ViSiCAST WP5 status for Annual Review 2000

Achievements to the end of July 2000

The Semantic Interface Language has been chosen, namely, Discourse Representation Structure (DRS) with certain extensions (M5-1). Connections from the previously used CMU parser to DRS are being investigated.

The initial version of the ‘Signing Gesture Markup Language’ (SiGML) has been defined (M5-10).

SiGML-processing tools are under development, in particular, tools for HamNoSys-to-SiGML translation.

Demonstrator for streaming capabilities in initial SiGML has been developed.

A draft definition of HamNoSys refinements to be incorporated into SiGML has been written: internal evaluation and verification are ongoing.

The initial domain for natural language processing has been chosen based on several pilot studies.

Potential grammar development tools have been analysed in the light of the special needs of sign language grammar and phonology; communication has been initiated with the authors of the most promising systems.

Achievements after end of July including next milestones and deliverables

Work is continuing towards milestones M5-2, M5-3, and M5-4 to be integrated with the already finished M5-10 into D5-1.

Work is progressing on DRS generation from simple English constructs via the CMU parser.

Progress against plan with any problems identified

In order to compensate delays in recruitment at both UH and UEA, those milestones with immediate dependants have been given priority. This resulted in delays for milestones M5-2 and M5-3. As there was a lay time of 5 month for the output of M5-2 to be used, no corrective actions were needed for that milestone. Work on M5-3 was

organised in a way that the extra-WP dependant (part of WP4) is not affected. No influence is seen on the next deliverables.

Work to date on SiGML development has highlighted the importance of the timely availability of a prototype SiGML synthesis tool (milestone M4-5), in order to support WP5's own internal and external evaluation requirements.

The most promising grammar development tool for VisiCAST, LinGo from Stanford U, is still under development, with one commponent necessary for ViSiCAST usage not yet available. (The developers' view was recently revised so that the next version should become available within the next weeks.) It was decided by the workpackage members that we wait a maximum of two more months for the system to become usable before choosing the next-best solution. In the meantime, an ad-hoc grammar formalism will be used, with re-coding necessary when switching to LinGo (or any other HPSG-based environment). This extra effort seems justified by the potential gain of efficiency should LinGo become available with the required component.