

Modeling has become Upside Down – and we haven't even noticed...

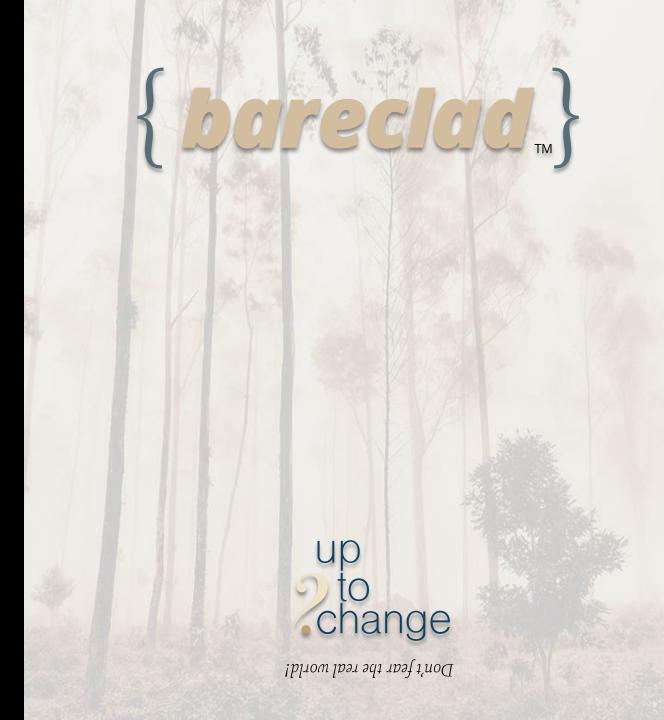
Lars Rönnbäck Ir@u2c.se

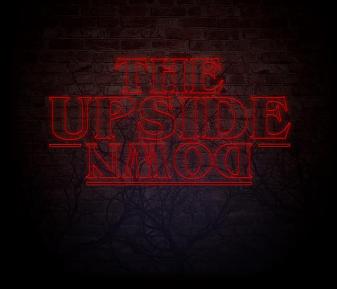


Understanding the Next Level of Data Integration



#transitional

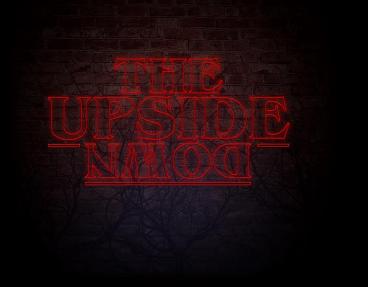




If you look at a row in a database at two different times, it has rarely changed. In the rare case that is has changed, whatever was before the change is lost forever.



If you look at a thing at two different times, it has *always* changed, and there is usually some trace helping you recognize what is different. If the change is really important and really hard to figure out, we let a court decide.



If you can figure out that something has changed in the database, it could either be that the new stuff supersedes the old or the old stuff was plain wrong all along... ... or both.



Things change naturally, such as hair going gray, cars becoming rusty, and icebergs melting. What we say about gray hair, rusty cars, and melting icebergs may turn out to be wrong, and therefore be abruptly corrected. Our world is bitemporal in nature, in nature.





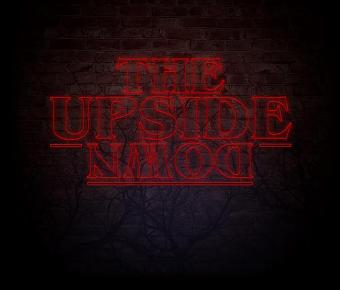
Information in a database is absolutely and universally <u>true*</u>.

* or maybe erroneous, but true until proven otherwise, and gone soon thereafter.

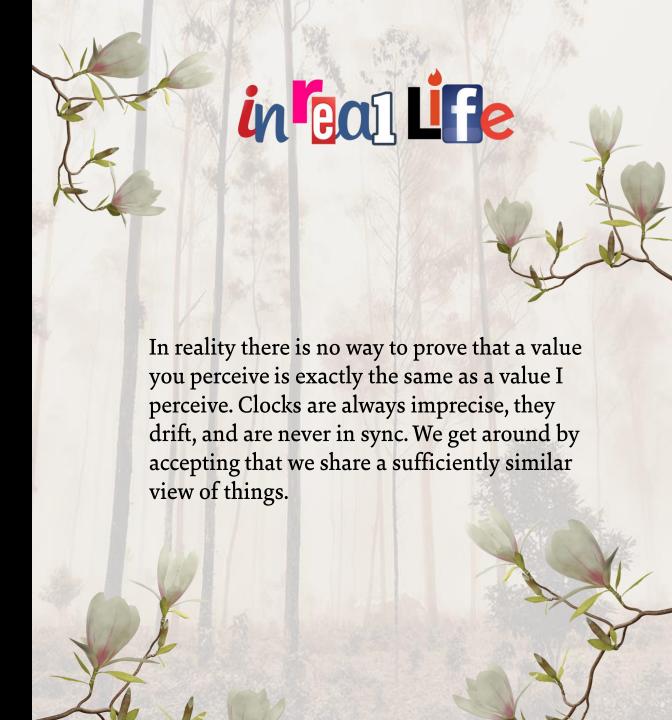


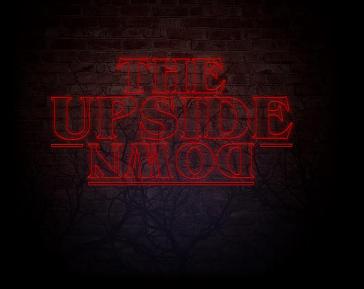
Information about reality is very different from reality itself. In reality one thing always happen one way or another, but what we say about it is always uncertain to some degree. We cannot speak with certainty about anything.



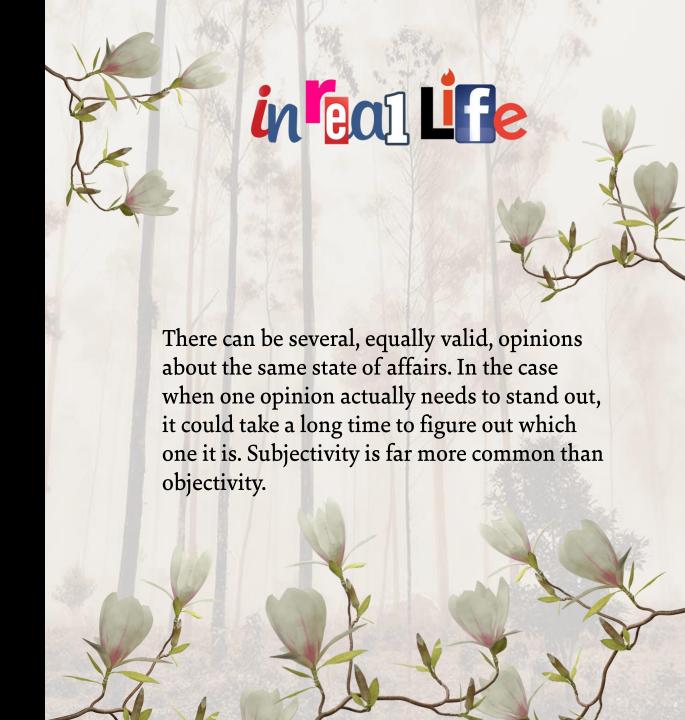


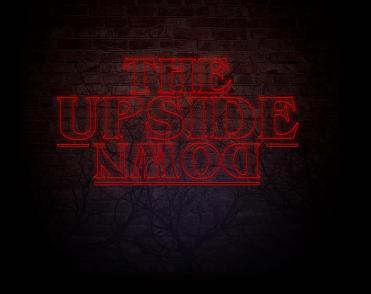
Values are always infinitely precise. Your *blue* is my *blue* and the server clock is both fit for all purposes and the one all other clocks tick in harmony with.



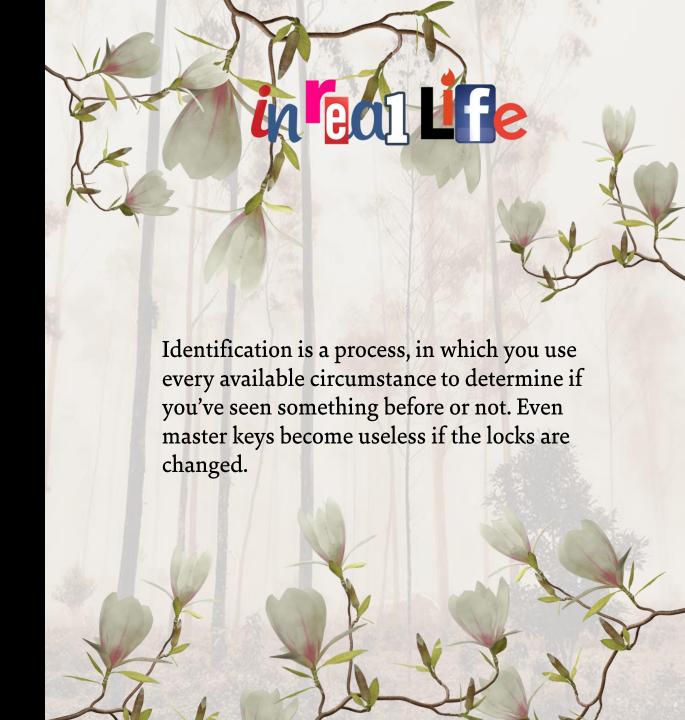


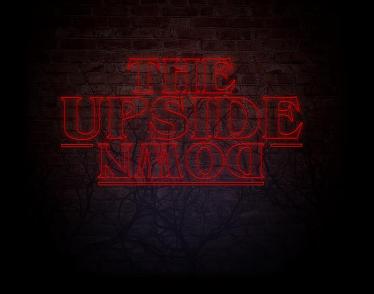
There are no differences of opinion. Whenever someone is wrong, the **ETL** will make it right, then and there.





There is a master key, forever used to unlock the insight about whether you've seen something before or if it is a new thing.





A thing belongs to one class, and one class only, **eternally**. Which class precisely was determined in a sitting of one or more masters of classification, usually a long time ago.

