12 – The Ontology Component

(Formerly the Common Vocabulary Component)

An abstract term is like a valise with a false bottom – you may put in it what ideas you please, and take them out again, without being observed.

Alexis de Tocqueville, 1835

Question 12 *Strict definition of terms reduces confusion in the world of building codes and permits. Can terminology standards reduce rampant "FUD factor" confusion in information technology?*
Answer 12 The Common Vocabulary Component
What information technology provides to the online world is no more mysterious than what architects, contractors, and property managers provide to the physical world. The Common Vocabulary Component requires the use of standardized terminology in the permitting of new facilities. By using the well-understood language of architects, structural engineers, contractors, property managers, and building inspectors, management can finally direct information technology, rather than the other way around.

Vocabulary Is Everything
Much of the means by which the vendors of technology products control our information appliances is through vocabulary. If a vendor can come up with a new name for a concept, even if the concept is old, he has leverage by which to convince the customer of the necessity of purchasing the new-new thing.

To be sure, information technology is not the only field where market control is attempted by means of buzzwords and jargon. Commercial real estate, the industry that serves as our model, is guilty of some of that same behavior.

But there is a very important difference of degree. An architect and contractor may expect the customer not to know the difference between blueboard and sheet rock and thereby gain a little bit of advantage, but they never try to assert or even suggest that the client does not understand the concept of a building sufficiently to know what she wants and needs. The commercial real estate industry serves at the direction of the property owners and their tenants.

By contrast, the message from the information technology community to the CEO and CFO is: you do not know enough about our field to enable you to manage the information technology in your business. All departments in your organization are man-

aged by you, except for your information technology department. You give general direction and expectation of results to the heads of all departments except IT, which is autonomous. In other words, the way information is used in the organization for whose performance you are responsible is none of your business.

Wittgenstein Saves Us from FUD

A case can be made that the regulation of electrical devices and building codes benefitted from the attention that the philosopher Ludwig Wittgenstein directed toward the importance of the meaning of words around the time that the regulations came into prominence.

Building codes are not poetry. They're some of the most prosaic and pragmatic things ever written. Expressiveness and clever metaphor are out; specificity is the only literary value in a book of building codes.

In IT, on the other hand, the lack of specificity in the vocabulary gives vendors and consultants a license to print money through the skillful use of obfuscation. So let's bring some Wittgenstein to information technology!

Building Codes Eschew Obfuscation

Besides the fact that lay people have more confidence from simple intuition and common sense about physical buildings than they do about information technology infrastructures, there is the fact that building codes are designed to specifically deter things like the FUD factor so common in information technology – the use of Fear, Uncertainty and Doubt as tools to confuse the customer and lock him into an onerous contract.

If one intends to get a construction permit for a building, the paperwork must use terms as defined in building codes. Here are a few taken from a random part of the alphabet in the construction glossary at http://www.homebuildingmanual.com/Glossary.htm

Balloon framed wall- Framed walls (generally over 10' tall) that run the entire vertical length from the floor sill plate to the roof. This is done to eliminate the need for a gable end truss.

Balusters- Vertical members in a railing used between a top rail and bottom rail or the stair treads.

Balustrade- The rail, posts and vertical balusters along the edge of a stairway or elevated walkway.

Barge- Horizontal beam rafter that supports shorter rafters.

Barge board- A decorative board covering the projecting rafter (fly rafter) of the gable end. At the cornice, this member is a fascia board.

Semantic obfuscation is effectively illegal in the AEC (architecture, engineering, and construction) professions. If you start coming up with neologisic acronyms for things already named, then you don't get to practice your profession.

That is the principle behind the Common Vocabulary Component.

A Very Important Word

An important word in our Quiet Enjoyment vocabulary is facility. It is already used in the physical world to identify both buildings and the equipment used in buildings, and so it's a good transitional link through which IT buzz can be dragged to describe the information facilities people feel are needed.

"Everything should be made as simple as possible, but no simpler."84 While the Common Vocabulary Component calls for words to be as specific as possible, "facility" is deliberately unspecific about size or scale. A facility can be a whole building or an office suite, a set of laboratories, an auditorium or exhibit hall, or any combination. So it is with an online facility. It's simply a place where people can assemble to get work done or be educated or entertained.

There is nothing new about the use of real estate metaphors to make information technology concepts more understandable. "Tunnel," we have noted, is one such word. The metaphor of a tunnel is quite accurate, more accurate probably than its author intended. A tunnel is supposed to be secure, but our mental picture of a tunnel presents us with something that is wide open at both ends. Through its inadvertent accuracy the metaphor shows us what's wrong with the technology it represents. A tunnel is not a facility by itself; it's just an important part of a facility.

We use the term "file" to refer to a piece of information on either paper or disk. In what part of a facility do we put files? An "SQL database?" Why not a "filing area?" The CEO ought to be able to specify that "we need a big filing area for our customer information, and it needs to be kept over there where it's handy to both support people and sales" without once having to use terms like "flat file" and "SQL" and "TPM benchmark."

Why not replace "authentication system" with "door and lock?" Engineers and locksmiths know that there are many kinds of doors and locks, that there is a lot of technology involved, but that doesn't mean that CEOs must know the names of all the different kinds of pins and tumblers in order to say, "We need a good lock on this door." He needn't know the difference between a hash function and a symmetric-key algorithm in order to direct the facility manager to issue keys to a particular group of people.

What does a website do that distinguishes itself from a reception area? Why not call a company's main website its "lobby" and the sites of its operating units or divisions

84 The actual quote from Einstein's *On the Method of Theoretical Physics* is, "It can scarcely be denied that the supreme goal of all theory is to make the irreducible basic elements as simple and as few as possible without having to surrender the adequate representation of a single datum of experience."

"reception areas?" Why do we bother with confusing terms like VPN and intranet and extranet and portal? Why don't we just call them things like "the channels marketing office." Then you don't need a lot of buzzwords to describe who's supposed to be in that office and who is not.

Why do we have a "B-to-C eCommerce site" instead of a "showroom?"

Why do we have a "B-to-B eCommerce portal" instead of an "expo booth?"

So far we have:

Facility

Wall

Room

Office suite

Door

Lock

Key

Filing area

Reception area

Lobby

Office

Showroom

Expo booth

The words, however, are not the most significant element of the Common Vocabulary Component. After all, people have been using real estate metaphors as computer navigation aids for years.

This QEI Component is rather the discipline of insisting that all planning and management of online information facilities be done in such a way that everything must be made to make sense using terminology that makes sense for a discussion of facilities where people assemble to get things done.

The Common Vocabulary Component excludes the use of the words "virtual" or "electronic." Your physical building uses phones and lights and… electrons. How is this one more electronic than the old one? Such words tell the listener, "I'm using this cute metaphor but I don't really believe in this stuff." Try insisting on using Usable Vocabulary. You'll learn quickly how it's not really metaphorical at all, that it simply describes a set of facilities in a new kind of space.

As Ted Codd was able to do for the term "relational database," and for that matter as the publishers of the Oxford English Dictionary did for English diction, we need to do for the lexicography of facilities. The language of facilities and of identity should be managed. Not legislated, but managed. Otherwise, those who manipulate perceptions by inventing buzzwords and new meanings for existing buzzwords will leave us all buried under a disorderly pile of construction materials.

Architecture can only prevail when there is an authoritative architectural language. We need lexicographers. Each needs to take ownership of one or more terms, and be authority on the meaning of that term., and the process needs to be managed by dictionaries and encyclopedias.

If you don't manage IT, it will manage you.

Peter MacMillan, Alliance e-Finance, in CMP's agora.com

To see the current state of development of

The Common Vocabulary Component
…and to learn how your

background in non-IT management
might be put to use in its development, please go to the
Common Vocabulary Component Development Office at osmio.ch

That wraps up the last piece of the Quiet Enjoyment Infrastructure. Let's now take a fifty thousand meter view of how QEI will change the way we live.