Feature grammar systems. Incremental maintenance of indexes to digital media warehouses

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Acknowledgments

"It's just a job. Grass grows, birds fly, waves pound the sand. I beat people up."
Muhammad Ali

When I was a little boy a fascination for collecting and indexing collections already popped up. A small card-tray, a leftover from my dad’s administration, was soon filled with a card for each book in my small, but steadily growing, library. And when the first computer entered my life, a borrowed old P2000, a catalog program was one of the first MBasic programs build. Throughout the years when older stuff exited and newer hard- and software entered replacing instantiations of this catalog program were devised, e.g. in Pascal and Clipper. So when, in 1996, I was looking for a master’s project it was not too strange to accept a project in the area of database management.

This project on the parallelization of data mining queries brought me in, sometimes a bit hard, contact with the Monet database kernel prototype. Enjoying the interaction and freedom within the database group at CWI and the UvA, I was happy to take the opportunity, after finishing my master’s thesis, to join.

Being tired of writing text, but not of code, I became a scientific system developer. My task was to build the Accon image crawler for the AMIS project. However, soon it turned out that the developing ideas could function as the basis for a PhD. In the beginning of 1997 the DMW project was started, and I started as a PhD student at CWI. So writing text was, again, one, or even the, main tasks, and the results of my efforts are in your hands. However, many people had major influence on these results, and it is my honor to thank them all in this final part of the thesis.

First of all I like to thank my promotor Martin Kersten. Just like many of my colleagues he sent me on my research way with a, in this case developed together with Niels Nes, first prototype. Although there is not much of the source code left the underlying ideas proved a fertile basis. In the years not only many CVS messages asked Martin’s attention, but also many versions of the various chapters and sections of this thesis. Thanks for the constructive comments and the unwearying attention for my English spelling and sentence structure.

The thesis was approved by the committee members: Peter Apers, Paul de Bra, Peter van Emde Boas and Paul Klint. I like to express my appreciation for their willingness to study this thesis, and thank them for their constructive comments.

Large parts, if not the complete thesis, would not have been written without the constructive environment the DMW project turned out to be. I thank Albrecht Schmidt, Roelof van Zwol, Milan Petkovic and Arno Knobbe, my fellow DMW PhD students, for their cooperation. Although it was a busy and stressful period, I have fun memories of the time we spent building the
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Australian Open search engine and our trip to VLDB in Rome to demonstrate it. Thanks also go to the other DMW project members throughout the years. Special thanks and appreciation go to Arjen de Vries for giving this most fruitful period of the DMW project direction and continuous encouragement.

I was glad with several other opportunities to improve the Acoi system. Starting with a huge hand drawn “feature grammar”, which I cherish in my archive, The Rijksmuseum case study was dreamed up by Frank Nack. And joined by Eric Pauwels we tried to automatically classify digitized paintings. This was an entertaining activity with some success, and also turned out to be one of the first cross theme projects at CWI. Henk Ernst Blok stress tested the extensibility of the Acoi framework by extending the WWW search engine with distributed full text search capabilities. This also led to a demonstration at VLDB and a book chapter. And I also like to mention Jeroen Vendrig. We planned for years to build a video annotation feature grammar, unfortunately it never really happened. It has been really nice to work together with all of you.

Next to fellow project members and co-authors CWI provided many other nice colleagues. Stefan Manegold has been an ideal roommate for all these years. We had numerous nice conversations of a technical and cultural nature. Cultural difference keep on being interesting. I hope you did not mind the, sometimes (too) loud, music. Niels Nes and Peter Boncz I like to thank for helping me with many technical issues, and extensive debugging sessions. Also thanks to all the other colleagues, I am sorry I can not name you all here, but you all made CWI a nice working environment.

De wereld buiten het CWI werd vergroot door verschillende trips naar zuidelijk Afrika. Ronald, Patrick en Menno, ik ben benieuwd waar we, mag zich de mogelijkheid nogmaals voor doen, de volgende keer terecht komen. Elke safari werd weer spannender! Although Capetown is a beautiful city, it became a favorite holiday destination due to Dave, Colette and Jane. You have always made us feel welcome and at home and I hope to see you all in the near future.

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Menzo Windhouwer
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