## "D.A.I. & S.M." a perfect recipe for failure in knowledge management

An impossible exercise in intellectual self-flogging Should you or any colleague of yours be caught in quoting this talk, the author will disavow all knowledge of its existence.

— Fabien

## Distributed A.I. to distribute and share Knowledge

– Who said users wanted to share and distribute their knowledge ??? Knowledge is power, who wants to share and distribute his/her power ??



- Full distribution and peer two peer are chimeras: organizations want to control what is happening.
- Full centralization is the road to salvation: it ensures central control point for quality, coherence, security and backup... that's what companies want !!! The multiplication of little autonomous entities is a nightmare of security and maintenance people, no one wants that !!!
- There is no real application that could not be done without agents, there is no application domain that calls for it.
   The "travel planning agent" is just a fantasy of academics.
  - The "travel planning agent" is just a fantasy of academics most of whom would not even trust their own secretary to book a flight for them, therefore much less give their credit card number to a 'learning agent'
- People did not trust or use their proprietary centralized closed A.I. systems… Why should they trust an open distributed system?

- What is the difference between Santa Claus, a complete MAS framework and an intelligent agent?
  - None: all of them do not exist! BDI is nice on paper but never fully implemented. The rest are nice algorithms but far from real intelligence
  - Agents are just distributed components/objects having their own thread;
     there is nothing to make a fuss about. Most of the MAS are impl. in OOL
  - Agent are just one of our latest unjustified anthropomorphisms and a formidable opportunity to recycle some dusty A.I. systems
  - After 15 years of research in Multi-Agent Systems we still don't have a
    definition for... "an agent" and "a multi-agent system"
    Hmm... how serious can we be in building on top of something we are
    not even able to define? Before doing the ontology of other domains we
    should get our own one right.
- Extensibility, flexibility, modularity in MAS and SW
  - If we can predict what extensions we will need, why not directly put them in the first place instead of preparing them?
  - The extensions we will effectively need cannot be foreseen for sure anyway and thus this is just wishful thinking and organization are better off using their ad'hoc internal solutions.

- Whales are fishes, spiders are insects, books are objects, and of course... penguins and ostriches fly
  - Why model scientific truth when popular belief is more effective?
  - Do we need D.A.I. or D. A. Stupidity ?
- Standard A.C.L. and common ontologies
  - Modern version of the myth of Sisyphus, with the same chances of success than the Esperanto.
  - Some concepts simply have no consensus...
     what's a hot tea? 24°C ? 31°C ? Between 20 and 24 °C?
  - Users hate complex queries and love keywords anyway !!!
  - The web is a garbage... quality and coherence are impossible on a worldwide scale... the semantic web will be a semantic garbage.
  - But it is OK because machines do not understand the meaning of tags anymore than they understood the meaning of plain text.
  - Organization will never agree on using standard ontologies: they don't want to depend on external standards and they don't want their services and products to be easily comparable with the one of a competitor.



- A.I. did not scale-up and D.A.I. will be even worse
  - A.I. is this part of C.S. where we build things that never make it to the real world; D.A.I. is just adding some complexity in case we had a chance to succeed.
  - D.A.I. solutions are slower and prone to combinatory explosion
     Some distributed (planning) protocols barely support two agents !!!
  - We should bet on some nice statistical method that naturally scales up.
  - Any administrator of such system will need a PhD in A.I., a PhD in philosophy, a PhD in linguistic, a PhD in logic, etc.
- Natural metaphors of D.A.I.

- The natural human organization does not work that well, that's why we are trying to assist them, so... in what respect is it

wise to use them as a natural metaphor ???

 The virtual assistant are, in best case, amusing pets and, in the worst case, real nuisances

 Natural autonomy (at the heart of agents) is the last thing a users want; they want absolute control and predictability.

The End

