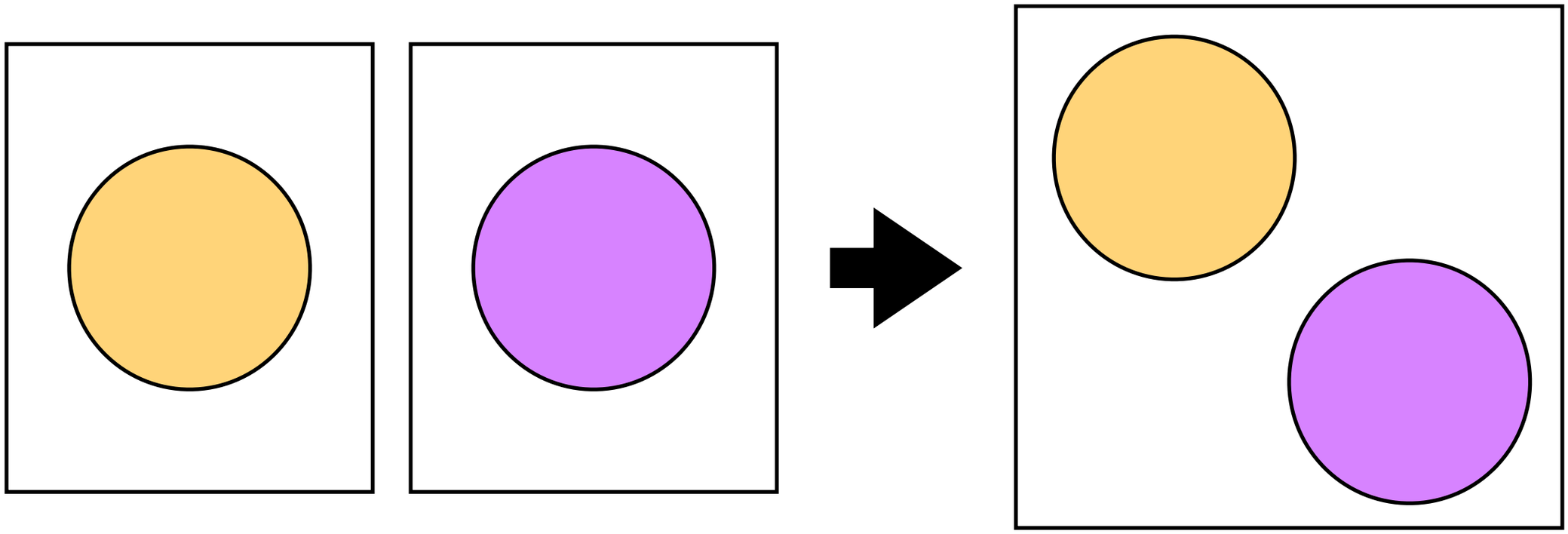
What if a collections merge or split?

Collection Migration



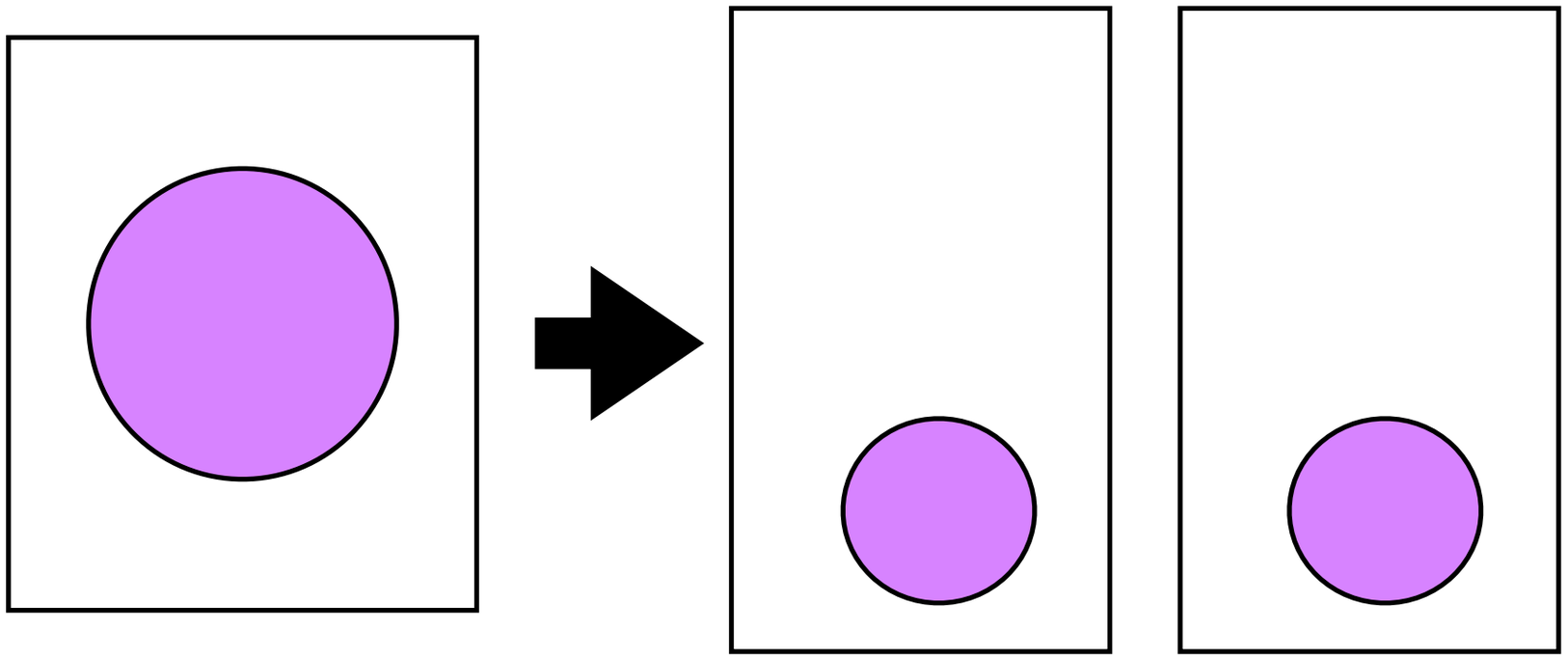
A collection moved to another institution but the institution continues to exist

Institution Merging



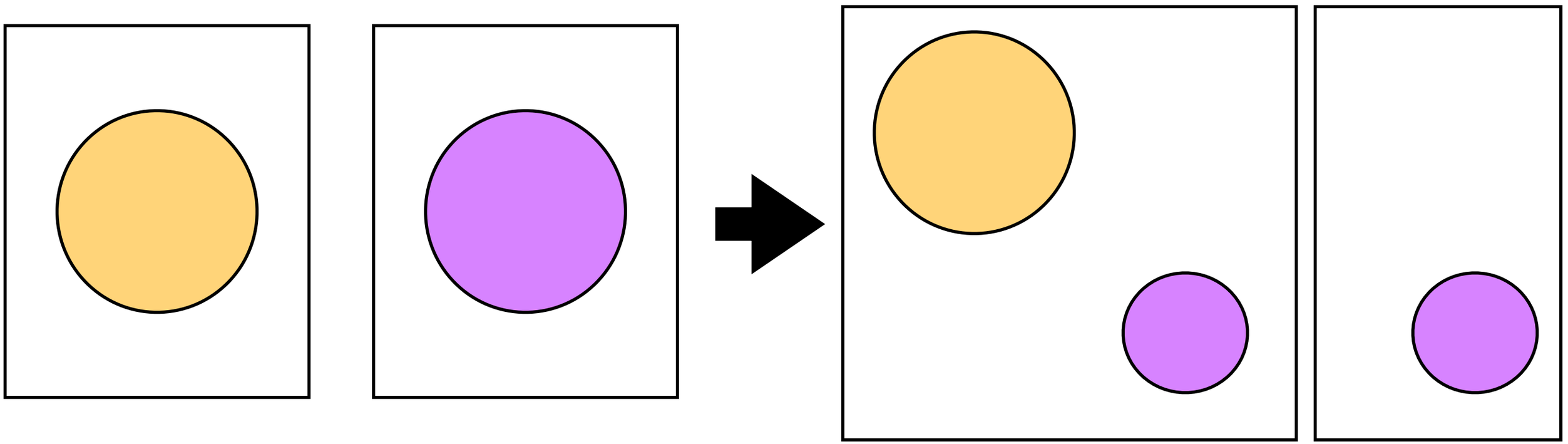
A collection moved to another institution as the original institution disappears

Collection Splitting



A collection is split between two institutions

Complex Splitting



Part of a collection moves to a different institution

Handling Movement

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- If both institutions have issued HTTP URIs and continue to exist then split is handled in data OR domain/sub-domain is passed with collection

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- If donating institution ceases to exist then domain must be passed with collection
- Generally merging involves big collections absorbing orphaned collections - so this is probably not a problem.

What if we use a third party supplier?

Alternative Use of GUID Services

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GUID

Supplier

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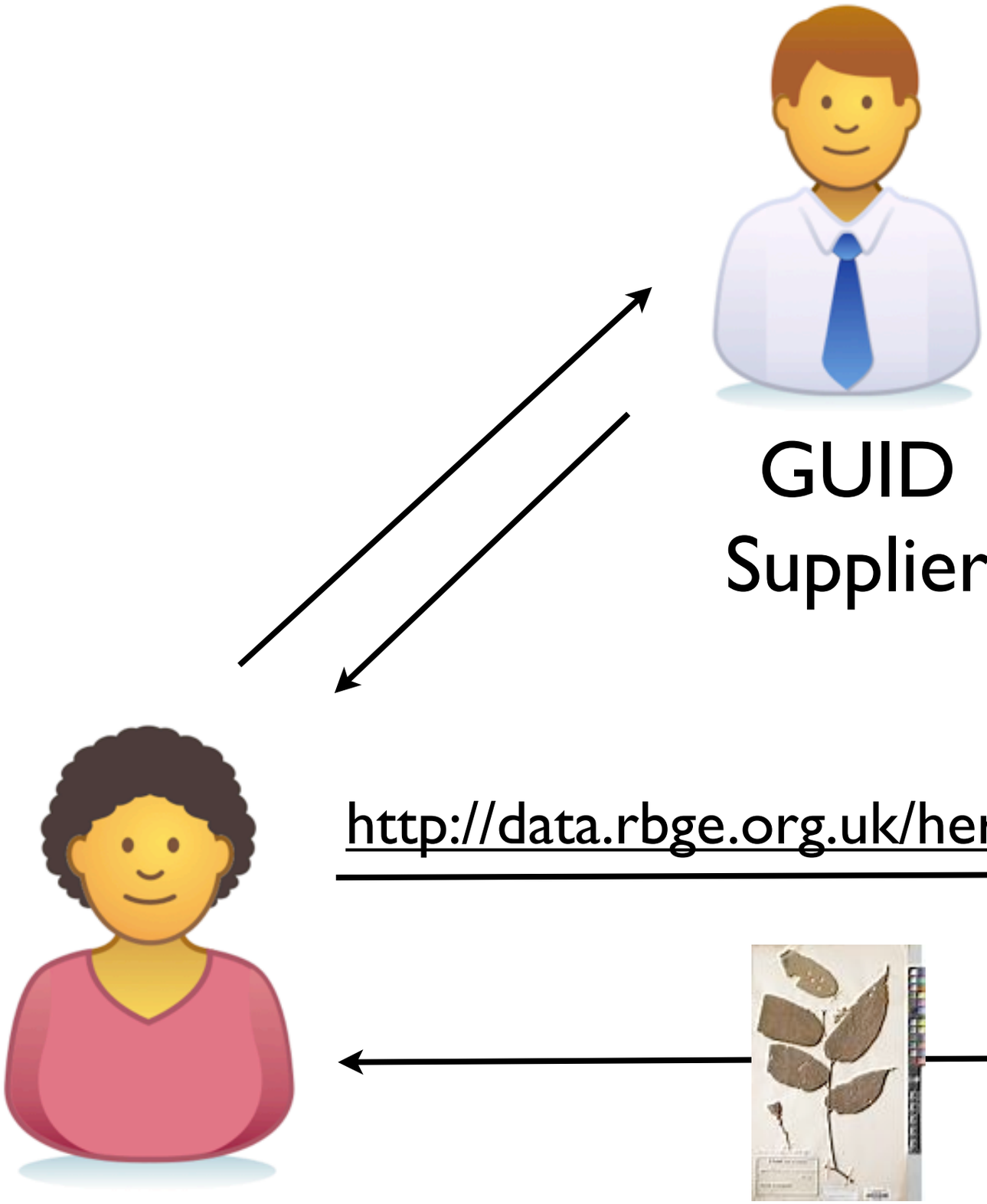
GUID Supplier

http://data.rbge.org.uk/herb/E00421509

Alternative Use of GUID Services



GUID Supplier

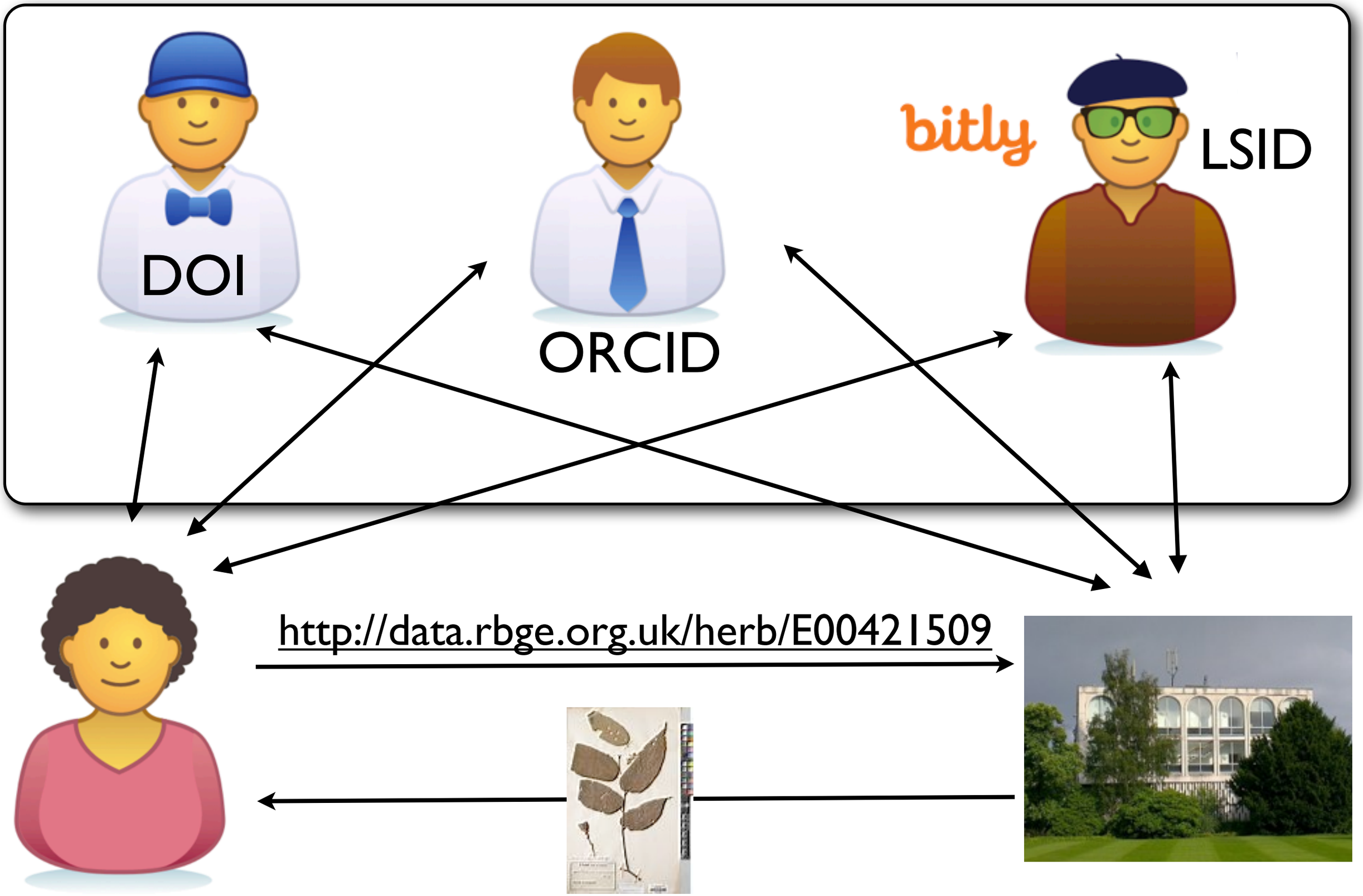
http://data.rbge.org.uk/herb/E00421509

Supplementary Use of GUID Services

GUID Supplier

http://data.rbge.org.uk/herb/E00421509

A “Persistence Candy” Layer



Any agreement with a third party is just another way to supply a stable HTTP URI for the data to the user

What if....?

(Hypothetical edge cases slow us down!)