Nine Key Principles on Corporate LSP Intranet Lexicography

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Abstract
In this article, I argue that the design of corporate Intranet reference works may be successfully based on nine key principles on corporate LSP Intranet lexicography. I offer a summary discussion of each of these nine key principles, and I show how these principles were implemented in practice in the design and development of TeleLex, which is a fully operational Intranet-based lexicographic knowledge management system at a major Danish telecommunications company. I also argue that the nine key principles on corporate LSP Intranet lexicography may not only be used in future lexicographic projects in corporations or organization, but also to some extent in future conventional lexicographic projects. Finally, I argue that a company-specific Intranet-based lexicographic knowledge management system, based on the nine key principles on corporate LSP Intranet lexicography proposed in this article, successfully facilitates language work performed by both language experts and non-professional corporate employees, who increasingly perform language work in the modern network society.

1. Introduction

Corporate LSP Intranet lexicography is seen as a subdiscipline of LSP lexicography because corporate Intranet reference works are designed, developed, and maintained in a corporate environment, which for many reasons is not like just another standard market segment for conventional dictionaries, cf. also (Simonsen 2002a:47-49). Furthermore, corporate Intranet reference works undoubtedly belong to an entirely different technological frame, and this technological frame clearly calls for specially designed theoretical considerations and practical solutions, cf. (Simonsen 2002a:64). Finally, corporate Intranet reference works are designed to meet the needs of the users and the organization as a communicative and economic entity, and that clearly calls for innovative and corporate-focused theoretical considerations. Consequently, new theoretical considerations on corporate LSP Intranet lexicography are needed; otherwise lexicographic or terminological artifacts will continue to be mere electronic copies of conventional paper or electronic dictionaries and continue to be naked terminological lists of little lexicographic and communicative value for the corporation.

2. The Nine Key Principles on Corporate LSP Intranet Lexicography

The nine key principles outlined in this article were developed during the TeleLex project and were used as the developmental basis of the lexicographic and technical solutions

implemented in TeleLex, cf. (Simonsen 2002a:195-268) for a detailed discussion of the TeleLex design.

The nine principles are listed below in Table 1.

1. Lexicographic user involvement
2. Lexicographic democracy
3. Lexicographic knowledge creation
4. Lexicographic knowledge transfer
5. Lexicographic knowledge management
6. Lexicographic quality assurance and standardization
7. Lexicographic delegation
8. Lexicographic interface customization
9. Lexicographic data convergence

Table 1: Nine Key Principles on Corporate LSP Intranet Lexicography

2.1. Lexicographic user involvement and Lexicographic democracy

Lexicographic user involvement and Lexicographic democracy are perhaps two of the most important key principles on which TeleLex was designed and implemented, cf. also (Simonsen 2002b), which offers a comprehensive discussion of user involvement in corporate LSP Intranet lexicography.

Lexicographic user involvement is defined as: 'any structured activities by which users are involved in the design and development of a lexicographic artifact by means of Intranet-based lexicographic user surveys and/or test groups'. In other words, this principle uses Intranet-based lexicographic user surveys in combination with reference groups/usability tests, as was the case in the TeleLex project.

Lexicographic democracy is defined as: 'any structured activities by which users are actively involved in the ongoing compilation and quality assurance of lemmata by means of Intranet-based lexicographic feedback and proposal forms'. The term 'democracy' is not to be understood literally as the lexicographic webmaster in question decides what is accepted for inclusion in the lexicographic artifact, cf. also (Simonsen 2002b). Consequently, corporate users cannot order their own term. Instead Lexicographic democracy means that competent users, who very often have updated lexicographic knowledge, may actively participate in a dynamic compilation and standardization of the lexicographic data used by the corporation. I argue that users of lexicographic knowledge management systems should be seen as containers and facilitators of lexicographic knowledge, and new lexicographic knowledge may be successfully created, transferred, and shared with the rest of the users and the corporation by means of Lexicographic democracy.

In fact, a number of theoretical contributions may be used to illustrate the relevance of Lexicographic democracy. (Storrer/Freese 1997:129) authoritatively argue that the need for updated lexicographic data is particularly high in a high-tech field, and (Geeb 1998:206)

argues that the knowledge and active participation of technical experts are required to satisfy the users' demands of a lexicographic artifact in a corporation. Also (De Schryver/Prinsloo 2000) discuss a concept called 'Simultaneous Feedback', which is designed to ensure dynamic feedback from the users to the compilers of small inexpensive dictionaries.

In conclusion, I argue that Lexicographic user involvement and Lexicographic democracy may in fact considerably increase the quality of both the actual design and the lexicographic data of a lexicographic artifact in a corporation. And furthermore Lexicographic user involvement and Lexicographic democracy can be used to retain and even enhance the lexicographic, communicative and economic value of the lexicographic artifact. And quite frankly it is certainly about time that lexicographic artifacts not only focus on the functions of the lexicographic artifact, cf. (Tarp 1995), but also focus on the users by actually taking these users seriously. A similar and far more powerful argument is used by for example (Humbley 2002), who very much to the point argues that 'Nouveaux dictionnaires, nouveaux rapports avec les utilisateurs'. And Lexicographic user involvement and Lexicographic democracy propose just that – a new and far more intimate relationship with the users without establishing what (Carr 1997:214) calls 'bottom-up lexicography'.

Figures 2-3 in Appendix show how Lexicographic user involvement was implemented in practice by means of a pre-conceptual and a post-conceptual user survey, respectively. Figures 4-5 in Appendix show how Lexicographic democracy was implemented in practice by means of a User feedback window and a User comment window, respectively.

2.2. Lexicographic knowledge creation, Lexicographic knowledge transfer, and Lexicographic knowledge management

As already pointed out above TeleLex was designed to be a lexicographic knowledge management system, and the three principles of Lexicographic knowledge creation, Lexicographic knowledge transfer and Lexicographic knowledge management are also seen as three crucial principles upon which a corporate Intranet reference work should be based.

Lexicographic knowledge creation is defined as: 'a corporation or organization's willingness and ability to focus on lexicographic knowledge creation and its ability to create and establish both a corporate culture and a technological system, which support both lexicographic knowledge creation and lexicographic culture building'.

Lexicographic knowledge transfer is defined as: 'a corporation or organization's willingness and ability to transfer and share its lexicographic knowledge with members of the corporation or organization and its ability to create and establish a lexicographic culture and a technological system, which support such lexicographic knowledge transfer'.

Lexicographic knowledge management is defined as: 'a corporation or organization's willingness and ability to focus on lexicographic knowledge management and its ability to create and establish a lexicographic culture and the technological solution required to facilitate such lexicographic knowledge management'.

As will appear from the above definitions the starting point of this discussion of lexicography and knowledge management in a corporate context is the corporation's willingness and ability to further lexicographic knowledge management. During the formulation of the three key principles on lexicographic knowledge management I was

heavily inspired by (Nonaka 1994), who outlines a number of very useful theories and models on the creation and transfer of organizational knowledge. Naturally, knowledge management is not only about IT systems, but in connection with corporate LSP lexicography, I argue that the medium itself plays a paramount role because of the nature of lexicographic data and the lexicographic environment in a corporation. I also argue that lexicographic knowledge creation processes are absolutely vital for a corporation, which is struggling to survive in a very often highly competitive environment. In addition to that, modern knowledge workers very often perform language work and an Intranet-based lexicographic knowledge management system based on these nine key principles is in fact needed to facilitate and quality-assure the language work performed by such non-professionals in a company or an organization.

An Intranet-based lexicographic knowledge management system furthermore also ensures that employees can quickly and easily access the lexicographic data that they need. Accessibility is very important as vast amounts of time are being wasted on locating data and/or knowledge in corporations and organizations as authoritatively outlined by (Busch 2001), who discusses a survey of 21 European companies. The survey showed that employees used an average of 18% of their total working hours locating data and/or knowledge. In other words the employees spent almost one fifth of their working hours looking for data and/or knowledge inside the organization. I argue that such waste of time also takes place when it comes to locating lexicographic data and that an Intranet-based lexicographic knowledge management system would reduce the amount of time wasted considerably.

Figures 4-9 in Appendix are screen shots of the User feedback window, User comment window, Linguistic forum window, Telecom forum window, Language policy window, and the TeleEditor start window, and they show how the principles of Lexicographic knowledge creation, Lexicographic knowledge transfer and Lexicographic knowledge management were implemented in practice.

As discussed in (Simonsen 2002a) a company's typical motive for supporting projects like the TeleLex project is very often to have a lexicographic knowledge management system with a view to retaining valuable lexicographic data for future use by all types of employees. And very often the most compelling argument is the need for lexicographic harmonization and standardization, especially in large, geographically dispersed corporations. All this called for the formulation of the principle Lexicographic quality assurance and standardization.

2.3. Lexicographic quality assurance and standardization

Lexicographic quality assurance and standardization is defined as: 'any structured activities by which lexicographic data is dynamically quality-assured, updated, and standardized by both linguistic and technical experts by means of Intranet-based lexicographic feedback and proposal forms, forums, language policies, and online editing systems'.

I argue that the need for lexicographic or terminological consistency and language management is very important for any corporation or organization, because inconsistent or even incorrect use of key terminology may negatively affect the bottom line, cf. (Wessel 2001) who convincingly discusses the economic potential of effective language

management. The relevance of Lexicographic quality assurance and standardization may furthermore be successfully illustrated by for example (Ripfel 1989:198), who discusses the need for harmonization and standardization. On this basis, I argue that a lexicographic knowledge management system in any corporation must have a quality-assuring, standardizing and regulating function, cf. also (Bergenholtz et al. 2003), who discuss the need for a clear corporate-focused language policy with a regulating function.

A lexicographic knowledge management system such as TeleLex thus becomes a strategic tool supporting the corporation's communication strategy and corporate image, and that may perhaps turn out to be the most important feature of such a system. Figures 4-9 in Appendix show how the principle of Lexicographic quality assurance and standardization was implemented in the TeleLex windows User feedback window, User comment window, Linguistic forum window, Telecom forum window, Language policy window, and the TeleEditor start window.

2.4. Lexicographic delegation

The principle of Lexicographic delegation is defined as: 'any lexicographic editing policies and automated editing systems, which enable the lexicographic webmaster to delegate specific lexicographic tasks and to facilitate horizontal and vertical compilation, and not least to delegate specific tasks to a number of editors across departmental, divisional, and geographic boundaries and time zones'. As will appear from (Simonsen 2002a) the purpose of Lexicographic delegation is first of all to enable the lexicographic webmaster to delegate lexicographic tasks to designated experts in different departments of the company or to various experts all over the world. Another possible solution would be to appoint selected and perhaps specially trained 'lexicographic ambassadors' in different departments, divisions, and countries to ensure that the lexicographic artifact is continually updated according to the needs of the users and the corporation.

Lexicographic delegation is a natural consequence of the new technological frame, cf. (Bijker 1995:122) and is optimally supported by the technological solution developed in the TeleLex project, cf. also Figure 9 in Appendix. As shown in Figure 9 the lexicographic webmaster can issue a personal access code to co-editors in different departments or to expert editors all over the world, but maintain control of the compilation process by restricting the access to specific fields in the relational database accessible from an number of ASP-driven dynamic web pages. Figure 9 shows how Lexicographic delegation could be successfully implemented in practice in corporate LSP lexicography by means of conventional technologies such as relational databases and ASP combined with focused theoretical considerations on lexicographic editing systems and lexicographic delegation.

An overall system architecture of the TeleLex system is shown below in Figure 1.

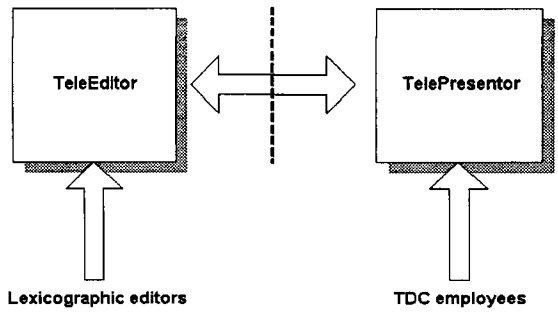

Figure 1: Overall System Architecture

Figure 1 shows that TeleLex consists of two overall modules - the data input module (TeleEditor) and the data output module (TelePresentor). As will appear from Figure 1, only the lexicographic webmaster and the lexicographic editors have access to the data input module as indicated by means of the vertical arrow in the left-hand side of the figure. The vertical arrow in the right-hand side of the figure shows that all employees with access to the TDC Intranet have access to the data output module. The horizontal arrow indicates that TeleLex is designed to be a dynamic and living organism where corporate users may submit terminology proposal forms by means of the user feedback and user comment windows.

2.5. Lexicographic interface customization

Lexicographic interface customization is defined as: 'any functionalities enabling the user of a lexicographic knowledge management system to customize the lexicographic contents on the basis of the lexicographic function required and the skills and competencies possessed'.

I argue that Lexicographic interface customization is only a natural consequence of the potential of the new medium and lexicographic function theories, cf. (Tarp 1995), and it means that the user can tick off a number of boxes and select the lexicographic module in which he is interested. In other words the principle of lexicographic interface customization makes it highly relevant to talk about polyfunctional reference works, cf. (Bergenholtz 1997) because several lexicographic functions may be supported. The customizable interface in TeleLex enables the corporate users to select the mix of lexicographic data in which they are interested and the user's decision is often based on the user's competencies and skills, and of course on the lexicographic function in question, for example L1-L2 translation or L2 production, see also (Tarp 1995) for a detailed discussion of lexicographic functions.

Figures 10-12 in Appendix show how the principle of Lexicographic interface customization was implemented in practice in TeleLex.

2.6. Lexicographic data convergence

Finally, the principle of Lexicographic data convergence is also seen as a useful lexicographic principle, and it is defined as: 'any structured activities and functionalities converging both internal, external, static, and dynamic lexicographic data sources in one

easy-to-use system'. Basically, the purpose of Lexicographic data convergence is to satisfy the complex of lexicographic needs of the user and the corporation.

The underlying idea of Lexicographic data convergence is to converge lexicographic and non-lexicographic data sources and present this information in a structured and customizable way to the benefit of the user. The principle of Lexicographic data convergence is the general principle upon which TeleLex was designed, and it means that a multitude of lexicographic as well as non-lexicographic data sources are converged and presented in the Danish-English Article Window, cf. also Figure 13 in Appendix. The principle of lexicographic data convergence goes further than the concept of 'Vernetzung' cf. (Lemberg et al. 1998:268-272), because Lexicographic data convergence is specifically designed for corporate LSP lexicography.

As already indicated above, new solutions are required to alleviate the serious weaknesses of conventional bilingual dictionaries, as convincingly discussed by (Hausmann 1991:2877-2878), who compares the bilingual dictionary with 'das Fass der Danaiden'. Furthermore, the very reason d'aitre for a lexicographic knowledge management system in a corporation is to serve as a useful tool for all types of users irrespective of education and background. And here lexicographic data convergence in combination with lexicographic interface customization may be a useful way of solving the problem of providing the right type and amount of lexicographic and non-lexicographic data to all types of users in one single system. Furthermore, a lexicographic artifact in a corporation should not be an elitist system designed for the chosen few, but should be designed to embrace experts and laymen alike. Another important aspect of relevance here is the dramatically increasing number of non-professionals performing for example translation work. So instead of just grumbling about this fact, the corporate translator or lexicographer should meet the layman's wishes and provide up-to-date and dynamic language usage examples in both languages to assist the layman in performing for example translation work. And here the principle of lexicographic data convergence is seen as a practical and helpful solution.

In addition to the static and controlled lexicographic data from the underlying relational database, cf. Figures 11-13 in Appendix, the principle of lexicographic data convergence furthermore enables the user to perform automated concordance searches in the underlying corpora. In the TeleLex project the two underlying corpora DANCORP and USCORP were made available for the user and every time a search in TeleLex was run, the user automatically ran a search in the two underlying corpora. Lexicographic data convergence thus enables the user to get access to unlimited amounts of valuable contextual information in controlled corpora. In other words, the user can now retrieve valuable contextual information, something, which so far has been the exclusive right of the lexicographer.

Furthermore, lexicographic data convergence also enables the user to perform automatic, context-sensitive, and structured searches for files containing the lemma or the equivalent on the Internet and the company's Intranet, respectively. By activating such a structured search, the user gets access to dynamic sources of lexicographic data, and I argue that such document retrieval successfully supports both text-independent and text-dependent functions, cf. also (Bergenholtz/Kaufmann 1997), and that it is very suitable for the layman and expert alike. Figure 13 in Appendix shows how the principle of Lexicographic data convergence was implemented in practice in the TeleLex project.

3. Conclusion

This article offered a summary discussion of nine theoretical principles on corporate LSP Intranet lexicography. The article also illustrated how these theoretical considerations were implemented in practice in an Intranet-based lexicographic knowledge management system at a major Danish telecommunications company. The article also illustrates that a corporation is not like a conventional lexicographic environment and that the lexicographic and non-lexicographic demands of both the users and the corporation should be satisfied. Consequently, I argue that the nine key principles outlined in this article are vital when designing and developing Intranet-based lexicographic knowledge management systems in corporations and organizations, and in fact I also argue that some of the nine key principles would be very useful in conventional lexicographic projects as well.

The consequences of the modern network society and the increasing skills and competencies of the modern knowledge worker call for radically different solutions in companies and organizations where language work is increasingly being performed by non-professionals. Consequently, I argue that a company-specific Intranet-based lexicographic knowledge management system, based on the nine key principles discussed above, would be a considerable linguistic and encyclopedic asset for both the language expert and the non-professional corporate employee.

4. References

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5. Appendix

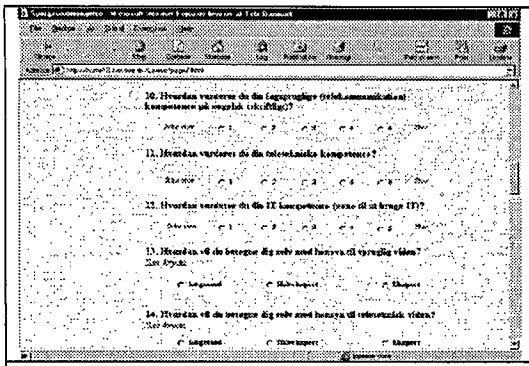

Figure 2: Pre-conceptual User Survey

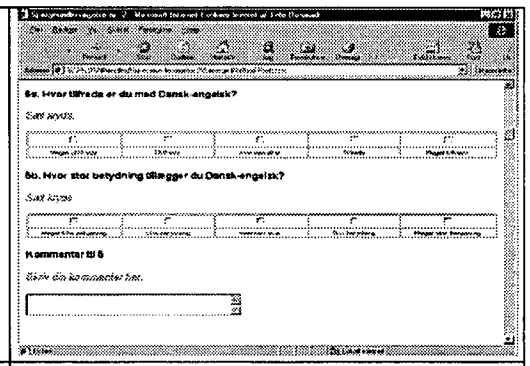

Figure 3: Post-conceptual User Survey

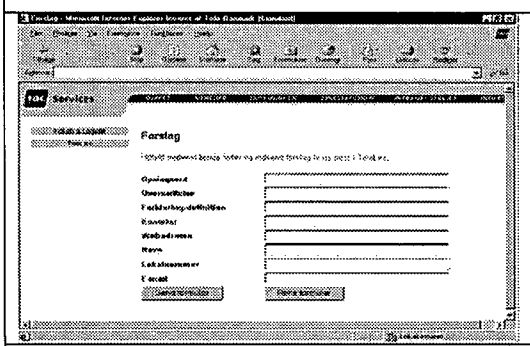

Figure 4: User Feedback Window

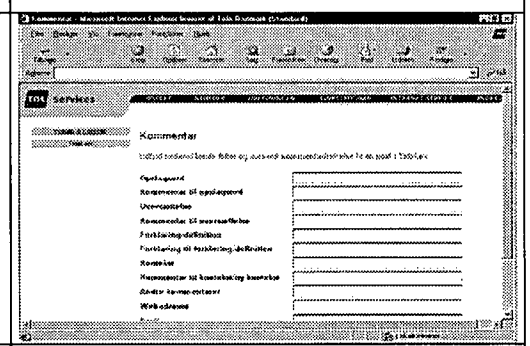

Figure 5: User Comment Window

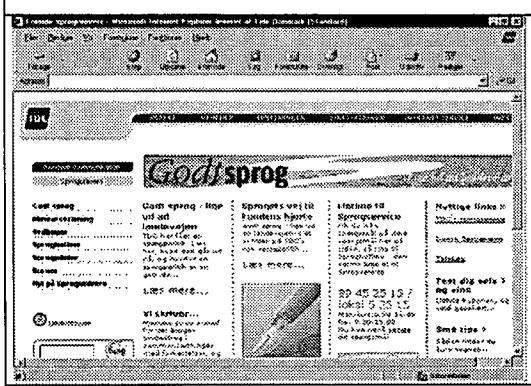

Figure 6: Language Policy Window

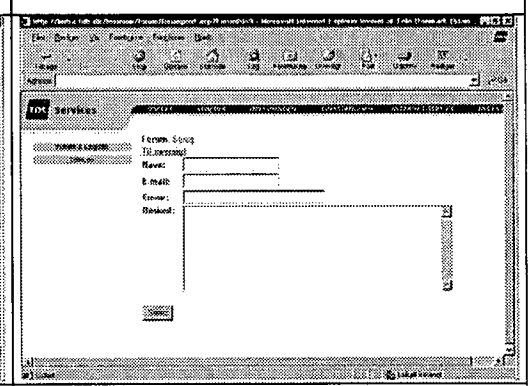

Figure 7: Linguistic Forum Window

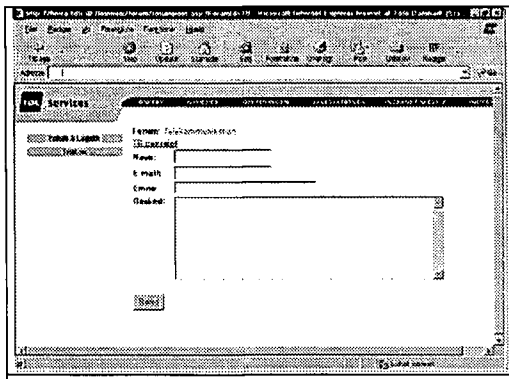

Figure 8: Telecom Forum Window

Figure 9: TeleEditor Start Window

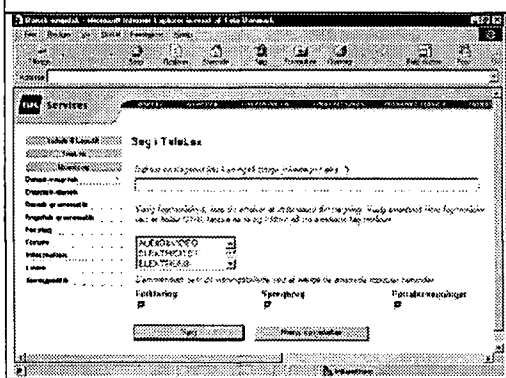

Figure 10: DK-UK Search Window

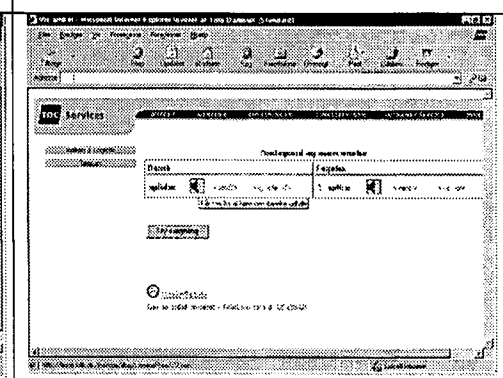

Figure 11: DK-UK Article Window (M1)

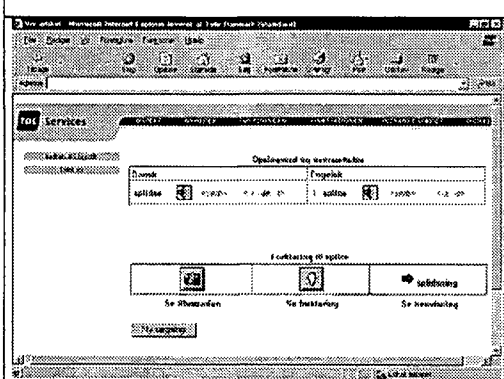

Figure 12: DK-UK Article Window (M2+M3)

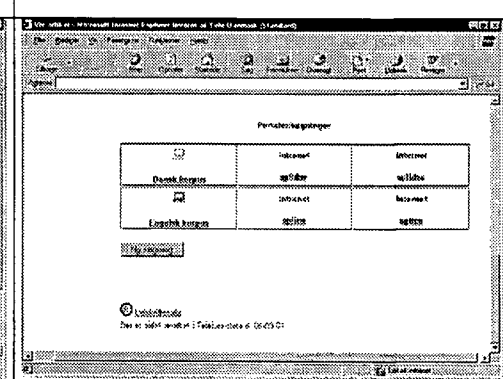

Figure 13: DK-UK Article Window (M4)