Summary Report
ToKeN[1] symposium on June 22, 2007

Since its launch in 1999 ToKeN became a well-known NWO research programme with a considerable steady research community. Every year a one-day ToKeN event is organised to bring together the researchers of various universities in the Netherlands and potential users of the research results. This year's ToKeN symposium convened on June 22, 2007 at the Academic Medical Center Amsterdam, one of the sites where ToKeN research is carried out.

The programme of the day consisted of three parallel workshops in the morning and a plenary session in the afternoon with an extensive poster session in between. All twenty ongoing ToKeN projects were presented either by posters or by oral presentations during the workshops or during the plenary session.

The day was opened by Professor Jaap van den Herik (University Maastricht and chair of the programme committee ToKeN). He welcomed the participants and drew the attention to the ToKeN-highlights of the last year including five recent Ph.D. theses, many scientific publications, a special issue about ToKeN-research in *Pattern Recognition Letters* and considerable media attention for the research.

The morning workshops on the three areas of application of the ToKeN programme (Healthcare, Education & Culture and Law enforcement & the Judicial system) offered a forum for a lively discussion of questions like: What are the highlights of the projects? What are the lessons learned? What are we proud of? What could have been done better? What are our future plans? Quite a few projects are in their final phase. Therefore, the workshops were a good opportunity to meet colleagues, to swap ideas, or simply to exchange the "ToKeN experience". Part of the Healthcare-workshop was a tutorial by Professor Jeremy Wyatt, the keynote speaker of the afternoon session.

THREE PARALLEL WORKSHOPS

According to the tradition of the ToKeN events, the lunch break was be accompanied by a lunch concert, this year with oboist Rik Sonneveld.

An important element of the symposium was a poster session which provided researchers with a unique opportunity to make their work highly visible, and to discuss their work one-on-one with other participants in an informal and interactive fashion. The poster session was held after the lunch. Reproductions of the posters are included in a booklet which can be ordered from the programme office (email: token@nwo.nl)

IMPRESSIONS OF THE POSTER SESSION

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[1] **ToKeN** - Access **To K**nowledge and its **e**nhancement **N**etherlands - is a multidisciplinary NWO research programme involving specialists in both cognitive and computer science as well as three fields of application, namely Healthcare, Education & Culture and Law enforcement & the Judicial system. The programme focuses on the ability of individuals to retrieve relevant knowledge and information from computer systems and to derive implicit knowledge from raw data. The overall aim is to develop methods and techniques to optimise the interaction between human users and advanced multimedia information systems.

The plenary session in the afternoon was opened by the exciting keynote lecture by Professor Jeremy Wyatt (University of Dundee). His talk entitled *Knowledge – a token of success?* explored the chain of knowledge from the crystallisation of tacit knowledge as explicit knowledge through research to three key methods for promoting professional uptake and use of explicit knowledge. Wyatt, since 2005 Professor of Health Informatics and Director of the Health Informatics Centre, University of Dundee illustrated his statements with examples from medicine, in which Evidence Based Medicine and practice guidelines provide useful innovation case studies.

PROFESSOR JEREMY WYATT

Following, three ToKeN Ph.D. students, one out of each field of application, presented their research. Drs. Leendert van Maanen (Department of Artificial Intelligence, University of Groningen) presented his work in the ToKeN/I2RP project on *Mediating expert knowledge and user interest in art work recommendation.* In his presentation, he discussed how the visitor's interests can be served, while taking the relationships between art works in the museum's collection into account. He proposed to represent these relationships using a spreading activation network, in which the nodes represent art works from the collection, and the edges represent a measure of similarity between the art works based on expert knowledge provided by the museum staff.

In her lecture entitled *Sense-making software for crime investigation: How to combine stories and arguments?* drs. Susan van den Braak (Department of Information and Computing Sciences, Utrecht University) presented an architecture for a sense-making system for crime investigation named AVERs (Argument Visualization for Evidential Reasoning based on stories) which is developed in the ToKeN/EVIDENCE project. This is a graphical representation software that allows human crime investigators to visualize their thinking about a case and link it with available supporting or attacking evidence.

Drs. Stefan Visscher of the TokeN/TIMEBAYES project (Department of Infectious Diseases, University Medical Center Utrecht) put in his talk *Using Temporal Context-specific Independence Information in the Exploratory Analysis of Disease Processes* the emphasis on the fact that in order to obtain insight into the evolution of disease processes, it is not merely necessary to explicitly model time, but also to consider context-specific independence information. He presented the use of dynamic Bayesian networks to model these processes as such models can be used for temporal reasoning in clinical decision-support systems.

Concluding thoughts at the end of the day were given by Dr. Hans van Eekelen, Chair Users Committee ToKeN. And finally the chairperson Professor Arie Hasman (AMC and member programme committee ToKeN) took the opportunity to thank the keynote speaker, the ToKeN speakers and all sixty-five participants for yet another interesting and inspiring ToKeN symposium.

Fore more information on ToKeN please visit the website www.nwo.nl\token

THE LECTURERS

DRS. LEENDERT VAN MAANEN

DRS. SUSAN VAN DEN BRAAK

DRS. STEFAN VISSCHER