



# ***Soar Usage Outside the USA.***

A. Kalus

University of Portsmouth

England

UK

tony.kalus@port.ac.uk



# *The Soar Mailing Lists*

- ❑ **13 people on the EURO-SOAR mailing list.**
- ❑ **95 people on the Soar-Group mailing list.**



# *Breakdown*

- **56 definite non-US people on this list.**  
**(38)** (Last year's numbers in brackets)
  - **11 x UK (13)**
  - **5 x Canada (4), Netherlands (6)**
  - **4 x Japan (4), France (4), Germany (4)**
  - **3 x Australia (2)**
  - **2 x Poland, South Korea, Sweden, Argentina, Brazil.**
  - **1 x Kuwait, Thailand, Switzerland, Romania, Italy, Finland, Belgium, Mexico, Israel, Singapore.**



# *Replies to Questionnaire*

- 11 replies received from a short questionnaire sent out to both lists.
  - 4 from the UK, (including me & postdoc)
  - 3 from the Netherlands,
  - 1 each from Australia, Brazil, Romania, Switzerland.



# *What Are People Using?*

## □ Hardware

- Sun Solaris
- PCs, Macs, Notebooks

## □ OS

- Solaris, NT, Win95, Linux, Digital Unix, MacOs

## □ Soar versions

- Soar 6.2.3, Soar 7.0.4, Soar 7.2, MacSoar 7.0.5, Lisp (Jans)



# *Who's Doing What?*

- **Technical University Delft - Jans Aasman**
  - User modelling for 20 in-house products & related empirical research.
- **Leiden University Medical Centre - Ernst Bovenkamp**
  - Automatic classification of tissue & vessel boundaries echo images.
  - Soar used as an expert system for:
    - image processing,
    - image interpretation.



# *Who's Doing What?*

## □ **University of Sydney - Gourabmoy Nath**

- Soar in architectural design:
  - mapping situated learning to chunking,
  - learning mapping between design context and existing design knowledge.

## □ **Rijksuniversiteit Groningen - Hans van den Broek**

- Multi-actor models of organisation.
  - Proposes a cognitive approach to actor modelling and uses Soar for the actor implementation.



# *Who's Doing What?*

- **University of Nottingham - Frank Ritter**
  - Teaching Soar in a final year module,
  - Job Shop scheduling (with Krems & Nerb),
  - Able III published as a book chapter with Randy's subtraction model,
  - Soar tutorials taught at conferences.





# *Who's Doing What?*

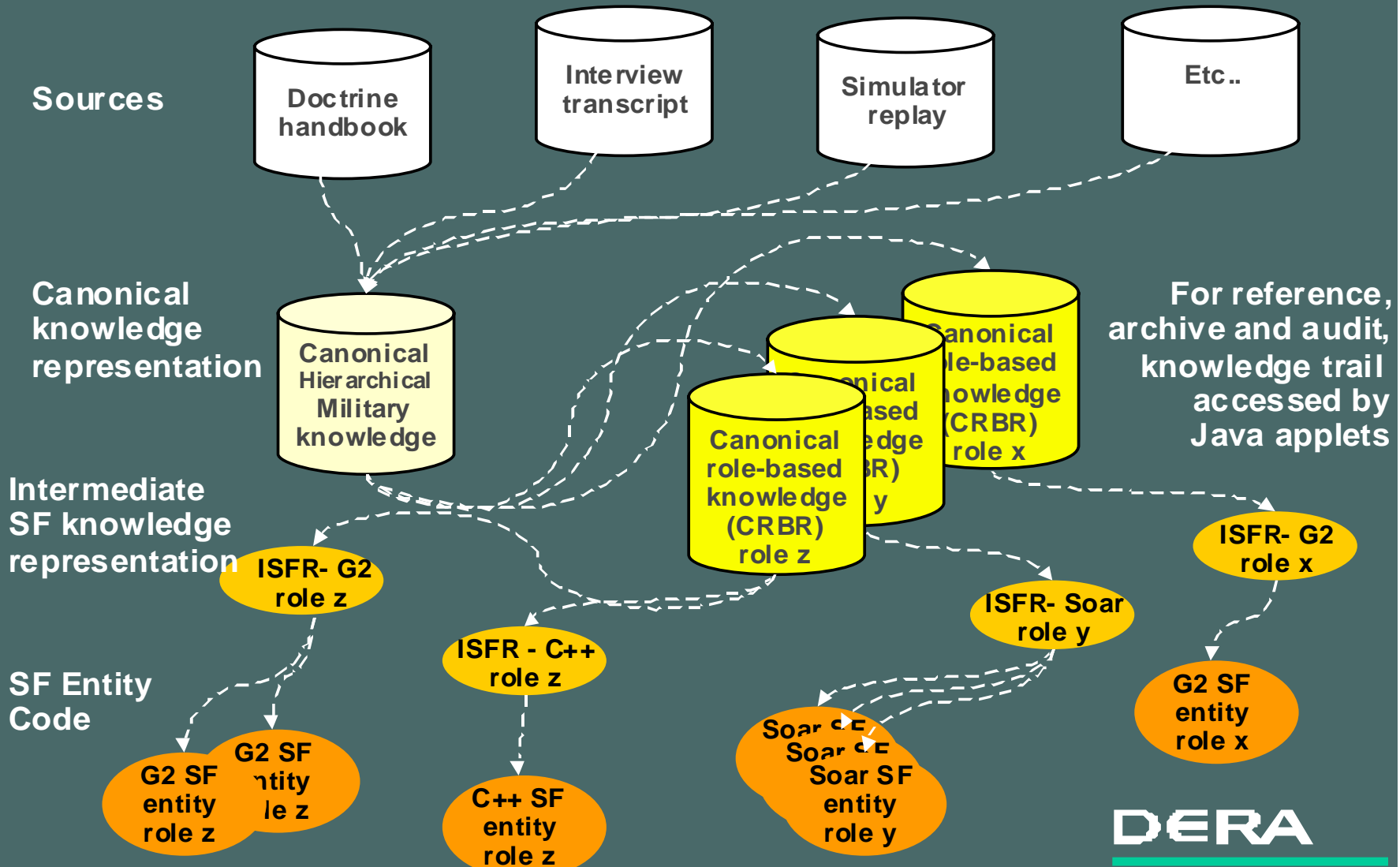
- University of Portsmouth - Tony Kalus & Tony Hirst (T<sup>2</sup>)
  - Modifying TacAir to use UK tactics (DERA),
  - Introduction of fatigue into TacAir pilot models,
  - Using and extending Milind's teamwork model,
  - FIPA ACL for Soar agents,
  - ViSoar - 'Visual' Programming Environment - more later!



# *Who's Doing What?*

- University of Portsmouth (continued)
  - **Reducing the Cost of Acquiring Behaviours - RCAB Project (DERA)**
    - Similar to DARPA's KSE/KIF/HPKB/ontology work, but on a smaller scale.
    - Using Soar as one of the 'end-user' agent architectures.

# RCAB - From knowledge source to SF entity





## *Who Might Use Soar?*

- Marcelo Cunha Santos - Brazil.
  - Starting PhD in Cognitive Science - intends to use Soar for this.
  
- Horia-Emil Popa - Romania.



## *Who's Not Using Soar?*

- University of Hertfordshire, UK.-  
Richard Young
  - No funding
  - Looking at ACT-R.



# *Who's Not Using Soar?*

- University of Zurich - Thomas Rothenfluh (Dept of Psychology)
  - Uses Soar for instruction & classroom demos, but has moved to ACT-R for practical simulations.

## WHY?

- ACT easier to integrate into other projects
- Requires less 'programming'
- Allows better and quicker focus on issues under study.



# *Who's Not Using Soar?*

## WHY (continued)

- ACT has better supporting material that appeals to psychology students & researchers
- Initial setup and new scripting environment better geared towards experimentation and is more transparent
- ACT community in Europe is active - allows for better help within Europe.



## ***What Attracted Newcomers to Soar?***

- General philosophy
- Availability of source code
- Manuals & tutorials
- Software is free of commercial rights
- Ongoing research
- Proven technology
- Soar help & mailing lists for questions
- Availability of chunking mechanism





## ***What Would Make Soar More Attractive?***

- ❑ More Examples!!!
  - both generally and
  - on 'advanced' topics - SCA, recovery from incorrect knowledge, use of default knowledge, abstraction, data chunking, core communications for a simple MAS, more on MAS generally.
  - More library rulesets.
  - More help on (C/C++) interfacing issues.
  - A Windows (not Tcl/Tk) interface.



## *Other Comments*

- Still hard to use!!
- Writing good Soar programs has proved more difficult than expected!!!
- Is anyone doing psychological work with Soar anymore??