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▶ To cite this version:

Lorène Prost, Marie-Helene Jeuffroy, Marianne Cerf. Designing a tool for wheat cultivar assessment by analysing its potential uses.. Farming Systems Design 2007: An International Symposium on Methodologies on Integrated Analysis on Farm Production Systems, Sep 2007, Catania, Italy. hal-01173142

HAL Id: hal-01173142 https://hal.science/hal-01173142

Submitted on 3 Jun2020

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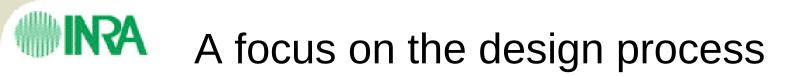


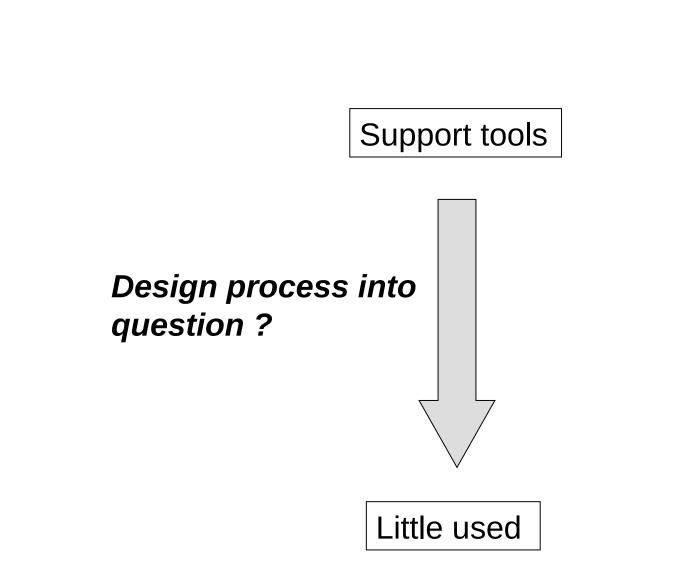
Designing a tool for wheat genotype assessment by analysing its potential uses

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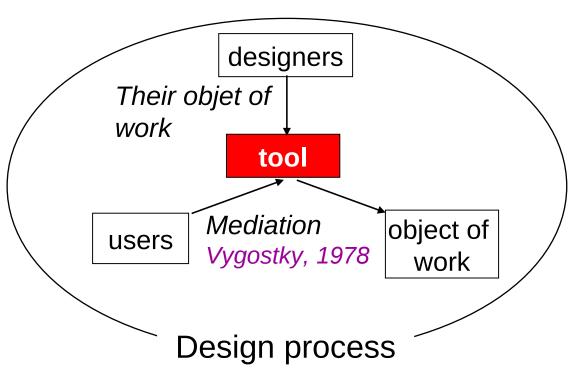






Pluridisciplinary issue

Design continues in use (ergonomics) => cycle to build dialog between users and designers



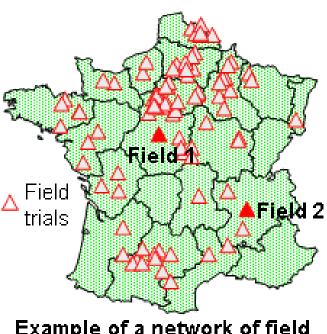
How to make this dialog possible?

What dynamics of transformation (tool + work) in such a design process?

INRA

The tool in design

Tool for agronomists : plant breeders to food suppliers Method that helps in assessing new genotypes (varieties) :

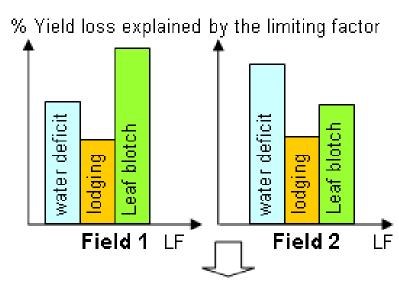


Example of a network of field trials (NFT)

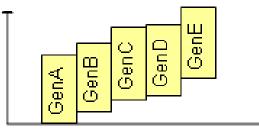
Output 1: characterize the limiting factors (LF) of the yield



Output 2: assess the resistance of the new genotypes (Gen) to the LF



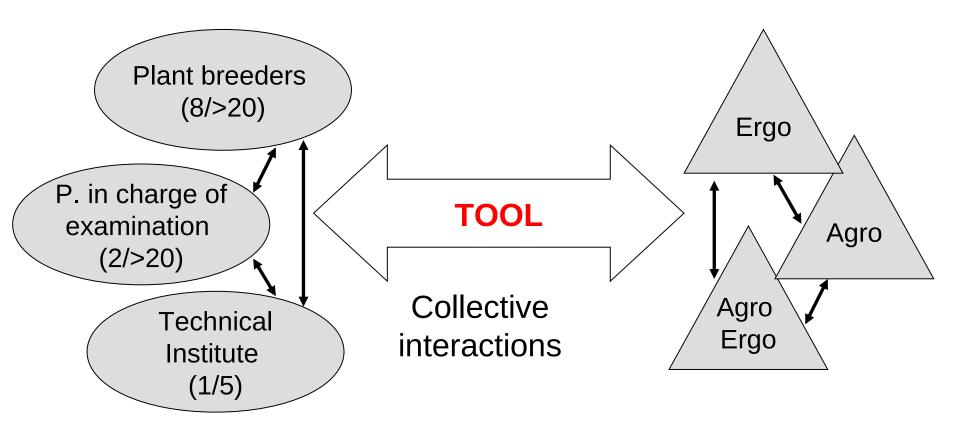
Level of resistance to lodging by genotype



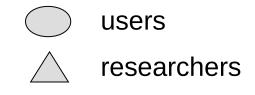
Lecomte, 2005



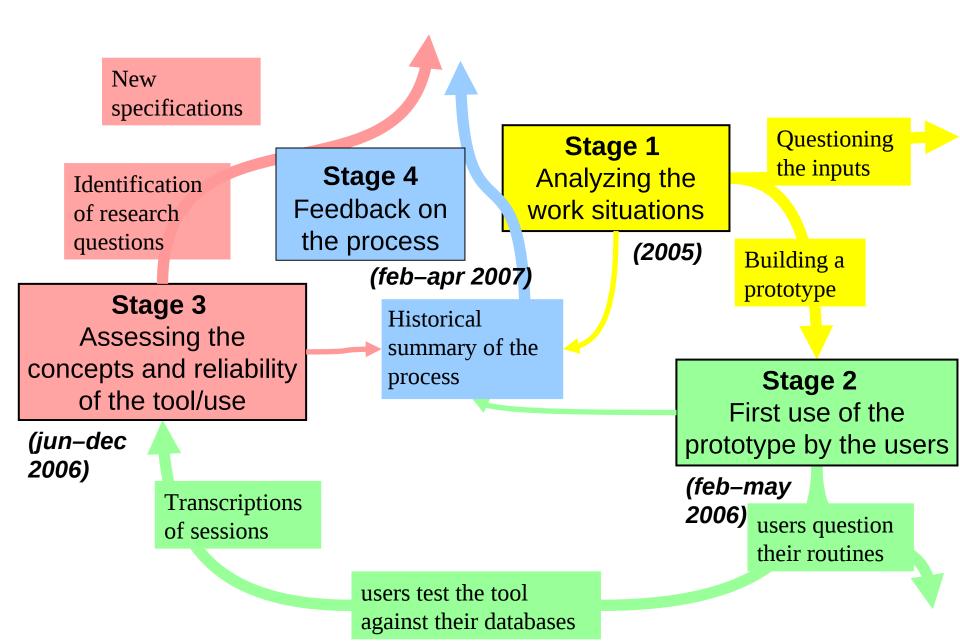
The actors of the study



(Nb of full partners / less implied partners)



Research strategy: stages and results





Désign

process

Discussion

Changes for the actors of the study

Changes in the users' object of work

Changes in the users' instruments of work

Changes in the collective part of their work

Focus on individual trials => Focus on the network of field trials (new computing systems, new measures taken)

Changes in relationships Changes in division of labor Changes in self position

Changes for the agronomists Way of seeing variability and of modelling it New research questions

Changes in the tool

Need for changes in the interface

Need for changes in the inputs

Need for changes in the concepts Statistical methods

Conclusion and perspectives

Design of a support tool : methodology

- Importance of the tracks
- Central role of the prototype
- Role of the collectives of actors with various expectations
- A generic method

A process to be continued

Agro: Richness of agronomic questions with a strong scientific interest for researchers

Ergo: lot of material to work out.