More about construals

Examples of construals

- Linguistic construal cf. interpreting sentences
- Scientific construals cf. Faraday
- Every day construals cf. lift adventure
- Design construals cf. room floorplan
- Construals of music cf. musical scores

... and many more examples to follow ...

Simple room construal revisited

Key semantic issues

- Nature of construals
  - personal, concurrent, manually constructed (SBR)
- Interactively mediated semantics of construals
  - a visual pun (the cabinet-digit)
- Emergent patterns of reliable state-change
  - the experimental paradox ...

The experimental paradox

What is first done

in an experimental way without any clear expectation of the outcome

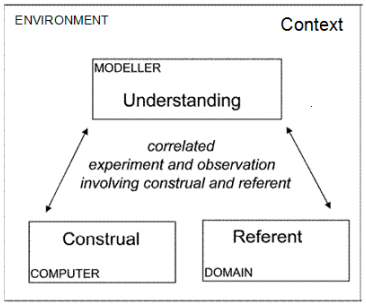
... is subsequently done

systematically in the 'certain' knowledge that expectation will be confirmed

One and the same activity ...

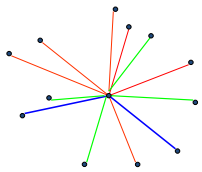
two interpretative contexts

The "Fundamental Diagram of EM"



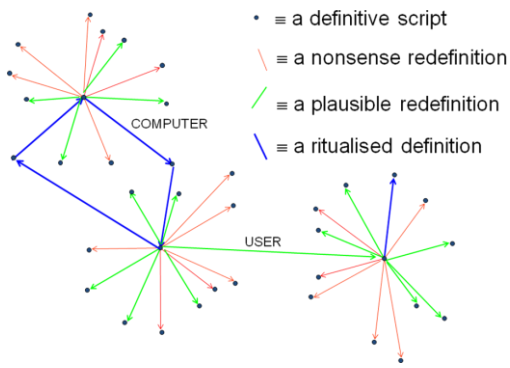
The “playing noughts-and-crosses” construal **oxoGardner1999** in the EM project archive

Definitive scripts as “fuzzy blobs”



- ≡ a definitive script
- ≡ a nonsense redefinition
- ≡ a plausible redefinition
- ≡ a ritualised definition

Plausible : *could* open the desk drawer
– note continuous spectrum of redefinitions
Ritualised : door *automatically* closes after being opened
Nonsense : opening the drawer makes the room smaller



3 ingredients in construal development:

- engineering the states within which the agency of the user and the computer operate;
- crafting the behaviours which these agents then play out;
- projecting meanings on to the agent actions

"Vertical", "horizontal" and "orthogonal" dimensions of state

Key features of making a construal

- opens up such a profusion of possible interpretations, stimulating the model-builder's imagination and creativity.
- is an open-ended activity that resembles organic growth rather than building to a specification

A famous quote from Heraclitus

“No man ever steps in the same river twice, for it's not the same river and he's not the same man.”

- In its proper context, this is great wisdom ...
- ... on the other hand, how perverse it would be to disregard the perceptions of sameness in men and rivers ....
- We can choose (“have discretion”), and because we have a choice we *construct* our context

Fundamental perspective in EM

Perceived connections
= connections *given-in-experience*
= conjunctive relations (William James – 1910)

What is meant by *experience* here? (Dewey)

Key concepts

The ODA framework
- observables, dependency and agency
- different varieties of perceived connection

LSD: "language for specification and description"
- Classification of observables
  - states, oracles, handles, derivates, privileges

Perceived connections ...

An **observable**: same identity different status
Cluster of observables resembles an object

Changes to observables connected by **dependency**

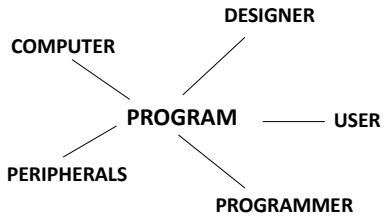
Part of same stream-of-thought ...
- successive positions "in the same game"
- lectures in the same module

Perceived connections ...

Cluster of observables resembling an object co-existing as coming and going 'at the same time' – potentially an **agent**

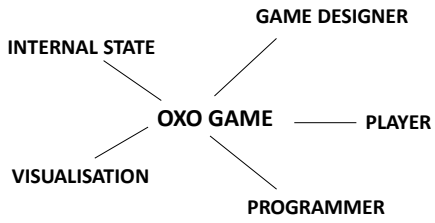
Being concurrent in the present moment

Changes being associated with / attributed to a specific agent



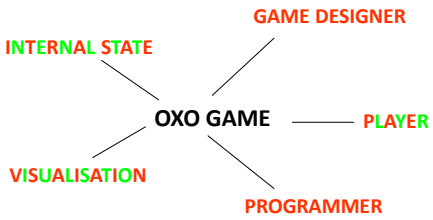
Diverse relations / representations in a traditional program

… compare this with the OXO laboratory



… all relations mediated by definitions

… Behaviour as programmed state change



Static and dynamic elements of state