

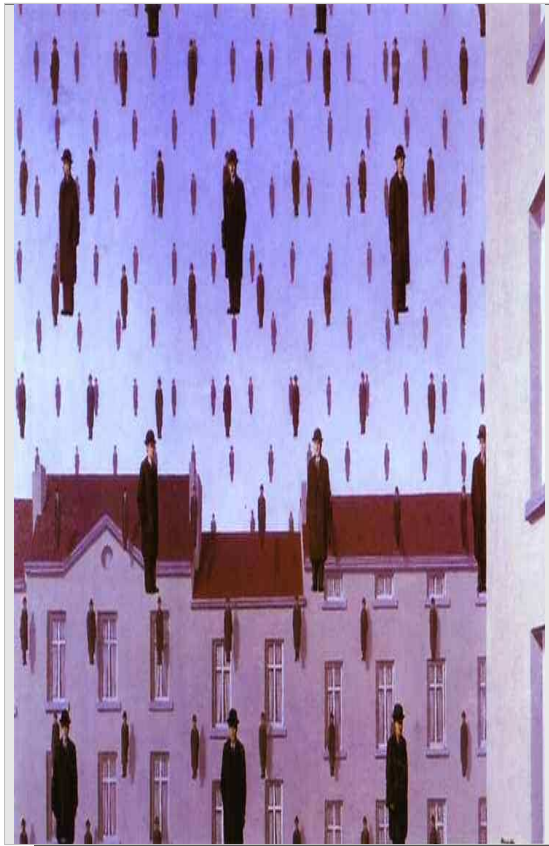
Tim McGrath
STASIS, Berlin
March 25 2008

Some nice paintings

The slippery road

Alchemy

☺ < € !



Ever had one of those days at the office?

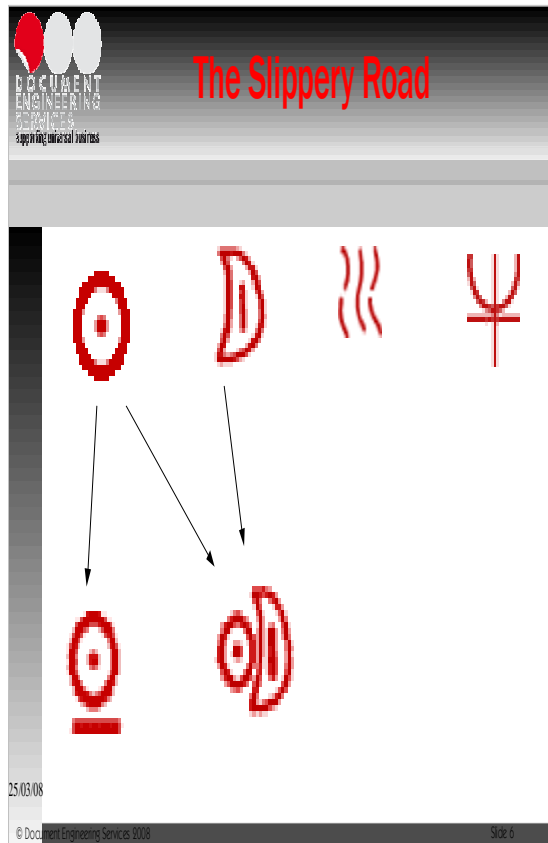


Had Rene Magritte been born a hundred years later then he may have been sitting with us today.

Instead he contributed some of the most intriguing images of semantic interoperability.

In particular he used wit and simple iconography to convey a universal and often profound message. Magritte showed us that to communicate meaning we need to go beyond syntax, beyond vocabulary and beyond language.

To convey semantics we need to communciate concepts.



This is not a new insight.

When we humans started to communicate and preserve their knowledge they needed to capture meaning in written form.

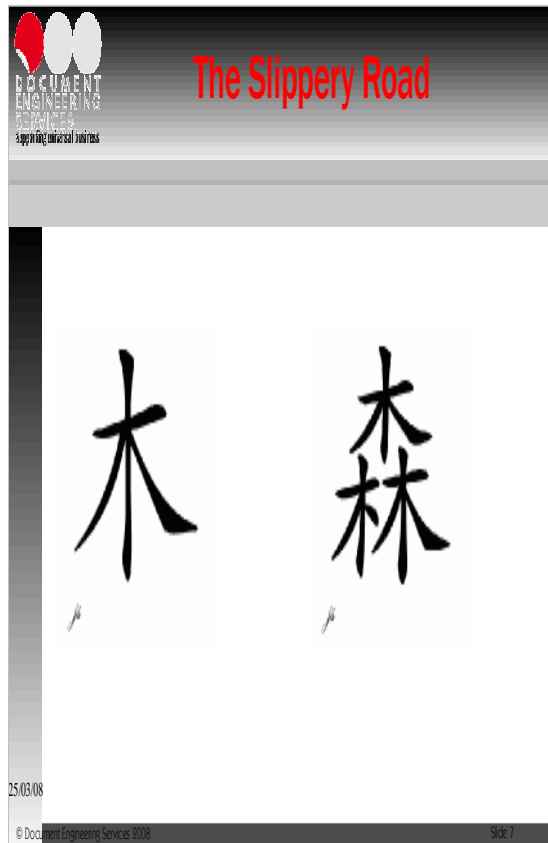
We have followed two different paths.

One bound its syntax to phonetics – sounds not concept. Symbols for sounds. What we now recognise as the western approach.

Tightly coupled to the spoken language.

But others chose a different path.

Here we have the symbols for Sun, Moon, Water and Cow. Underneath we see how they combine to form symbols for Shadow and Dawn.



In this way the ancient Chinese created the first universal written language. And it is still used today.

Here we have the symbol for Tree, followed by the symbol for Forest. But could any of say 'tree' in Mandarin Chinese (mu) or 'forest' (sen)?

How is it we can read but cannot speak Chinese? We can understand the meaning outside of the language because the symbols describe the concept not the implementation of that concept in a given language.



These symbols become more sophisticated as they attempt to convey more semantics.

They combine. Here is a Person (ren) and a Person bent over in a field – a Man (ding).

But of course there are just too many concepts to establish a manageable vocabulary of these characters. It is worth noting that many Chinese characters now include phonetic glyphs.

Just as we in the west have evolved to using codes – patterns of characters. It happens that to us humans these have phonetic association. But to machines they are just text patterns.

The challenge to us as we sit here today is to reconnect the meaning to these codes – to go beyond the syntax and vocabulary.



I was first aware of the universal nature of written Chinese when I was at a restaurant in China with a Japanese friend. He could read the menu but not ask the waiter for anything – he had to point. It occurred to me that if we all learnt to read Chinese we could use it as the universal written language. We could subtitle every movie with one set of characters and everyone could understand it (as they do in Hong Kong for Cantonese speakers).

But of course it is not that simple. Language cannot convey the full meaning (Confucius actually said that). After lunch my friend and I went for a walk and past a pavement that was being cleaned. It had this sign on it.

My friend was startled because in Japanese the two symbols for "slippery" and "floor" mean "sliding" and "earth" – in Japan this means an earthquake.

Semantics are more subtle than language,

So how can we express them?



One way we do this is by creating abstract models of the concept. We use these to emphasize some aspects and de-emphasize others.

There are many ways these models are created and expressed. Each attracts its own religious following. Each has its merits and shares many fundamental principles but are often distracted (and detracted) by dogma. This is familiar ground.

However we create or draw or express these models, they are only models, what we chose to emphasize or de-emphasize affects the meaning. We cannot avoid injecting our interpretations on reality. As Magritte famously depicted in *The Treachery of Images* – the picture is not the object.

You could say that the road to semantic enlightenment is littered with false profits (and/or prophets).



We sometimes get distracted by the intellectual fun of semantics. The cute tricks and intriguing rat holes - new jargon, silver bullets and philosophical debates.

Sir Isaac Newton is today remembered as a great scientific thinker perhaps the father of all. The era he heralded is even called the enlightenment. We know him for Principia Mathematica – a cornerstone in western cultural development. I only recently became aware that Newton wrote more papers and expended more energy on Alchemy – turning lead into gold. Why? I suspect because it is the challenge of the impossible. Is Alchemy a profitable path? Who can say. What we can say is that it wouldn't be wise to rely on it.

Alfred Russel Wallace and Arthur Conan Doyle both great rationalists of their day believed in fairies and the supernatural. We should not consider these as aberrations. It is just that not all their visions bore fruit.

As a travel around I am sensing some alchemists amongst us. I would not dismiss any of their ideas but I believe we need to keep focus on the fact that in a business world profit outweighs fun.

DOCUMENT
ENGINEERING
SERVICES
Supporting commercial business

? → ☺ + €

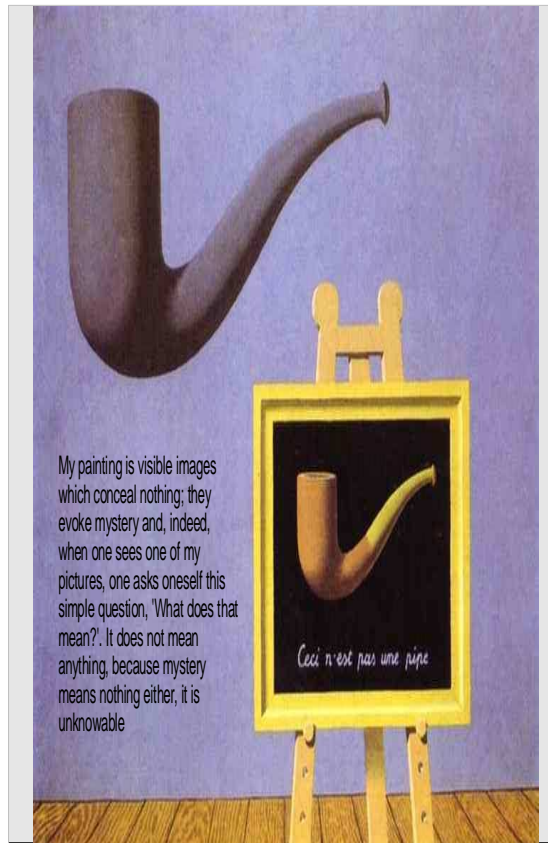
☺ < € !

25.03.08

© Document Engineering Services 2008 Slide 12

This talk is called “Semantics for Fun and Profit” but we should remember that the profit must exceed the fun.

Of course I will leave the final word to Rene Magritte....



Still not a pipe.

Magritte describes his works as...

"... visible images which conceal nothing; they evoke mystery and, indeed, when one sees one of my pictures, one asks oneself this simple question, 'What does that mean?'. It does not mean anything, because mystery means nothing either, it is unknowable"



"Fluffy the Killer Kangeroo" (Reg Mombassa)