Like poles repel

Two 300kg pull power magnets cannot be forced together by the weight of a man
Like poles repel.

Two 300kg pull power magnets cannot be forced together by weight of a man.

Three large software vendors found it hard to agree on how to handle XML in SQL.
Like poles repel

Two 300kg pull power magnets cannot be forced together by weight of a man.
Creating effective software standards is hard

Useable
Adopted
Uncontested
Useable

Sufficient features
Fit requirements
Ergonomic for users
Fit for implementation
Adopted

Timely
Community
Accessible

But above all ...
Uncontested

Just the one
Just the one, for each ...

Domain Community
Why do data communities arise?  

Data model
Uses of data
Domain standards and interchange standards

Data communities are not islands
Users either want or have to deal with multiple models and uses
Bridging SQL, RDF & Property Graphs

An opportunity to create co-operative approaches to interoperation in graph data management
Minimal Interoperation

Each community has to get its house in order.

Property graph world seems to lag the RDF world in this respect.

“GQL face-to-face”
In theory . . .

SQL could be extended to do everything for graphs.

SPARQL could be extended to do everything for PG and tables.

A property graph GQL that handles tables and graphs could do everything SQL can do.
In practice . . .

That would lead to paralysis, or endless war

Data communities have very deep social and product roots, and large to huge user bases

Like humans, they can’t get personality transplants
In practice . . .

That would lead to paralysis, or endless war

Data communities have very deep social and product roots, and large to huge user bases

Like humans, they can’t get personality transplants
Co-operate to define reasonable interoperation standards

SQL/PGQ
SQL-GQL shared substrate
sparql-gremlin + CfoG
GQL-SPARQL* views
role of graph typing
data interchange
SQL
SELECT gt.p1, gt.p2
FROM GRAPH_TABLE( ) gt

GQL
FROM sn MATCH
RETURN n.p1, e.p2
SQL

GQL

scalar datatypes
expressions
tabular post-project clauses
catalog
authN model ...
GQL

FROM sfoo MATCH

SPARQL* named query

sfoo # that can CONSTRUCT
Graph program

Query

Imperative/Traversal

Compute
X-model
Data interchange

PG

RDF

Graph Schema/Type
Co-operate to define reasonable interoperation standards