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COGAIN

Communication by Gaze Interaction

Network of Excellence

Information Society Technologies

D4.2 Release of linked communication systems on COGAIN site

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IT University of Copenhagen

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Dissemination Level		
PU	Public	x
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

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Available online at <http://www.cogain.org/results/reports/COGAIN-D4.2.pdf>

Linked systems available online at <http://www.cogain.org/downloads>

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Thanks to

People and organisations involved in design, development and testing of GazeTalk, see <http://www.cogain.org/results/applications/gazetalk/about>

People and organisations involved in design, development and testing of Dasher, see <http://www.inference.phy.cam.ac.uk/dasher/History.html>

Abstract

This deliverable consist of a link made between two software systems, Gazetalk 5.0 and Dasher. Both have been developed by COGAIN partners, namely IT University of Copenhagen and University of Cambridge. Both systems may be found at www.cogain.org/downloads.

GazeTalk 5.0 provides direct access to the very fast Dasher typing system (Ward and MacKay, 2002). The decision to make a link directly from within Gazetalk to Dasher was done on basis of experimental research that indicated high potentials for some users to reach a typing speed on Dasher that would be considerable higher than the speed expert users of GazeTalk can expect to achieve (Itoh, Aoki & Hansen, 2006).

The link to Dasher from GazeTalk has been put on the very front layout of GazeTalk to remind the user that he or she could try it, every time GazeTalk is turned on (Figure 1).

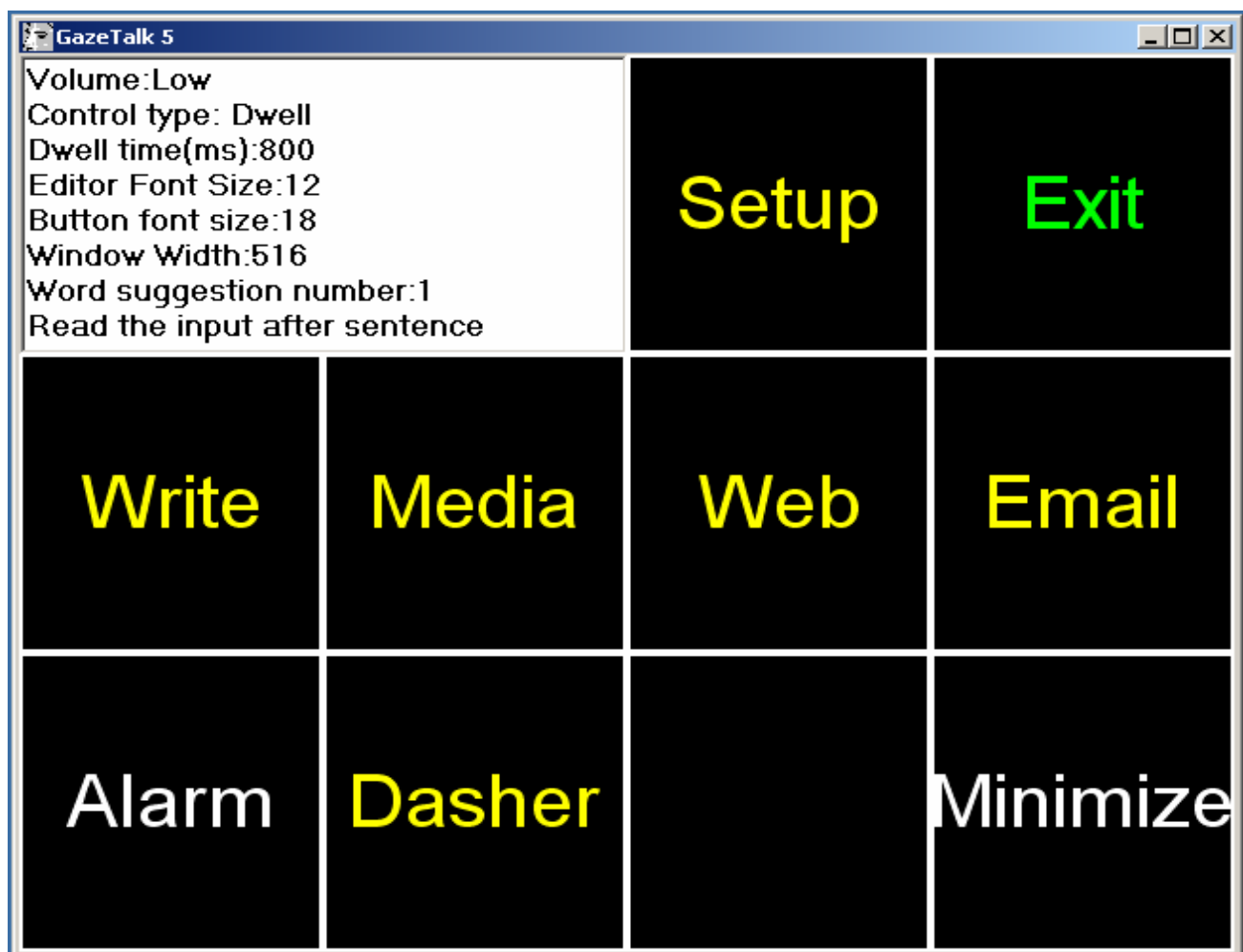


Figure 1. Dasher link on the front page of GazeTalk.

Once the Dasher button gets activated the user will see a divided layout in which the Dasher systems takes up a window to the left and the standard GazeTalk layout to the right (Figure 2).

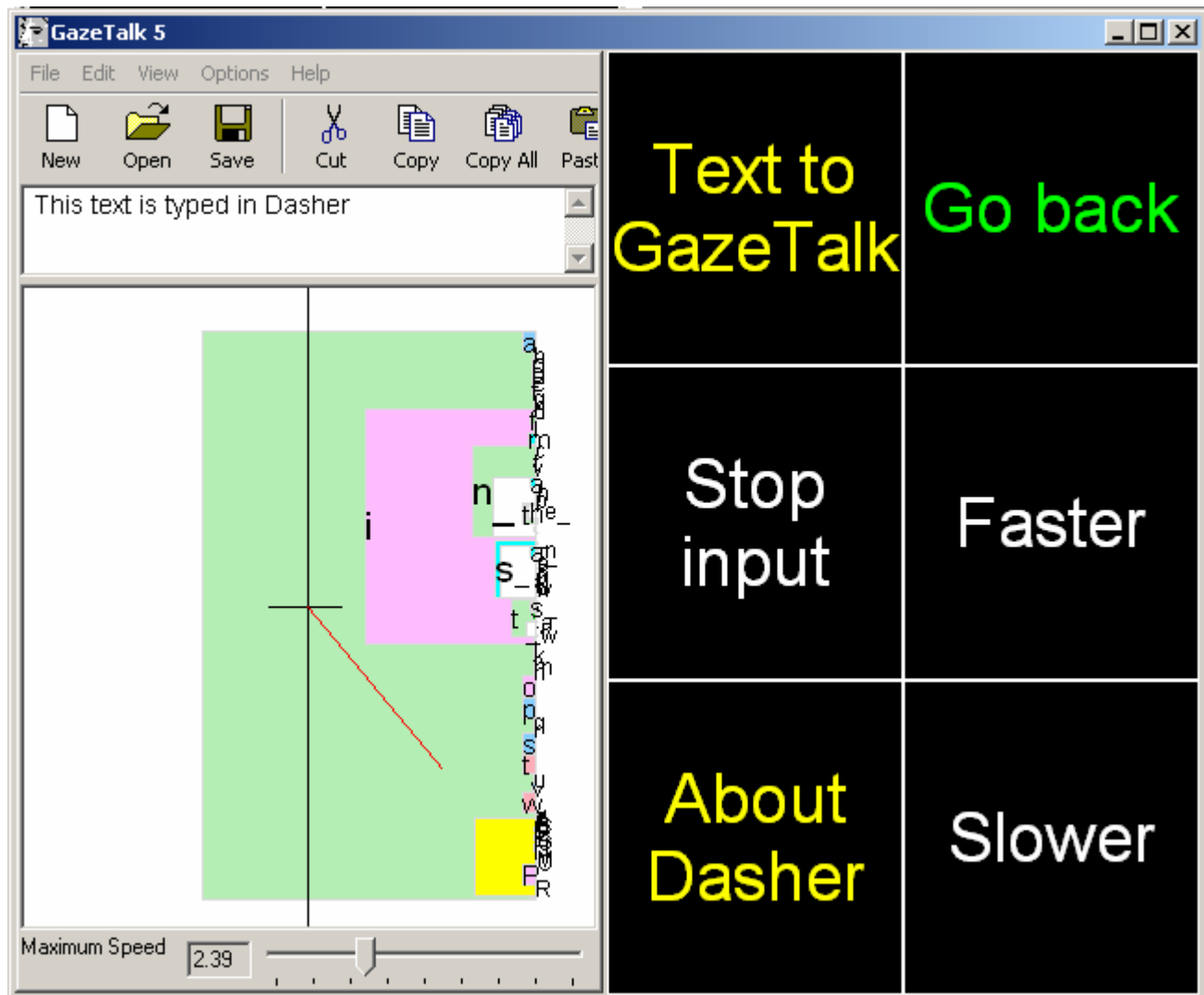


Figure 2. Dasher in a window within GazeTalk.

The user can start input to Dasher, control the typing speed of Dasher (faster/slower) and export the text written in Dasher directly to GazeTalk ("Text to GazeTalk"). In GazeTalk the user is then able to continue writing and/or editing, and use the text for e-mails, documents or just as type-to-talk (Figure 3). Text that are written in Dasher and exported to GazeTalk will be included in the database of user words. The words will therefore be predicted with a high likelihood in all future text production within GazeTalk.

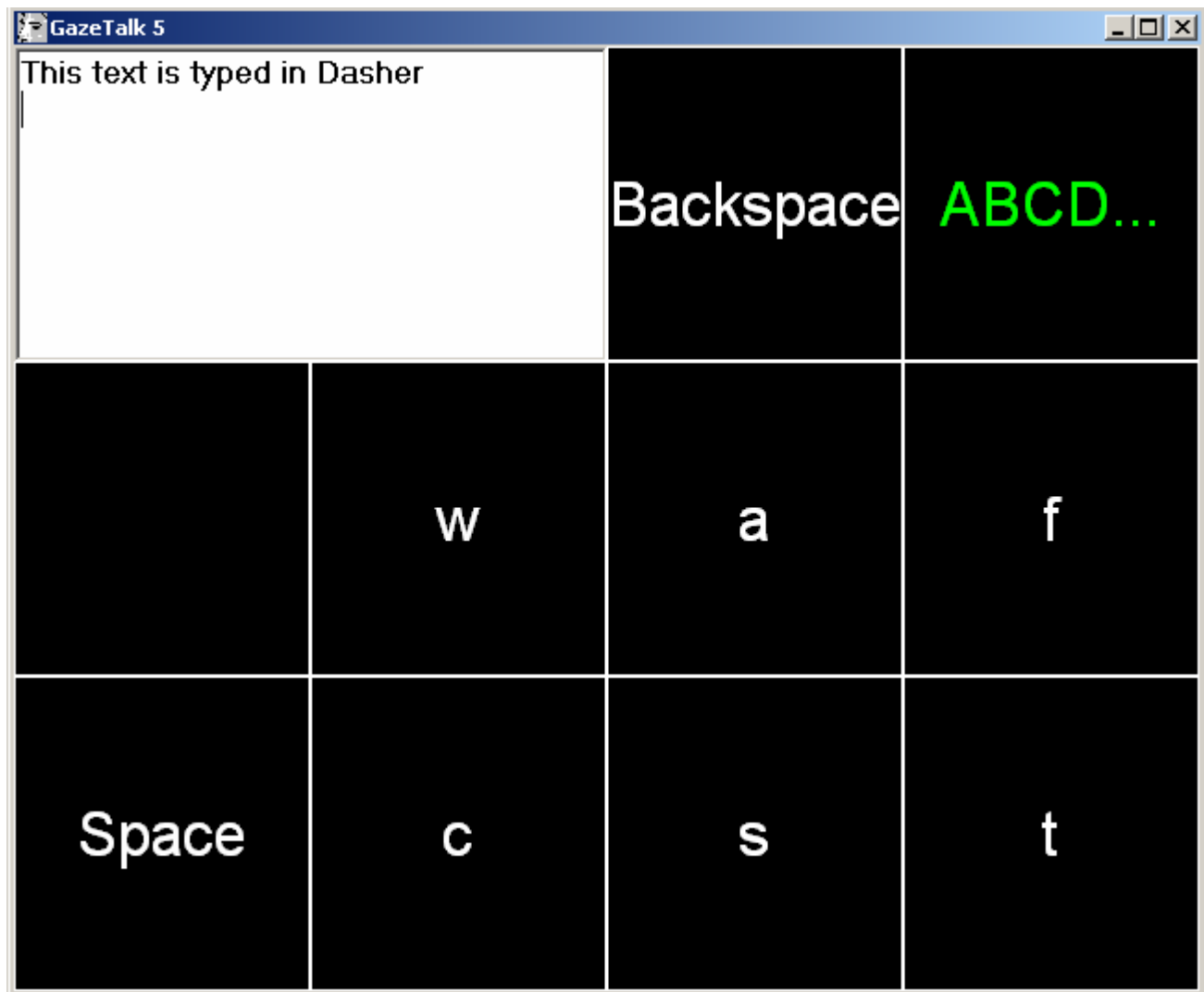


Figure 3. Text produced in Dasher are exported to GazeTalk.

The user may also get more information about Dasher (“About Dasher” button). If the user activates this button, then GazeTalk will open its browser window with the Dasher homepage shown. (Figure 4). In this way, it is always the latest information generated by the Dasher group themselves that the user gets.

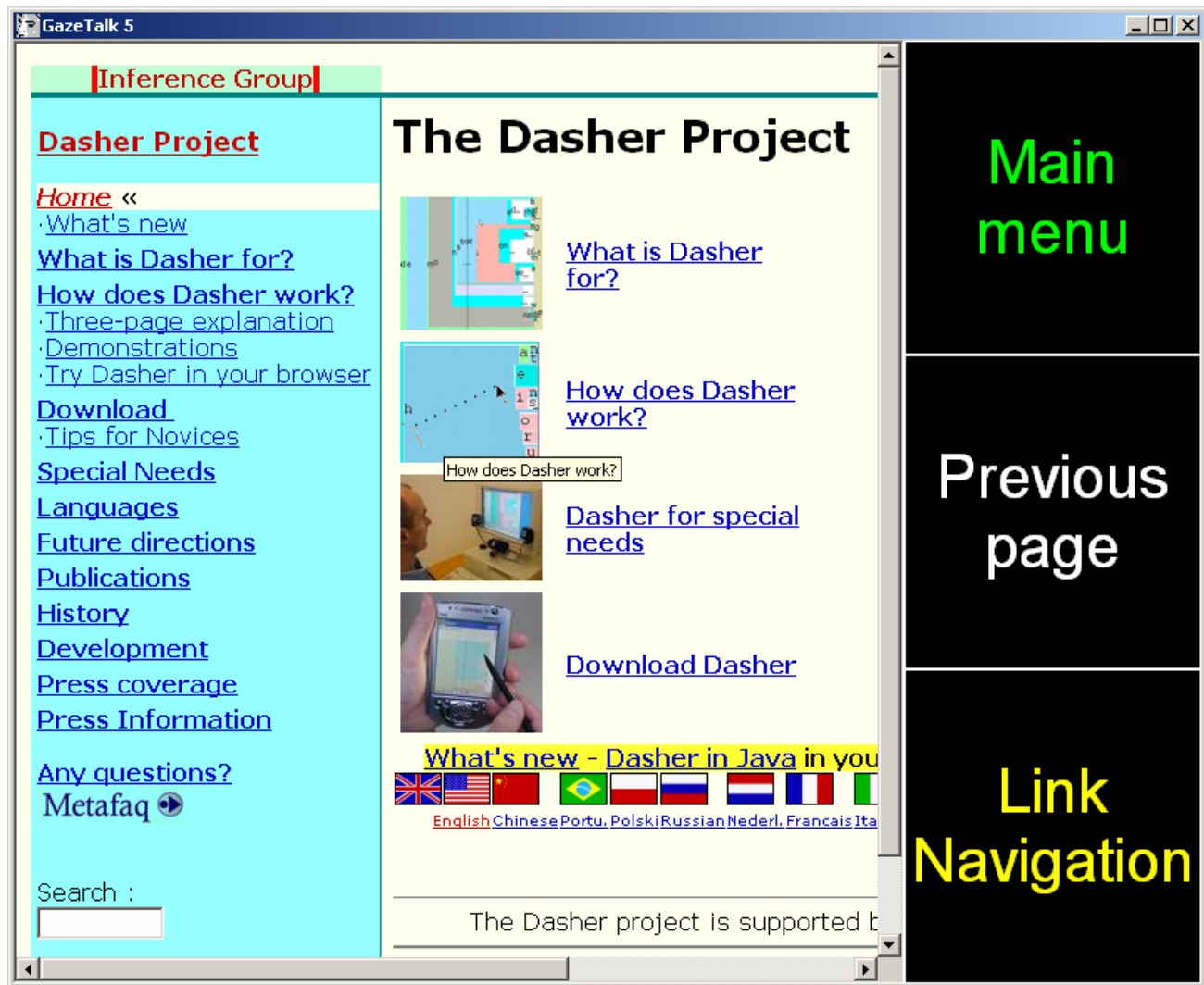


Figure 4. Dasher website in the browser of GazeTalk.

References:

Itoh, K., Aoki, H., and Hansen, J. P. 2006. A comparative usability study of two Japanese gaze typing systems. In *Proceedings of the 2006 Symposium on Eye Tracking Research & Applications* (San Diego, California, March 27 - 29, 2006). ETRA '06. ACM Press, New York, NY, 59-66.

Ward, D. J., and MacKay, D. J. C. 2002. Fast Hands-Free Writing by Gaze Direction. *Nature*, 418, p. 838, August 22.