

Observation process = a process aimed at making a state of affairs (“situation”) readily apparent to the naked eye. In our case, such a process should obviously be regarded as targeting a *medically relevant* state of affairs. One of the outcomes of the observation process should be a proposition of the following general form:

“The value of parameter x that characterizes patient P , and measured by method M at time T is V ,”

or similar--such as:

“Parameter/quality x measured by method M at time T for patient P has value V .”

Possible examples of parameter x :

“blood glucose level,”

“blood pressure at location L ,”

“concentration of MRSA cells in sample S .”

This way of phrasing things has the advantage that all presence/absence propositions can be rendered as numerical assertions, such as:

“MRSA is absent” = “Concentration of MRSA in sample S belonging to patient P measured by method M at time T is 0”

etc. Assuming that the time and patient variables can be swept under the carpet (i.e. can be inferred from the context), one can get by with just:

“Parameter/quality x measured by method M has value V .”

Finally, in order to remain within the constraints of DL, we may choose to incorporate the method M in the parameter/property/quality, hence:

“Parameter/property/quality x_M has value V .”

Some parameters/qualities should be grouped into classes of qualities that purportedly measure the same physical magnitude, e.g.: blood pressure measured by method A (bp_A) and blood pressure measured by method B (bp_B) would all belong to a BloodPressure class (either as instances, or as subclasses, depending on the modeling style chosen).

One thing that is conspicuously missing from this framework is the so-called “observable entity” as an “information(al) entity” or something in this vein. I have, personally, always been skeptical about the ontological status of such “entities.” The only type of entity in current

mainstream philosophical thought that may come close to what BFO ontologists call “informational entity” is the proposition.

Finally, I have not tackled the issue of units of measure in the above framework, though I am confident that it can be accommodated easily. The diagram below might be one way to capture this aspect.

