

NoSQL is Anti-relational

a short rant on intellectual dishonesty

SQL <> Relational

It's simply a declarative language designed to interface with relational databases

```
SELECT gentle_wash
FROM washing_machine_control
WHERE load_size = "small"
AND water_temp = "COLD"
```

A SQL-like API does not turn my washing machine into a relational database!

Data Model

Relational:

- ALL data reside in TABLES (relations)

NoSQL:

- Documents, JSON objects, JAVA classes, anything imaginable (except tables)

Structure (schema)

Relational:

- Schema (columns, types) defined in advance
- Data conforms to schema on entry, or error

NoSQL:

- Data goes in no matter what
- “Schema on read”

Structure (logical models)

Relational:

- Data-driven database design
(normalized)

NoSQL:

- Application-driven database design
(non-normalized)

Operations

Relational:

- Declarative interfaces desirable (SQL)
- JOINS are fundamental

NoSQL:

- Declarative interfaces dangerous
- JOINS are anathema

Consistency

Relational:

- Absolute consistency (ACID)

NoSQL:

- Eventually consistent (i.e. inconsistent)

Summary

- Data Model
- Structure (schema)
- Structure (models)
- Operations
- Consistency



NoSQL is ~~Relational?~~

Anyone who tells you otherwise is blowing smoke up your ass...