

Reference List

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June 16, 2010

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1 Keywords

1. Hypertext

- General Hypertext
 - General
 - General (Background)
 - HT Methodology
 - Intro
 - Definition
 - Justification
 - Review
- HT Models
 - Dexter_Model
 - Amsterdam_Model
 - model:...
 - SGML
- Links
 - taxonomy of link_types
 - link_structures
 - link_patterns → link_structures
 - taxonomy
 - theory
 - (see also Guided_Tour in AutoGen)
- Automatic Generation of Hypertext
 - Auto (AI)
 - AutoGen
 - AutoGen (Document Analysis)
 - AutoGen (IR/NLP)
 - Concept_Identification
 - phrase
 - Conversion
 - Guided_Tour
- Writing/Authoring/Creating Hypertext
 - Authoring
 - Authoring/Conversion
 - Design
 - Design Decisions
 - Indexing
 - Methodology

2. Fields related to HT

- collaboration (group)
- groupware
- database
- annotation
- e-pubs
- hardware

3. AI [as applied to HT]

- AI
- AI (reasoning system)
- NLP
- Neural_net
- Semantic_net
- CYC
- Misc (AI)

¹suggested reading for CS 6606

²domain experts vs. novices

³read for GSLIS 861

4. Human Factors

- Evaluation/Testing
 - Evaluation
 - [HT] Metric[s]
 - Testing
 - Usability
- Human-Computer Interaction
 - HCI
 - task_analysis
 - mental/cognitive models
 - cultural_factors
 - 6606¹
- CogPsych
 - indiv_diffs
 - Spatial_Ability
 - Reading
 - Expertise²
 - 861³ / menus
- Interfaces
 - fisheye_view
 - interface

8. HT Systems

- | | | |
|----------------------------|----------------------|------------------------|
| • [HT] System Issues | – Essence | – MARS |
| • System | – EXPLICIT | – MEDLARS |
| – AIDA | – gIBIS (group IBIS) | – MICROCOSM |
| – Andrew ⁴ | – HyperLaw | – MUCH |
| – browserware ⁵ | – HYPERLINE | – Multivalent Document |
| – CDWord | – IBIS | – NoteCards |
| – CODER (AI) | – Information Lens | – NUDIST |
| – CONCORDE | – JANUS | – OHS ⁶ |
| – CORE | – KIM | – QCIP |
| – CYC (AI model) | – LOCKE | – SatTellite |
| – DalText | – MAESTRO | – SemNet |

⁴The keyword 'Andrew' refers to both the Andrew Toolkit & the Andrew File system.

⁵See also WWW [MB97]

⁶OHS=Open Hypertext Systems(s)

5. Information Retrieval

- Bayesian (probability)
- Categorization
- correspondance_analysis
- Clustering
- Information_Filtering
- Information_Retrieval
- LSI
- MDS
- full_text
- probabilistic_IR
- Ward's_Method
- weighting
- spreading_activation

6. Bloom_Filter

7. Miscellaneous

- Classic
- Misc (AI)
- Misc (Other field [non-HT])
- Legal_Issues [in HT]

- | | | |
|-------------|----------------------|-----------|
| - SFS | - TOPIC (AI) | - WordNet |
| - SMART | - TREC | - WWW |
| - SUE | - VIBE | - Xanadu |
| - SuperBook | - VISAR | - Xtract |
| - TEXTNET | - WEBSs ⁷ | - XLibris |

⁷WEBS=Woven Electronic Book System with scripts

2 Selected Topics

2.1 Annotation

- Cathy Marshall [Mar98b; Mar98a]
- Campbell and Maglio [CM99] about annotation not interfering and sometimes helping
- O'Hara and Sellen [OS97]
- Ovsiannikov et al. from the Brain group in IJHCS [OAM99]
- Price et al. about XLibris [PGS98; SPG98]
- See also Digital Libraries and Mobility by Marshall et al. [MGP01]

2.2 Cognitive factors in HT

- Nielsen's The Matters That Matter [Nie89]
- Bryce Allen's 1991 ARIST chapter [All91]
- Dillon and Gabbard [DG98]
- Dillon (1996) user analysis in HCI [DW96]
- Dillon Human factors in journal usage [DRM89]
- Chen and Rada's meta-analysis [CR96]
- Rouet's cog psych paper at HT91 [Rou92]
- Charney's chapter [Cha94]
- Wright's HT keynote [Wri91]
- Wright's To Jump or Not To Jump [Wri93]
- Wright in NATO Conference [Wri90]
- Nielsen's (1995) chapter [Nie95b]
- Dillon's survey of reading from paper vs. screen [Dil92]

◀ See also Section 3.10

2.2.1 Individual Differences

- Special Issue of JASIS (April 2001) [Cha00]
- Dillon in IJHCS [DW96]
- Dillon & Gabbard in Rev. Ed. Res. [DG98]
- Chen & Rada [CR96] were surprised to find no differences except spatial ones
- Does Bryce Allen's ARIST chapter [All91] say anything about this?
- ◀ See also Section 3.10.1

2.2.2 Spatial Ability

- Bryce Allen in DL'98 [All98]
- McDonald and Stevenson about disorientation [MS96]
- Chen and Czerwinski [CC97] for an investigation and good background section
- Chen and Rada [CR96] found an effect of spatial ability on performance in their meta-analysis
- Trumbo [Tru98] in interactions
- Others
 - McDonald and Stevenson [MS99]
 - Medyckyj-Scott in 1992 Geoforum [MS92b]
 - O'Hara and Sellen [OS97]
 - Edwards and Hardman [EH89]
 - Hofman and van Oostendorp [Hv99]

2.3 Navigation & Shape

- Navigation Through Complex Information Spaces in *Hypertext in Context* [MDR91b]
- A Framework for Navigation [Spe99]
- Spatial-Semantics: How Users Derive Shape from Information Space [Dil00]
- Effects of Text Structure and Prior Knowledge of the Learner on Navigation in Hypertext [MS98a]
- Navigation in hyperspace: An evaluation of the effects of navigational tools and subject matter expertise on browsing and information retrieval in hypertext [MS98b]
- Spatial Ability and Visual Navigation: An Empirical Study [CC97]
- 'Lost in Hyperspace': Cognitive Mapping and Navigation in a Hypertext Environment [EH89]
- Domain Knowledge, Interest, and Hypertext Navigation: A Study of Individual Differences [LK98]

2.4 Collections

2.4.1 Bibliographies

- Appendices in Nielsen's books [Nie90c; Nie95a]
- Reviews of hypertext literature [Par93a; Par94]
- Miscellaneous Bibliographies [Fra88; Kah90; LKS93]
- Eastgate Compendium [Sys]

2.4.2 Searchable Catalogues

- The HCI Bibliography [Per92]
- Bowerbird [MM] is for hypertext theory
- ACM DL [Ass] is for all ACM publications

2.4.3 Journals to watch

- The New Review of HM & MM [The]
- JoDI [JoD]
- Intl. J. of Human-Computer Studies [IJHb]
- Intl. J. of Human-Computer Interaction [IJHa]
- interactions [int]
- ACM TOCHI [ACM]
- ACM TOIS [ACMb]
- Interacting with Computers [Inta]
- Applied Ergonomics
- Information Retrieval [Inf]
- JASIS [Joub]

2.4.4 Special Journal Issues

Computing Surveys

December 1999 (Hypertext) [AS99]

IEEE Computer

January 1988 (Electronic Publishing Technologies) [IEE88]

JASIS

- April 2001 (Individual Differences In Virtual Environments) [Cha00]
- May 1989 (Hypertext) (according to Nielsen [Nie90c, p. 205])

TOIS

January 1989 (Hypertext) [OIS89]

Byte

October 1988 (Hypertext) [Byt88]

Communications of the ACM

- Jul. 1988 (Hypertext) [CAC88]
- Feb. 1994 (Hypermedia) [CAC94]
- Aug. 1995 (Designing Hypermedia Applications) [Mic95; Bie]
- May 2001 and Apr. 1995 (Digital Libraries) [Edw01; Edw95]
- Jul. 1989 (Interactive Technologies)
- Jul. 1994 (Intelligent Agents)

ACM Queue

- April 2004 (Search engines) [Que04]
- March 2003 (Web services) [Que03]

SysAdmin

- March 2003 (Security) [Sys03]
- August 2002 (Intrusion detection) [Sys02]

Ergonomics

November 1998 (Task Analysis) [Ann98]

International Journal of Human-Computer Studies (IJHCS)

July 2005 (HCI research in privacy and security) [Int05]

ACM interactions

May + June 2006 (HCI and security: A Contradiction in Terms?) [int06]

3 Classics, Meta-analyses, Reviews, and Surveys

- Meta-analyses in general see Hedges & Olkin [HO85]

3.1 Hypertext

- intro and survey of hypertext by Jeff Conklin [Con87; Con91]
- Bush's memex [Bus45]
- view from 1988 about where HT has to go [Hal88]
- Literary Machines [Nel90]
- Galotti has some intro stuff about meta-analyses [Gal94b, pp. 423,431]

3.2 Annotation

Annotation Technology [OAM99] contains a review

3.3 Navigation & Shape

- A Framework for Navigation [Spe99]
- Spatial-Semantics: How Users Derive Shape from Information Space [Dil00]
- Navigation Through Complex Information Spaces in *Hypertext in Context* [MDR91b]

3.4 User Acceptance of Technology

- Mahmood et al.'s meta-analysis [MBGJ00]
- Nielsen & Levy's preference vs. performance [NL94]
- Dillon & Morris's ARIST chapter [DM96]

3.5 Fisheye views

- fisheye view paper [Fur86] is a good place to start
- Kim and Hirtle [KH95] suggest type of interfaces, including fisheyes, to help with HT disorientation

3.6 The vocabulary problem

- Furnas et al. [FLGD87]
- Krovetz & Croft [KC92]

3.7 Metrics and measures of hypertext structures

Botafogo et al. [BRS92]

3.8 Inter-linker consistency and well-trodden paths

- Ellis et al. in J.Doc [EFHW94a]
- Ellis et al. in JASIS [EFW96]
- Ellis et al. in Comp. Surveys [FEW99]
- Pausch and Detmer in EPodd [PD90]

3.9 IR similarity measures

- Jones & Furnas's Pictures of Relevance [JF87]
- Ellis et al. [EFHW93]
- Wong & Yao [WY92]
- Zobel & Moffat [ZM98]
- Korfhage and Yang's A Cautionary Tale [KY91]

3.10 Cognitive factors in HT

- Reading from paper vs. screens (Dillon, 1992) [Dil92]
- Cognitive research in information science(Allen, ARIST 1991) [All91]
- Review of education research (and crit. of Chen & Rada's meta-analysis by Dillon and Gabbard in 1998) [DG98]
- User analysis in HCI (Dilon, 1996) [DW96]
- Chen & Rada's meta-analysis [CR96]
- Nielsen's 1995 chapter about hypertext usability [Nie95b]
- See also SuperBook experiences [LER⁺93]

► See also Section 2.2

3.10.1 Individual Differences

- Bryce Allen in ARIST 1991 [All91]
- Nielsen's 1995 chapter about usability [Nie95b]
- Dillon's 1996 review [DW96]
- Nigel Ford's 2000 JASIS article [For00]

► See also Section 2.2.1

3.10.2 Spatial Ability

(nothing)

3.11 How to present experimental results

Jean's Pragmatics Revisted [TS92]

3.12 The Dexter Hypertext Reference Model

- Workshop paper with Z [HS90]
- CACM article without Z [HS94]

3.13 Browsing

- ARIST chapter [CR93]
- Elaine Toms [Tom00]

3.14 Cognitive walkthrough technique

- Original paper [PLRW92]
- Practioner's guide and redesign [WRLP94]
- Section 4.1 of Lewis & Rieman's book [LR94a]

3.15 Link structures

Ordering the Information Graph by Parunak [Par91b]

3.16 Probabilistic models in IR

Crestani et al.'s survey [CLvRC98]

3.17 HCI Handbooks

- Handbook of HCI [HLP97]
- Handbook of Human Factors and Ergonomics [Sal97]

4 Research and Writing Guides

- A Handbook for Scholars [van92]
- The Chicago Guide to Writing about Multivariate Analysis [Mil05a]
- Applied statistics: a handbook of techniques [Sac84]
- Design and Analysis of Cross-Over Trials [JK89]

References

- [AB] Marc Andreessen and Eric Bina. NCSA Mosaic for X. available via anonymous FTP from <ftp.ncsa.uiuc.edu> in the Mosaic directory. See [URL:http://www.ncsa.uiuc.edu/SDG/Software/XMosaic/index.html](http://www.ncsa.uiuc.edu/SDG/Software/XMosaic/index.html) for more information.
- [AB05a] Anne Adams and Ann Blandford, July 2005. Bridging the gap between organizational and user perspectives of security in the clinical domain. *International Journal of Human-Computer Studies*, 63(1 – 2):175 – 202. URL [URL:http://dx.doi.org/10.1016/j.ijhcs.2005.04.022](http://dx.doi.org/10.1016/j.ijhcs.2005.04.022). [URL:http://www.sciencedirect.com/science/article/B6WGR-4G94HXR-4/2/732fdc1be50f5f9123b9d653917b8914](http://www.sciencedirect.com/science/article/B6WGR-4G94HXR-4/2/732fdc1be50f5f9123b9d653917b8914).
- SEE ALSO: Shibu Basheer’s MEC report and Andrew T. Zhou’s MCS Thesis
- KEYWORD: Usability • Security
- [AB05b] Ishtiaq Ahmed and James Blustein, February 2005. Navigation in information space. In Kommers and Isaías [KI05], (pp. 281 – 286).
- [AB05c] Ishtiaq Ahmed and James Blustein, February 2005. Navigation in information space: How does spatial ability play a part? In Kommers and Isaías [KI05], (pp. 119 – 125).
- [AB06] Ishtiaq Ahmed and James Blustein, 2006. Influence of spatial ability in navigation. *International Journal of Web Based Communities*, 2(2):183 – 196. URL [URL:http://inderscience.metapress.com/link.asp?id=383yjj9f0rdvv3fv](http://inderscience.metapress.com/link.asp?id=383yjj9f0rdvv3fv).
- [ABS02] Stephen D. Armstrong, William C. Brewer, and Richard K. Steinberg, 2002. Usability testing. In Samuel G. Charlton and Thoma O’Brien (eds.), *Handbook of Human Factors Testing and Evaluation*, chapter 18, (pp. 403 – 432). Lawrence Erlbaum Associates, 2nd edition. ISBN 0-8058-3291-2.
- [AC02] Pedro Antunes and Carlos J. Costa, 1 – 4 September 2002. Handheld CSCW in the meeting environment. In Haake and Pino [HP02], (pp. 47 – 60). URL [URL:http://www.springerlink.com/content/55e43xg2h1pcd30u](http://www.springerlink.com/content/55e43xg2h1pcd30u). Published in Lecture Notes in Computer Science volume 2440/2002.
- [ACD⁺03] Einat Amitay, David Carmel, Adam Darlow, Ronny Lempel, and Aya Soffer, 26 – 30 August 2003. The connectivity sonar: detecting site functionality by structural patterns. In Hypertext 2003 [Hyp03], (pp. 38 – 47). URL [URL:http://doi.acm.org/10.1145/900051.900060](http://doi.acm.org/10.1145/900051.900060).
- SEE ALSO: Structural Analysis of Hypertexts: Identifying Hierarchies and Useful Metrics by Botafogo et al. [BRS92]
- KEYWORD: Metric
- [ACG91] Maristella Agosti, Roberto Colotti, and Girolamo Gradenigo, 13 – 16 October 1991. A two-level hypertext retrieval model for legal data. In A. Bookstein, Y. Chiaramella, G. Salton, and V. V. Raghava (eds.), *SIGIR ’91 Proceedings of the 14th Annual International ACM/SIGIR Conference on Research and Development in Information Retrieval*, (pp. 316 – 325). ACM SIGIR, Chicago, Illinois, USA: The Association for Computing Machinery.

ANNOTATION:

- A query system over a limited domain
- A prototype document management system, called HyperLaw, for testing the EXPLICIT model with a highly structured law code. EXPLICIT is a two-level indexing scheme. The two levels are documents and descriptions of the document contents.
- Abstract: 'The paper introduces an associative IR model based on the 2-level architecture proposed in [Agosti et al, 1989a] and [Agosti et al, 1990], and an experimental prototype developed in order to validate the model in a personal computing environment. In the 1st part of the paper, related work and motivations are presented. In the 2nd part, the model, entitled EXPLICIT, is introduced. EXPLICIT is based on a 2-level architecture which holds the 2 main parts of the info resource managed by an IR tool: the collection of documents and the indexing term structure. The term structure is managed as a schema of concepts which can be used by the final user as a frame of reference in the query formulation process. The model supports the concurrent use of different schemas of concepts to satisfy info needs of different categories of users. In the 3rd part of the paper, the main characteristics of the experimental prototype, named HyperLaw, are presented.'

SEE ALSO: Horton in TR:SA [Hor90] for another application to law resources

KEYWORD: HT!AutoGen • System!HyperLaw • System!EXPLICIT • System!HYPERLINE • link types!taxonomy of

- [Ack92] Phillip L. Ackerman, 1992. Abilities and individual differences in complex skill acquisition. In *Proceedings of the Human Factors Society 36th Annual Meeting*, volume 2, (pp. 921 – 925). ISSN 0163-5182.

ANNOTATION: Abstract: 'A theoretically-driven, information processing based examination of ability-performance relations during the acquisition of a high-fidelity complex air traffic controller simulation task is described. Two laboratory experiments and one field experiment are reviewed that describe the results of extensive ability testing (including measures of general, reasoning, spatial, perceptual speed, and perceptual/psychomotor abilities) and individual differences in skill acquisition over protracted skill-learning sessions. Laboratory studies examine individual differences in the acquisition of skills on TRACON — a Terminal Radar Approach Controller simulation. The field investigation examines acquisition of skills by FAA Air Traffic Controller Trainees. Results are reported from perspective of global/component abilities, and global/component criterion task performance measures. Results validate and further extend the Ackerman (1988) theory of the cognitive ability determinants of individual differences in skill acquisition. This research program demonstrates the benefits of ability component and task component levels of analysis over global analyses of ability-skill relations. Implications are discussed for developing refined selection

instruments for the prediction of air traffic controller training success, and for other job tasks with demands for inconsistent information processing, as well as implications for design of tailored training procedures.' (Record from HCIBIB [URL:http://hcibib.org/gs.cgi?word=checked&terms=C.HFS.92.921](http://hcibib.org/gs.cgi?word=checked&terms=C.HFS.92.921))

KEYWORD: individual differences

- [ACKM04] Gustavo Alonso, Fabio Casati, Harumi Kuno, and Vijay Machiraju, 2004. *Web Services: Concepts, Architectures and Applications*. Springer-Verlag. ISBN 3-540-44008-9.

KEYWORD: System!WWW • System!WWW!CS4173 • CS4173 (WWW)

- [ACMa] ACM computing surveys, Association for Computing Machinery. ISSN 0360-0300. URL [URL:http://www.acm.org/pubs/contents/journals/surveys/](http://www.acm.org/pubs/contents/journals/surveys/).

CALLNo: QA 76.5 C617

- [ACMb] ACM transactions on information systems, New York, NY: Association for Computing Machinery.

- [ACM85] ACM-SIGIR, 5 – 7 June 1985. *Research and Development in Information Retrieval Eighth Annual International ACM SIGIR Conference*. ACM. ISBN 0-89791-159-8.

- [ACM87] ACM, 13 – 15 November 1987. *Hypertext '87 Papers*. The University of North Carolina, Chapel Hill, North Carolina: Association for Computing Machinery.

- [ACM88] ACM, 23 – 25 March 1988. *Proceedings of the ACM Conference on Office Information Systems*. Palo Alto, CA: SIGOIS Bulletin v.9 #2 – 3 (April – July 1988).

- [ACM91] ACM, 15 – 18 December 1991. *Hypertext '91 Third ACM Conference on Hypertext Proceedings*. Association for Computing Machinery. ISBN 0-89791-461-9.

- [ACM96] ACM SIGLINK, SIGOIS, 16 – 20 March 1996. *Hypertext '96 The Seventh ACM Conference on Hypertext*. Washington, DC: ACM Press. ISBN 0-89791-778-2.

- [ACM99] Association for Computing Machinery, December 1999. Special issue. *ACM Computing Surveys*, 31(4). ISSN 0360-0300.

SEE ALSO: Electronic Symposium on HT and HM [AS99]

KEYWORD: HT

- [ACM05] 2005. *HYPERTEXT '05: Proceedings of the sixteenth ACM conference on Hypertext and hypermedia*. New York, NY: ACM Press. ISBN 1-59593-168-6.

ANNOTATION: General chair: Siegfried Reich; Program chair: Manolis Tzagarakis

- [ACM06] 2006. *HYPERTEXT '06: Proceedings of the seventeenth conference on Hypertext and hypermedia*. New York, NY: ACM Press. ISBN 1-59593-417-0. General chair Uffe K. Wiil; Programe chairs Peter J. Nürnberg and Jessica Rubart.

- [ACM07] ACM sigWeb, 2007. *HT'07: Proceedings of the 18th conference on Hypertext and hypermedia*. New York, NY: ACM Press. ISBN 978-1-59593-820-6. General Chair-Simon Harper and Program Chairs Helen Ashman, Mark Bernstein, Alexandra Cristea, Hugh C. Davis, Paul De Bra, Vicki Hanson, and Dave Millard.
- [ACM10] ACM sigWeb, 2010. *HT '10: Proceedings of the 21st ACM conference on Hypertext and hypermedia*. New York, NY: ACM Press. ISBN 978-1-4503-0041-4. General Chair-Mark Chignell, and Program Chair-Elaine Toms.
- [ACM] 1994-. ACM transactions on computer-human interaction, New York, NY: Association for Computing Machinery.
- [Act01] The PATRIOT Act, 24 October 2001. 107th congress, 1st session h. r. 3162. URL <http://thomas.loc.gov/cgi-bin/query/z?c107:H.R.3162.ENR:>).
- [AH91] R. Akscyn and F. Halasz (eds.), 1991. *Topics on Hypertext*. Addison-Wesley.
 ANNOTATION: Revised versions of selected papers from the ACM Hypertext'89 conference as well as supplementary material such as a survey of existing research and commercial hypertext systems – Nielsen [Nie90c, pp.208 – 9]
- [AH01] Lada A. Adamic and Bernardo A. Huberman, 2001. The Web's hidden order. *Communications of the ACM*, 44(9):55 – 60. URL <http://doi.acm.org/10.1145/383694.383707>.
- KEYWORD: CS4173 (WWW) • Web graph
- [AK90] Foto Afrati and Constantinos D. Koutras, November 1990. A hypertext model supporting querying mechanisms. In Streitz et al. [SRA90], (pp. 52 – 66). Proceedings of the First European Conference on Hypertext.
- [AL92] Philippe Aigrain and Véronique Longueville, July – August 1992. Evaluation of navigational links between images. *Information Processing & Management*, 28(4):517 – 528.
 ANNOTATION: The authors are developing methods to evaluate the quality of links in a hypermedia database of images and descriptive terms. They compute the image-to-image similarity as a function dp using a probabilistic model of user behaviour.
 KEYWORD: Evaluation
- [AL94] Philippe Aigrain and Véronique Longueville, May 1994. A model for the evaluation of expansion techniques in information retrieval systems. *Journal of the American Society for Information Science*, 45(4):225 – 234.
 KEYWORD: Evaluation
- [Alb75] Josef Albers, 1975. *Interaction of Color: Unabridged exts and Selected Plates*. Yale University Press, revised edition.
 KEYWORD: colour

- [All91] Bryce L. Allen, 1991. Cognitive research in information science: Implications for design. In Martha E. Williams (ed.), *Annual Review of Information Science and Technology*, volume 26, (pp. 3 – 37). Learned Information, Inc.

KEYWORD: Review • CogPsych • Information Retrieval

- [All95] James Allan, 1995. *Automatic Hypertext Construction*. Ph.D. thesis, Cornell University.

- [All96] James Allan, 16 – 20 March 1996. Automatic hypertext link typing. In *Hypertext '96 The Seventh ACM Conference on Hypertext* [ACM96], (pp. 42 – 52).

SEE ALSO: James's thesis [SABS96]

KEYWORD: System!SMART

- [All98] Bryce Allen, 23 – 26 June 1998. Information space representation in interactive systems: Relationship to spatial abilities. In Ian Witten, Rob Akscyn, and Frank M. Shipman, III (eds.), *Digital Libraries 98*, (pp. 1 – 10). Pittsburgh, PA. URL [URL: http://doi.acm.org/10.1145/276675.276676](http://doi.acm.org/10.1145/276675.276676).

ANNOTATION:

- multiple-window/frame, lists vs. spatial organization for IR, possibly useful for information visualization. Users with lower levels of spatial ability benefitted most from the design features that made use of 2D information representation. Mismatch between the abilities of users and the design features implemented can deteriorate performance. Not clear why or if these results carry over to other interfaces.
- Background: mental models and learning/information encoding references
- Background: abilities/qualities such as: spatial scanning (to orient self and locate objects in space), perceptual speed (related to selection of scanning strategies), and field independence influence performance in IR (p. 3) (See Charney [Cha94, pp. 252, 262] for more about field (in-)dependence.)
- 'The results show that design features can act to deteriorate performance if there is not a good match between the design features and abilities of users' (p. 7)
- 'Users with lower levels of spatial abilities benefitted most from the design features that made use of two-dimensional information representation... A comparison of the results for interactions of design features with cognitive abilities and with task leads to the conclusion that personal characteristics provide a stronger basis for the design of usable systems than tasks.' (p. 9)

Perhaps this is related to Dillon & Watson in IJHCS (1996) 45:619 – 637 [DW96]

- Paivo's extensive body of research 'demonstrates that the ability to encode information presented conceptually as a spatial representation can facilitate learning and memory. ... Dual encoding is facilitated by an isomorphism between the dimensions of conceptual and representations.' (p. 2)

- Method: Used Ekstrom test set, tested Spatial Scanning and Perceptual Scanning, high-low categorization by median split (pp. 3, 6)
- ‘There was a significant three-way interaction between task, display type, and perceptual speed ($F(1, 64) = 4.94, p < .03$) in predicting the proportion of records printed by users.’ (p. 8)
- From Discussion (p. 9): ‘It was expected that certain cognitive abilities would be associated with processing of spatial representations of information. The findings supported this idea, but in an unexpected manner. One might have expected that users with higher levels of spatial abilities would have been most able to make use of spatial representations of information, and so derive the most benefit from these representations. In fact the opposite occurred. Users with lower levels of spatial abilities benefitted most from the design features that made use of two-dimensional information representation. The results presented in Table 4 provide one example of this effect

– Table 4 (p. 7):

Word Map	Spat. Scan.	
	Low	High
No	.15	.22
Yes	.29	.24

$F(1, 1) = 1495.87, p < .02$

It seems likely that users with higher levels of spatial scanning are able to visualize information spaces on their own, without system-provided aids. . . . a mismatch between the abilities of users and the design features implemented can deteriorate performance.’

SEE ALSO:

Journal version [All00]

field (in-)dependence

- B. Allen in DL98 [All98] and JASIS [All00]
- Charney [Cha94, pp. 252, 262]
- Dillon & Watson in IJHCS v.45 [DW96, p. 627]
- Dillon in JASIS 51(6) [Dil00]
- N. Ford’s *Cognitive Styles and Virtual Environments* also in JASIS 51(6) [For00]
- Jennings et al. in CogErg91 [JBM91]

KEYWORD: Evaluation • spatial ability

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KEYWORD: spatial ability

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- SEE ALSO: Notes on conference version [All98]
- KEYWORD: individual differences
- [All01] Julia Allen, 2001. *The CERT[®] Guide To System and Network Security Practices*. Addison-Wesley. ISBN 020173723X.
- KEYWORD: Security
- [AM90] Mark Ackerman and Thomas W. Malone, April 1990. Answer Garden: A tool for growing organizational memory. In Lochovsky and Allen [LA90]. Published in SIG OIS Bulletin v.11.
- CALLNo: HF5547.5.A1A886 v.11
- KEYWORD: System • HT!AutoGen • HT!Guided Tour
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- ANNOTATION: Spatial ability: pp.451–456
- [And00b] Kenneth M. Anderson (ed.), 30 May – 4 June 2000. *Proceedings of the Eleventh ACM Conference on Hypertext and Hypermedia*. San Antonio, TX: ACM Press.
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- KEYWORD: task_analysis
- [Ann03] John Annett, 2003. Hierarchical task analysis. In Erik Hollnagel (ed.), *Handbook of Cognitive Task Design*, chapter 2, (pp. 17 – 35). Lawrence Erlbaum Associates, Inc.
- KEYWORD: task_analysis
- [Ann05] John Annett, 2005. Hierarchical task analysis (HTA). In Neville Stanton, Alan Hedge, Karel Brookhuis, Eduardo Salas, and Hal Henrick (eds.), *Handbook of Human Factors and Ergonomic Methods*, chapter 33, (p. 7). CRC Press. ISBN 0-415-28700-6.
- SEE ALSO: HTA in Handbook of Cognitive Task Design [Ann03]
- [ANR89] Michael H. Andersen, Jakob Nielsen, and Henrik Rasmussen, 1989. A similarity-based hypertext browser for reading the Unix network news. *Hypermedia*, 1(3):255 – 265.
- ANNOTATION: A toy system for evaluating the interface for a hypertext Usenet news reader.

KEYWORD: Usability • Usenet • HT!AutoGen

[App] Applied ergonomics: Human factors in technology and society. ISSN 0003-6870. URL [URL:http://www.elsevier.nl/locate/issn/00036870/](http://www.elsevier.nl/locate/issn/00036870/).

[AS91] John R. Anderson and Lael J. Schooler, November 1991. Reflections of the environment in memory. *Psychological Science*, 2(6):396 – 408.

ANNOTATION: full of inferences and assumptions, no proof of causality

KEYWORD: CogPsych!LIS 861

[AS96] Maristella Agosti and Alan F. Smeaton (eds.), 1996. *Information retrieval and hypertext*. Kluwer Academic.

CALLNO: QA76.76.H94I54 1996

[AS99] Helen Ashman and Rosemary Michelle Simpson, December 1999. Computing surveys' electronic symposium on hypertext and hypermedia: Editorial. *ACM Computing Surveys*, 31(4). All articles in the symposium should be at [URL:http://www.acm.org/pubs/contents/journals/surveys/1999-31](http://www.acm.org/pubs/contents/journals/surveys/1999-31) and are also available from [URL:http://www.cs.brown.edu/memex/ACM_HypertextTestbed/citationBase/home.html](http://www.cs.brown.edu/memex/ACM_HypertextTestbed/citationBase/home.html).

[AS03] Peggy Agouris and Anthony Stefanidis, January 2003. Efficient summarization of spatiotemporal events. *Communications of the ACM*, 46:65 – 66. URL [URL:http://doi.acm.org/10.1145/602421.602454](http://doi.acm.org/10.1145/602421.602454).

SEE ALSO: The Spinning Cube of Potential Doom [Lau04]

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CALLNO: Z699.A10543

KEYWORD: MSc!Justification

[Ass] Association for computing machinery digital library. URL [URL:http://acm.org/dl/](http://acm.org/dl/). Searching is free, full-text requires extra payment.

[ASY91] R. E. Anderson, P. J. Sallis, and W. K. Yeap, 1991. Enhancing hypertext application using NLP techniques. *Journal of Information Science*, 17:49 – 56.

KEYWORD: NLP • System!CDWord

[Av72] Mortimer J. Adler and Charles van Doren, 1972. *How to Read a Book: The Classic Guide to Intelligent Reading*. Toronto: Simon & Schuster, Inc. ISBN 0-671-212209-5.

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KEYWORD: Usability • Security • Classic

- [AW01] Jaspreet S. Ahuja and Jane Webster, December 2001. Perceived disorientation: an examination of a new measure to assess web design effectiveness. *Interacting with Computers*, 14:15 – 29. URL [http://dx.doi.org/10.1016/S0953-5438\(01\)00048-0](http://dx.doi.org/10.1016/S0953-5438(01)00048-0).

ANNOTATION: Abstract

In this paper, we present the development of a new measure of perceived disorientation that helps to explain experiences with Web-based systems. Two studies, incorporating over 300 participants, provide evidence for the measure's construct validity. The first study is a survey that develops this new measure and distinguishes it from ease of use. The second study, an experiment investigating users performing an information retrieval task on the Web, further distinguishes disorientation from ease of use, and relates it to actions. Moreover, the study compares the effects of Web designs containing simple and global navigation systems; these systems related to perceived disorientation but not to ease of use or actions. Finally, the study examines disorientation's relationship with user performance and demonstrates that perceived disorientation relates more strongly than actions to performance. Our perceived disorientation measure is simple and quick to administer to users, and we conclude by suggesting that designers will find it useful in assessing and comparing Web designs.

SEE ALSO:

- P. Smith (1996) [Smi96] in *Interacting with Computers*
- Otter and Johnson (2000) [OJ00] in *Interacting with Computers*
- Gwizdka and Spence (2007) [GS07] in *Interacting with Computers*

KEYWORD: Metric • Evaluation • Navigation!Lostness

- [AYM88] Robert Akscyn, Elise Yoder, and Donald McCracken, 15 – 19 May 1988. The data model is the heart of interface design. In Elliot Soloway, Douglas Frye, and Sylvia B. Sheppard (eds.), *Human factors in computing systems CHI '88 conference Proceedings*, (pp. 115 – 120). ACM SIGCHI, Addison-Wesley.
- [BA98] Jon Baskerville and Lamia Abid, 16 September 1998. Subject: Statistical comparison of hypertext links generated by rules. Microsoft Word document sent by e-mail.
- [BAB⁺87] William O. Beeman, Kenneth T. Anderson, Gail Bader, James Larkin, Anne P. McClard, Patrick McQuillan, and Mark Shields, 13 – 15 November 1987. Hypertext and pluralism: From lineal to non-lineal thinking. In *Hypertext '87 Papers* [ACM87], (pp. 67 – 88).

ANNOTATION: Hypertext as a tool for education

- [BAI05] James Blustein, Ishtiaq Ahmed, and Keith Instone, 2005. An evaluation of menu breadcrumbs for the WWW. In *ACM Hypertext* [ACM05], (pp. 202 – 204). URL <http://doi.acm.org/10.1145/1083356.1083394>.

ANNOTATION: General chair: Siegfried Reich; Program chair: Manolis Tzagarakis

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KEYWORD: LSI

- [Bal93] V. Balasubramanian, October 1993. List of open issues in hypertext/outline of review. [⟨URL:file:///eies2/eies2/www/WWW/bala/issues⟩](file:///eies2/eies2/www/WWW/bala/issues) in the World-Wide Web hypertext project. Telnet address 128.235.1.43, login id www
Superseded by [⟨URL:http://www.win.tue.nl/win/cs/is/debra/cursus/review-2.html⟩](http://www.win.tue.nl/win/cs/is/debra/cursus/review-2.html) (30 July 1995).

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KEYWORD: Review

- [Bal02] Derek Balling, Summer 2002. Using Sendmail::Milter to tinker with your mail. *SysAdmin*, 11(6):63 – 66.

- [Bar89a] Edward Barrett (ed.), 1989. *The Society of Text: Hypertext, Hypermedia, and the Social Construction of Information*. Cambridge, MA: The MIT Press.

CALLNo: QA76.76.H94 S65 1989

- [Bar89b] David Barron, April 1989. Why use SGML? *Electronic Publishing — Origination, Dissemination and Design*, 2(1):3 – 24.

KEYWORD: SGML • ODA • ODIF • markup

- [Bar94] Lisa Baron, 1994. *The Effectiveness of Labelled, Typed Links as Cues in Hypertext Systems*. Ph.D. thesis, University of Western Ontario, London, Ontario, Canada.

CALLNo: AS42.L83B2656 1994

- [Bar98] Katherine Barber (ed.), 1998. *The Canadian Oxford Dictionary*. Toronto: Oxford University Press. ISBN 0-19-541120-X.

- [Bas91] Reva Basch, July 1991. Books online: Visions, plans, and perspectives for electronic text. *Online*. ISSN 0146-5422.

CALLNo: Z699.A1O545

KEYWORD: MSc!Justification • HT!General

- [Bas98] Jon Baskerville, 11 November 1998. Personal communication. e-mail.

- [BB89] Paul A. Booth and Gill M. Brown, 1989. Cognitive models in human-computer interaction. In Booth [Boo89], chapter 4, (pp. 65 – 101). Includes annotated bibliography.

KEYWORD: HCI • Cognitive model • Review

- [BB91] E. J. Borowski and J. M. Borwein (eds.), 1991. *The Harper Collins Dictionary of Mathematics*. HarperCollins. ISBN 0-06-461019-5.
- [BBC] Lisa Baron, Edward Brown, and Mark H. Chignell. Back to basics: The role of the author in hypertext. Contact: Mark H. Chignell (chignell@dgp.utoronto.ca) +1 (416) 978-8951
- KEYWORD: link types
- [BBJM91] Mark Bernstein, Jay David Bolter, Michael Joyce, and Elli Mylanos, 15 – 18 December 1991. Architectures for volatile hypertext. In *Hypertext '91 Proceedings* [ACM91], (pp. 243 – 260).
- [BC88] Michael L. Begeman and Jeff Conklin, October 1988. The right tool for the job. *Byte*, (pp. 255, 256, 258, 260 – 262, 264, 266, 268).
- ANNOTATION: Systems design process for HT, describes IBIS and gIBIS
- KEYWORD: Design • System!IBIS • System!gIBIS
- [BC92] Nicholas J. Belkin and W. Bruce Croft, December 1992. Information filtering and information retrieval: two sides of the same coin? *Communications of the ACM*, 35(12):29 – 38.
- KEYWORD: Information Filtering • Classic
- [BCB92] Brian T. Bartell, Garrison W. Cottrell, and Richard K. Belew, 21 – 24 June 1992. Latent semantic indexing is an optimal special case of multidimensional scaling. In Belkin et al. [BIP92].
- CALLNO: Z699.A1A886 92-07-02
- SEE ALSO: [CA80]
- KEYWORD: LSI • Statistics!MDS
- [BCM03] Jeffrey M. Bradshaw, Ciamcorno Cabri, and Rebecca Montanari, July 2003. Taking back cyberspace. *IEEE Computer*, 37:89 – 92.
- KEYWORD: CS4173 (WWW) • web services
- [BCS⁺90] Patricia Baird, Jacqueline Covo, Ben Schneiderman, Ian Williams, and Renee Deter, November 1990. The advantages of hypertext for large information systems; where are the big systems? In Streitz et al. [SRA90], (pp. 343 – 346). Summary of panel discussion.
- KEYWORD: HT!General
- [BCSR91] A. Bookstein, Y. Chiaramella, G. Salton, and V. V. Raghava (eds.), 13 – 16 October 1991. *SIGIR '91 Proceedings of the 14th Annual International ACM/SIGIR Conference on Research and Development in Information Retrieval*. ACM SIGIR, Chicago, Illinois USA: The Association for Computing Machinery.
- [BD91] Emily Berk and Joseph Devlin (eds.), 1991. *Hypertext/Hypermedia Handbook*. Software Engineering. Intertext Publications, McGraw-Hill Publishing. ISBN 0-07-016622-6.

CALLNo: QA76.76.H94.H96 1991

- [BDP00] D. Burin, A. Delgado, and G. Prieto, 2000. Solution strategies and gender differences in spatial visualization tasks. *Psicologica*, 21:275–286.
- [Bel88] Richard K. Belew, 1988. Hypertext as knowledge representation. In Bernstein [Ber88c], (pp. 20 – 24).
- [Ben93] Alfred Benn, 17 December 1993. Personal communication.
- [Ben95] David Benyon, 30 – 31 October 1995. Navigating information space. In Stephanidis [Ste95], (p. 16). URL [URL: http://ui4all.ics.forth.gr/UI4ALL-95/benyon.pdf](http://ui4all.ics.forth.gr/UI4ALL-95/benyon.pdf). Downloaded 18 March 2001.

ANNOTATION: Abstract: ‘The issue of how users can navigate their way through large information spaces is one that is crucial to the ever expanding and interlinking of computer systems. There are many ways of dealing with the issue of navigation one of which is to provide different dialogue styles to suit individual capabilities. The performance of users was compared on a menu style interface to a database system, which minimised navigation and constrained the dialogue, and a command style interface, which allowed an open and flexible dialogue. The results showed that some users did perform better on the interface which minimised navigational issues, and some better on the more open interface; and that users’ performance related to their levels of spatial ability and experience with using command style interfaces. The menu interface proved suitable for users with both a low spatial ability and low experience of using command style interfaces. The command interface proved suitable for all users with a high spatial ability, whatever their previous experience, and for users with a low spatial ability but high experience of using command style interfaces. The results of this small scale experiment have potentially important ramifications for designers of interfaces to large information spaces.’ Record from HCIBIB [URL: http://hcibib.org/gs.cgi?word=checked&terms=C.UI4ALL.95.5](http://hcibib.org/gs.cgi?word=checked&terms=C.UI4ALL.95.5)

SEE ALSO: Accommodating Individual Differences in Searching a Hierarchical File System [VW88]

KEYWORD: Navigation • individual differences • spatial ability

- [Ber88a] Mark Bernstein, October 1988. The bookmark and the compass: Orientation tools for hypertext users. *SIG OIS Bulletin*, 9(4):34 – 45. URL [URL: http://doi.acm.org/10.1145/51640.51645](http://doi.acm.org/10.1145/51640.51645).
- [Ber88b] Mark Bernstein, October 1988. The bookmark and the compass: Orientation tools for hypertext users. *ACM SIGOIS Bulletin*, 9(4):34 – 45.

ANNOTATION: ‘Rationale for the design of the Hypergate user interface, including ‘breadcrumbs’ marking the user’s footprints, user-defined bookmarks and author-defined thumb tabs (permanently visible links to landmark nodes). The author advocates use of hand-drawn overview maps instead of automatically generated maps.’ — Nielsen[Nie90c, pp. 211 – 2]

- [Ber88c] Mark Bernstein (ed.), 1988. *AAAI-88 Workshop AI and Hypertext: Issues and Directions*. AAAI, 134 Main St., Watertown, MA 02172, USA: Eastgate Systems.
- [Ber90] Mark Bernstein, November 1990. An apprentice that discovers hypertext links. In Streitz et al. [SRA90], (pp. 212 – 223). Proceedings of the First European Conference on Hypertext.
- ANNOTATION: Computes dot products of vectors generated from Bloom filter hashing to discover similar pages in a monograph. This approach works with ‘compact, independent hypertext documents which may be considered to address a single subject, and which are intended to be read rather than queried.’ (p. 213); comments on VISAR
- SEE ALSO: [Blo70; MB93]
- KEYWORD: HT!AutoGen • System!VISAR
- [Ber91] Donna Lee Berg, 1991. The research potential of the electronic OED database at the University of Waterloo: A case study. *Library Hi Tech*, 9:4:37 – 50. ISSN 0737-8831.
- CALLNo: Z671.L696
- KEYWORD: Usability • OED
- [Ber93] Mark Bernstein, 8 June 1993. Personal communication. e-mail.
- [Ber94a] H. Berghel, 1994. On seamless prototyping. *ACM SIGICE Quarterly*. Citation not confirmed — not in ACM DL.
- SEE ALSO: Cited in his reply to Rudd and Insensee’s 22 Tips [Ber94b]
- KEYWORD: HCI!prototyping • HCI!prototyping!paper prototypes
- [Ber94b] Hal Berghel, April 1994. New wave prototyping: Use and abuse of vacuous prototypes. *interactions*, 1:49 – 54.
- SEE ALSO:
- original article [RI94b]
 - original author’s (sidebar) reply [RI94a] and Tip #23
 - Berghel’s seamless prototyping reference [Ber94a]
 - Another take on the issue [Hol05a]
- KEYWORD: HCI!prototyping • HCI!prototyping!paper prototypes
- [Ber96] Mark Bernstein, January 1996. Re: What is ‘open hypertext’? Usenet Message-ID <Bernstein-0601960955220001@slip-5-2.shore.net>, posted to alt.hypertext.
- KEYWORD: Definition
- [Ber97] Mark Bernstein, 3 February 1997. Personal communication. e-mail.
- [Ber98] Mark Bernstein, 20 – 24 June 1998. Patterns of hypertext. In Grønbaek et al. [GMS98], (pp. 21 – 29). URL <URL:http://doi.acm.org/10.1145/276627.276630>.
- KEYWORD: link structures

- [Ber02] Michael Lewis Bernard, 2002. *Examining a Metric for Predicting the Accessibility of Information within Hypertext Structures*. Ph.D. thesis, Wichita State University. URL [URL: http://psychology.wichita.edu/mbernard/abstract.htm](http://psychology.wichita.edu/mbernard/abstract.htm).

ANNOTATION:

- symmetrical hierarchies (no cycles).
- design based on menu studies.
- measure based on Shannon's information.

SEE ALSO:

- Botafogo's measures [BRS92],
- Jean's book [TS95],
- Browsing chapter in ARIST 1993 [CR93]
- Evaluation of information-seeking performance in hypermedia digital libraries by Salampasis et al. [STB98]

KEYWORD: menus

- [BFB91] Elmaoun M. Babiker, Hiroko Fujihara, and Craig D. B. Boyle, 1991. A metric for hypertext usability. In *SIGDOC '91: Proceedings of the 9th annual international conference on Systems documentation*, (pp. 95 – 104). New York, NY: ACM Press. URL [URL: http://doi.acm.org/10.1145/122778.122793](http://doi.acm.org/10.1145/122778.122793).

SEE ALSO:

- Nielsen & Levy in CACM 37(4) on preference vs. performance [NL94]
- P. A. Smith's Towards a Practical Measure ... [Smi96]

KEYWORD: Metric • Evaluation • information seeking • Navigation!Lostness

- [BFR99] James Blustein and Luis Fransisco-Revilla, June 1999. Panel: Adaptive hypermedia. *sigWeb Newsletter*, 8(2):51 – 53. Trip report about Hypertext '99 [TWWL99] conference panel.

KEYWORD: HT!adaptive hypermedia

- [BFS03] Pierre Baldi, Paolo Fransconi, and Padhraic Smyth, 2003. *Modeling the Internet and the Web: Probabilistic Methods and Algorithms*. John Wiley & Sons, Ltd. ISBN 0-470-84906-1. Copyright by the authors.

- [BG03] Jessica Brazelton and G. Anthony Gorry, February 2003. Creating a knowledge-sharing community: If you build it, will they come? *Communications of the ACM*, 46:23 – 25.

- [BGBG95] Ronald M. Baecker, Jonathan Grudin, William A. S. Buxton, and Saul Greenberg (eds.), 1995. *Readings in Human-Computer Interaction: Toward the Year 2000*. Morgan Kaufmann, 2nd edition. ISBN 1-55860-246-1.

CALLNo: QA76.9.H85R43

- [BGG02] Kevin Baker, Saul Greenberg, and Carl Gutwin, 2002. Empirical development of a heuristic evaluation methodology for shared workspace groupware. In *Proceedings of the 2002 ACM conference on Computer supported cooperative work*, (pp. 96 – 105). New Orleans, Louisiana, USA. URL [URL: http://doi.acm.org/10.1145/587078.587093](http://doi.acm.org/10.1145/587078.587093).

KEYWORD: heuristic • groupware

- [BGP90] Frédérique Biennier, Michel Guivarch, and Jean-Marie Pinon, November 1990. Browsing in hyperdocuments with the assistance of a neural network. In Streitz et al. [SRA90], (pp. 288 – 297). Proceedings of the First European Conference on Hypertext.

ANNOTATION: navigation & query refinement not how to index (assumed relationship ratings, too)

KEYWORD: Neural net

- [BH97] David Benyon and Kristina Höök, 1997. Navigation in information spaces: Supporting the individual. In *Proceedings of human-computer interaction: INTERACT'97*, (pp. 39–46). Chapman and Hall.

- [BHB89] R. John Brockmann, William Horton, and Kevin Brock, 1989. From database to hypertext via electronic publishing: An information odyssey. In Barrett [Bar89a], chapter 11, (pp. 162 – 205).

CALLNO: QA76.76.H94 S65 1989

SEE ALSO: Ordering the Information Graph by Parunak [Par91b] in HT/HM Handbook ed. by Berk and Devlin (for different HT link structures). Fig. 16 on p. 183 is a famous diagram.

KEYWORD: link structures

- [BHK92] Paul De Bra, Geert-Jan Houben, and Yoram Kornatzky, 30 November – 4 December 1992. An extensible data model for hyperdocuments. In Lucarella et al. [LNNP92], (pp. 222 – 231).

ANNOTATION: nodes, links and anchors are basic units

KEYWORD: HT!model

- [BHMN92] M. J. Blosseville, G. Hébrail, M.G. Monteil, and Pénot N, 21 – 24 June 1992. Automatic document classification: Natural language processing, statistical analysis, and expert system techniques used together. In Belkin et al. [BIP92].

CALLNO: Z699.A1A886 92-07-02

KEYWORD: NLP

- [Bie] Michael Bieber. Electronic version of the Communications of the ACM August 1995 special issue on hypermedia design [Mic95]. URL [URL: http://space.njit.edu:5080/cacm/overview.html](http://space.njit.edu:5080/cacm/overview.html).

- [Bie91] Michael Bieber, 15 – 18 December 1991. Issues in modelling a “dynamic” hypertext interface for non-hypertext systems. In *Hypertext '91 Proceedings* [ACM91], (pp. 203 – 217).

- [BIP92] Nicholas Belkin, Peter Ingwersen, and Annelise Mark Pejtersen (eds.), 21 – 24 June 1992. *SIGIR '92 Proceedings of the Fifteenth Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*. Royal School of Librarianship, Copenhagen, Denmark, Copenhagen, Denmark: ACM.
CALLNo: Z699.A1A886 92-07-02
- [Bir87] Faber Birren, 1987. *Principles of Color: A Review of Past Traditions and Modern Theories*. 77 Lower Valley Road, Atglen, PA 19310: Schiffer Publishing, Limited. ISBN 0-88740-103-1. From page 2: 'New material © 1987 by Faber Birren. Copyright © 1969 by Van Nostrand Reinhold Company Inc.'
- KEYWORD: colour
- [Bir93] Philip Birnbaum, 1993. *Encyclopedia of Jewish Concepts*. Rockaway Beach, New York: Hebrew Publishing Company. ISBN 0-88482-930-8.
- [Bis95] Ann Peterson Bishop, Spring 1995. Scholarly journals on the net: A reader's assessment. *Library Trends*, 43(4):544 – 570.
- KEYWORD: e-pubs
- [BIT] Behaviour & information technology, Taylor & Francis Ltd. ISSN 0144-929X (print) / 1362-3001 (online). URL [URL: http://www.tandf.co.uk/journals/tf/0951192X.html](http://www.tandf.co.uk/journals/tf/0951192X.html).
- [BJL92] Mark Bernstein, Michael Joyce, and David Levine, 30 November – 4 December 1992. Contours of constructive hypertexts. In Lucarella et al. [LNNP92], (pp. 161 – 170).
- ANNOTATION: Subjective descriptions of what is good and bad about hypertext.
- KEYWORD: HT!Design • HT!Literary hypertext
- [BK03] Kirsten R. Butcher and Walter Kintsch, 2003. Comprehension and discourse processing. In Healy et al. [HPW03], chapter 21, (pp. 575 – 595).
- KEYWORD: Reading • HCI!CS6606
- [BKKS84] H. Russell Bernard, Peter Killworth, David Kronenfeld, and Lee Sailer, 1984. The problem of informant accuracy: The validity of retrospective data. In Bernard J. Siegel (ed.), *Annual Review of Anthropology*, volume 13, (pp. 495 – 517). 4139 El Camino Way, Palo Alto, CA, 94306, USA: Annual Reviews, Inc. ISBN 0-8243-1913-3.
- CALLNo: GN4.A558 v.13 1984
- KEYWORD: CogPsych!LIS 861
- [BKP05a] Marilyn Hughes Blackmon, Muneo Kitajima, and Peter G. Polson, 2005. Tool for accurately predicting website navigation problems non-problems, problem severity, and effectiveness of repairs. In *CHI '05: Proceedings of the SIGCHI conference on Human factors in computing systems*, (pp. 31 – 40). ACM Press. ISBN 1-58113-998-5.
- KEYWORD: HCI • Evaluation!Cognitive walkthrough

- [BKP05b] Marilyn Hughes Blackmon, Muneo Kitajima, and Peter G. Polson, 2005. Tool for accurately predicting website navigation problems, non-problems, problem severity, and effectiveness of repairs. In *CHI '05: Proceedings of the SIGCHI conference on Human factors in computing systems*, (pp. 31 – 40). New York, NY: ACM Press. URL [URL: http://doi.acm.org/10.1145/1054972.1054978](http://doi.acm.org/10.1145/1054972.1054978).
- [BL87] I. Borg and J. Lingoes, 1987. *Multidimensional Similarity Structure Analysis*. Springer-Verlag. ISBN 0-387-96525-4 / 3-540-96525-4.
CALLNo: QA278.2.B685
- [BL89a] Ken Bice and Clayton Lewis (eds.), 30 April – 4 May 1989. *CHI '89 'Wings For The Mind'*. ACM SIGCHI, Austin, Texas: Addison-Wesley. ISBN 0-201-50400-6.
CALLNo: QA76.9.H85C44 1989
- [BL89b] Susan Bonzi and Elizabeth Liddy, 1989. The use of anaphoric resolution for document description in information retrieval. *Information Processing & Management*, 25(4):429 – 441.
- [BL01] Julie Barnes and Laura Leventhal, 2001. Turning the tables: introducing software engineering concepts in a user interface design course. In *SIGCSE '01: Proceedings of the thirty-second SIGCSE technical symposium on Computer Science Education*, (pp. 214 – 218). New York, NY: ACM Press. ISBN 1-58113-329-4.
KEYWORD: CS3160 (UID)
- [BLCa] Tim Berners-Lee and Daniel Connolly. Hypertext markup language a representation of textual information and meta information for retrieval and interchange. [URL: http://www.csd.uwo.ca/%7ejamie/Refs/link-types.html](http://www.csd.uwo.ca/%7ejamie/Refs/link-types.html) by J. Blustein has a verbatim transcription of the section entitled 'Link Relationship Values'.
- [BLCb] Tim Berners-Lee and Daniel Connolly. *Hypertext Markup Language: A Representation of Textual Information and Meta Information for Retrieval and Interchange*. World Wide Web, 15 March 1993 version edition. This hypertext document has WWW address [URL: http://info.cern.ch/hypertext/WWW/MarkUp/MarkUp.html](http://info.cern.ch/hypertext/WWW/MarkUp/MarkUp.html). It can be read by connecting to info.cern.ch (Internet protocol (IP) address 128.141.201.74) with telnet.
- [BLC95a] T. Berners-Lee and D. Connolly, November 1995. Hypertext markup language - 2.0. Request for Comments 1866, Network Working Group, Internet Engineering Task Force. URL [URL: ftp://ftp.internic.net/rfc/rfc1866.txt](ftp://ftp.internic.net/rfc/rfc1866.txt).
- [BLC95b] T. Berners-Lee and D. Connolly, December 1995. Terms. In *Hypertext Markup Language — 2.0*. The World Wide Web Consortium. URL [URL: http://www.w3.org/hypertext/WWW/MarkUp/html-spec/html-spec_2.html#GLOSS19](http://www.w3.org/hypertext/WWW/MarkUp/html-spec/html-spec_2.html#GLOSS19).
- [BLG83] Mark L. Berenson, David M. Levine, and Matthew Goldstein, 1983. *Intermediate Statistical Methods and Applications: A Computer Package Approach*. Prentice-Hall.
- [Blo70] Burton H. Bloom, July 1970. Space/time trade-offs in hashing coding with allowable errors. *Communications of the ACM*, 13(7):422 – 426.

- [Blu94] William James Blustein, 1994. *An Evaluation of Tools for Converting Text to Hypertext*. Master's thesis, University of Western Ontario, London, Ontario, Canada.
- ANNOTATION: Converted Usenet messages into hypertext using structural and semantic rules, and evaluated quality of semantically built links. Those links were evaluated by comparing the minimal number of links between their corresponding nodes in an analogous hypertext graph with a measure of semantic similarity derived from latent semantic indexing.
- SEE ALSO: LSI[BCB92], Jones and Furnas [JF87], TOPIC[HR88], VISAR[CRM89], Bernstein's apprentice[Ber90]
- [Blu95] James Blustein, August 1995. Implementing bit vectors in C. *Dr. Dobb's Journal*, 20(8). For updates and additions see [URL:http://www.csd.uwo.ca/%7ejejamie/BitVectors/README.html](http://www.csd.uwo.ca/%7ejejamie/BitVectors/README.html).
- [Blu97] James Blustein, 8 – 10 June 1997. A design for the construction and evaluation of an automatic hypertext generator. In Bernd Frohmann (ed.), *Communication and Information In Context: Society, Technology, and the Professions [Proceedings of the 25th Annual Conference/Travaux du 25^e congrès annuel Canadian Association for Information Science (CAIS)/Association Canadienne des Sciences de L'information (ACSI)]*, (pp. 309 – 320). St. John's, Newfoundland.
- [Blu98] James Blustein, 19 – 20 April 1998. Evaluating automatically generated hypertext versions of scholarly articles. In N. Hari Narayanan (ed.), *Hyped-Media to Hyper-Media: Toward Theoretical Foundations of Design, Use and Evaluation*. ACM SIGCHI. URL [URL:http://www.csd.uwo.ca/%7ejejamie/CHI98/CHI.html](http://www.csd.uwo.ca/%7ejejamie/CHI98/CHI.html). Presented at a conference workshop.
- [Blu99] William James Blustein, 1999. *Hypertext Versions of Journal Articles: Computer-aided Linking and Realistic Human-based Evaluation*. Ph.D. thesis, University of Western Ontario, London, Ontario, Canada.
- SEE ALSO: Piolat et al. [PRT97] for interface design
- [Blu00] James Blustein, 30 May – 4 June 2000. Automatically generated hypertext versions of scholarly articles and their evaluation. In Anderson [And00b], (pp. 201 – 210). URL [URL:http://doi.acm.org/10.1145/336296.336364](http://doi.acm.org/10.1145/336296.336364).
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- [BM85] David C. Blair and M. E. Maron, March 1985. An evaluation of retrieval effectiveness for a full-text document-retrieval system. *Communications of the ACM*, 18(3):289 – 299.
- [BM89a] David T. Barnard and Ian A. Macleod, 14 November 1989. Maestro working paper 0: An archive of structured texts. Technical Report 86-262, Department of Computing and Information Science, Queen's University at Kingston.
- KEYWORD: System!MAESTRO

- [BM89b] Paul A. Booth and Chris J. Marshall, 1989. Usability in human-computer interaction. In Booth [Boo89], chapter 5, (pp. 103 – 136). Includes annotated bibliography.
 ANNOTATION: Definition of Usability should be considered as prep for HCI classes
 KEYWORD: HCI • Usability • Review
- [BM93] David Benyon and D. M. Murray, December 1993. Adaptive systems: From intelligent tutoring to autonomous agents. *Knowledge-Based Systems*, 6(4):197–219. URL [URL: http://dx.doi.org/10.1016/0950-7051\(93\)90012-I](http://dx.doi.org/10.1016/0950-7051(93)90012-I).
- [BMT98] Gordon Paul Bary, Scott McRae, and Peter Timmer, 1998. Against generalising hypermedia navigation. *HCI Letters*, 1(1):13 – 15. ISSN 1430-8630.
 ANNOTATION: Found that guided tour was better than hierarchy for grocery shopping application
 SEE ALSO: I think Charney [Cha94] wrote about similar studies
- [BN04a] James Blustein and Mona Noor, 2004. Personal glossaries on the WWW: an exploratory study. In *DocEng '04: Proceedings of the 2004 ACM symposium on Document engineering*, (pp. 54 – 56). New York, NY: ACM Press. ISBN 1-58113-938-1. URL [URL: http://doi.acm.org/10.1145/1030397.1030409](http://doi.acm.org/10.1145/1030397.1030409).
- [BN04b] James Blustein and Mona Noor, 2004. Personal glossaries on the WWW: an exploratory study (hypertext). In *DocEng '04: Proceedings of the 2004 ACM symposium on Document engineering*, (pp. 54 – 56). New York, NY: ACM Press. ISBN 1-58113-938-1. URL [URL: http://doi.acm.org/10.1145/1030397.1030409](http://doi.acm.org/10.1145/1030397.1030409).
- [Boa90] Kathryn Boar, 1990. Text representations. In Gillman [Gil90], (pp. 97 – 100). Proceedings of ‘The User’s Perspective’ (1988) and ‘Text Management’ (1989).
 CALLNo: QA76.9.T48 I59 1988-1989
 KEYWORD: SGML
- [Boe01] Patricia M. Boechler, February 2001. How spatial is hyperspace? Interacting with hypertext documents: Cognitive processes and concepts. *CyberPsychology & Behavior*, 4(1):23 – 46. URL [URL: http://dx.doi.org/10.1089/10949310151088352](http://dx.doi.org/10.1089/10949310151088352).
 ANNOTATION: Mostly wrong and internally inconsistent, however
on page 35: ‘Montello... comes to the conclusion that “There exist two or more distinct subsystems that represent spatial information in different formats” (p. 17).’
on page 38: ‘A distinction needs to be made between navigation effectiveness and learning of the document material. ...’
- [Bol91] Jay David Bolter, 1991. Topographic writing: Hypertext and the electronic writing space. In Paul Delany and George P. Landow (eds.), *Hypermedia and Literary Studies*, (pp. 105 – 118). The MIT Press.
 CALLNo: PN98.E4 H97 1991

ANNOTATION: Reviewed in Computing Reviews[Par94]

SEE ALSO: Reading and Writing The Electronic Book [YMvD91]

- [Bom07] Birgit Bomsdorf, 7 – 9 November 2007. The webtaskmodel approach to web process modelling. In *Task Models and Diagrams for User Interface Design*, (pp. 240 – 253). URL [URL: http://www.springerlink.com/content/t023mv388303k7w4](http://www.springerlink.com/content/t023mv388303k7w4).

ANNOTATION: Abstract

Task modelling has been entering the development process of web applications. However, modelling web processes from a usage-centred perspective is still challenging due to the strong distinctions of traditional interactive systems and state-of-the-art web applications. This paper proposes the WebTaskModel approach, by which task model concepts are adapted for the purpose of modelling interactive web applications. The main difference to existing task models is the introduction and build-time usage of a generic task lifecycle. Hereby the descriptions of exceptions and error cases of task performance (caused by, e.g., the stateless protocol or Browser interactions) are on the one hand appended to the task while, on the other hand, being clearly separated.

- [Boo89] Paul A. Booth (ed.), 1989. *An Introduction to Human-Computer Interaction*. Hove, East Sussex, UK: Lawrence Erlbaum Associates. ISBN 0-86377-122-X / 0-86377-123-8 (pbk.).

- [BOO95] Mathilde M. Bekker, Judith S. Olson, and Gary M. Olson, 1995. Analysis of gestures in face-to-face design teams provides guidance for how to use groupware in design. In *DIS '95: Proceedings of the conference on Designing interactive systems*, (pp. 157 – 166). New York, NY: ACM Press. ISBN 0-89791-673-5. URL [URL: http://doi.acm.org/10.1145/225434.225452](http://doi.acm.org/10.1145/225434.225452).

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KEYWORD: CogPsych!LIS 861

- [Bot93] Rodrigo A. Batafoga, 27 June – 1 July 1993. Cluster analysis for hypertext systems. In Korfhage et al. [KRW93], (pp. 116 – 125).

CALLNO: Z699.A1A886 93-07-15

SEE ALSO: HT Metrics by Batafoga et al. [BRS92]

KEYWORD: Cluster

- [Bou99] Niels Olof Bouvin, February 1999. Unifying strategies for web augmentation. In Tochtermann et al. [TWWL99], (pp. 91 – 100).

- [Boy91] Guy A. Boy, 15 – 18 December 1991. Indexing hypertext documents in context. In *Hypertext '91 Proceedings* [ACM91].

KEYWORD: HT!model!CID

- [BP88] Christine L. Borgman and Edward Y. H. Pai (eds.), 23 – 27 October 1988. *Information & Technology Planning for the Second 50 Years Proceedings of the 51st Annual Meeting of the American Society for Information Science*, volume 25. Atlanta, Georgia: Learned Information, Inc. ISBN 0-938734-29-6. ISSN 0044-7870.
- [BP03] Laurie Brady and Christine Phillips, 2003. Aesthetics and usability: A look at color and balance. *Usability News*, 5.1. URL [URL: http://psychology.wichita.edu/surl/usabilitynews/51/aesthetics.htm](http://psychology.wichita.edu/surl/usabilitynews/51/aesthetics.htm).
- SEE ALSO: 'What makes a website popular' [KLRH04] and 'The role of context in perception of the aesthetics of web pages over time' [vSL09]
- KEYWORD: HCI!colour • HCI!website reputation / value assessment
- [BPKL02] Marilyn Hughes Blackmon, Peter G. Polson, Muneo Kitajima, and Clayton Lewis, 2002. Cognitive walkthrough for the web. In *CHI '02: Proceedings of the SIGCHI conference on Human factors in computing systems*, (pp. 463 – 470). New York, NY: ACM Press. ISBN 1-58113-453-3.
- KEYWORD: HCI • Evaluation!Cognitive walkthrough
- [BR90] Richard K. Belew and John Rentzepis, April 1990. HyperMail: Treating electronic mail as literature. In Lochovsky and Allen [LA90], (pp. 48 – 54). Published in SIG OIS Bulletin v.11.
- CALLNo: HF5547.5.A1A886 v.11
- ANNOTATION: hypercard stack for Unix mail, suggest same for Usenet
- KEYWORD: MSc!Justification
- [Bra08] John Douglas Bradley, 2008. Pliny: A model for digital support of scholarship. *Journal of Digital Information (JoDI)*, 9(1).
- SEE ALSO: Jan Olsen's PhD book [Ols94] and Taylor's MSc [Tay89]
- KEYWORD: annotation
- [Bre03] William F. Brewer, 2003. Mental models. In Nadel [Nad03], (pp. 1 – 6). In four volumes.
- KEYWORD: CogPsych
- [Bri00] Dan Brian, Summer 2000. Lingua::Wordnet. *The Perl Journal*, 5(2):40 – 48.
- SEE ALSO: Wordnet in CACM [Mil95]
- KEYWORD: System!WordNet
- [Bro65] J. Bronowski, 1965. The creative mind. In *Science and Human Values*, chapter 1, (pp. 11 – 30, 83 – 89). Penguin Books (by arrangement with Hutchinson of London).
- SEE ALSO:
- Gardner-Bonneau's The Joy of Psychology [GB01],
 - Landauer's 'Relations between CogPsych and Computer System Design' [Lan87], and

- Cronbach's 'The two disciplines of scientific psychology' [Cro57]

KEYWORD: CogPsych!LIS 861

- [Bro88] P. J. Brown, April 1988. Linking and searching within hypertext. *Electronic Publishing — Origination, Dissemination and Design*, 1(1):45–53.

ANNOTATION: A discussion of how a 'find' command (viewed as an unstructured linking mechanism) can be integrated into a hypertext system. — Nielsen[Nie90c, p.211]

- [Bro90] P. J. Brown, November 1990. Assessing the quality of hypertext documents. In Streitz et al. [SRA90], (pp. 1 – 12). Proceedings of the First European Conference on Hypertext.

ANNOTATION: Section about assessment

KEYWORD: Authoring • Evaluation •

- [Bro93] Lesley Brown (ed.), 1993. *The New Shorter Oxford English Dictionary*. Clarendon Press.

- [BRS92] Rodrigo A. Botafogo, Ehud Rivlin, and Ben Schneiderman, April 1992. Structural analysis of hypertexts: Identifying hierarchies and useful metrics. *ACM Transactions on Information Systems*, 10(2):142 – 180. URL [URL: http://doi.acm.org/10.1145/146802.146826](http://doi.acm.org/10.1145/146802.146826).

ANNOTATION: B. et al. develop metrics that may be used to identify and classify hierarchical link structures in hypertexts. They applied their techniques to simple handmade hypertexts.

SEE ALSO:

- applications to browsing (Rivlin et al. in CACM 37(2) [RBS94])
- McE's application to user trails (HT'99 [McE99] to start),
- validity confirmed by Yamada et al. (TOCHI 2(4) [YHS95])
- application to lostness measure by Gwizdka & Spence in *Interacting with Computers* v.19 [GS07]
- A survey of Web metrics in ACM CompSurv [DNB02]
- The Connectivity Sonar in HT'03 [ACD⁺03]
- A hypertext model based on Huffman coding in HT'01 [CV01]

KEYWORD: Evaluation • Metric • System!Hyperties • Classic

- [Bru90] Peter D. Bruza, November 1990. Hyperindices: A novel aid for searching in hypermedia. In Streitz et al. [SRA90], (pp. 109 – 122). Proceedings of the First European Conference on Hypertext.

- [BS93] Richard Brandwein and Mike Sendall, 1993. HTML converters. URL [URL: http://info.cern.ch/hypertext/WWW/Tools/Filters.html](http://info.cern.ch/hypertext/WWW/Tools/Filters.html).

- [BS01] James Blustein and Mark Staveley, 2001. Methods of generating and evaluating hypertext. In Martha E. Williams (ed.), *Annual Review of Information Science and Technology*, volume 35, (pp. 299 – 335). Medford, New Jersey: Information Today, Inc. Published on behalf of the American Society for Information Science and Technology.
- [BS03a] Roberto J. Bayardo and Ramakrishnan Srikant, September 2003. Technological solutions for protecting privacy. *IEEE Computer*, 36:115 – 118.
- KEYWORD: CS4173 (WWW) • privacy
- [BS03b] James Blustein and Jason Satel, 2003. Spatial ability and information shape: When do individual differences matter. In Frank M. Shipman, III and Jim Rosenberg (eds.), *Third Workshop on Spatial Hypertext*. [URL:http://www.cs.dal.ca/research/techreports/2003/CS-2003-11.shtml](http://www.cs.dal.ca/research/techreports/2003/CS-2003-11.shtml).
- KEYWORD: spatial ability
- [BSF05] James Blustein, Daniel L. Silver, and Ching-Lung Fu, 12 – 14 October 2005. Information visualization for intrusion detection. In *PST'05: Third Annual Conference on Privacy, Security and Trust*. URL [URL:http://www.lib.unb.ca/Texts/PST/2005/pdf/blustein.pdf](http://www.lib.unb.ca/Texts/PST/2005/pdf/blustein.pdf).
- [BSO00] Barry A. T. Brown, Abigail J. Sellen, and Kenton P. O'Hara, 1 – 6 April 2000. A diary study of information capture in working life. In Turner et al. [TSCP00], (pp. 438 – 445).
- SEE ALSO: Other Kenton O'Hara papers [OS97; OSNS98]
- [BT93] Izak Benbasat and Peter Todd, 1993. An experimental investigation of interface design alternatives: icon vs. text and direct manipulation vs. menus. *International Journal of Man-Machine Studies*, 38(3):369 – 402.
- SEE ALSO:
- Individual Differences in the Use of Command Line and Menu Computer Interfaces [Wes97]
 - The effects of maps and textual information on navigation in a desktop virtual environment by Schlender et al. [SPW00]
- KEYWORD: CogPsych!LIS 861 • menus
- [BTS] James Blustein and Jean Tague-Sutcliffe. IR-STAT-PAK [computer program]. URL [URL:http://ftp://ftp-nlpir.nist.gov/pub/irstat/](http://ftp://ftp-nlpir.nist.gov/pub/irstat/). Overview at [URL:http://www.csd.uwo.ca/~jamie/IRSP-overview.html](http://www.csd.uwo.ca/~jamie/IRSP-overview.html) and [URL:http://www.csd.uwo.ca.ca/%7ejamie/PS/IRSP-one.ps](http://www.csd.uwo.ca.ca/%7ejamie/PS/IRSP-one.ps).
- [Buc92] Chris Buckley, 12 July 1992. Smart version 11.0. available via anonymous FTP at [URL:ftp://ftp.cs.cornell.edu/pub/smart/smart.11.0.tar.Z](http://ftp.cs.cornell.edu/pub/smart/smart.11.0.tar.Z).
- [Buc96] Simon Buckingham Shum, 18 June 1996. The missing link: Hypermedia usability research & the web. Obtained from [URL:http://kmi.open.ac.uk/~simonb/...](http://kmi.open.ac.uk/~simonb/...)

- [Bur92] Forbes J. Burkowski, 21 – 24 June 1992. Retrieval activities in a database consisting of heterogeneous collections of structured text. In Belkin et al. [BIP92], (pp. 112 – 125).
- CALLNo: Z699.A1A886 92-07-02
- ANNOTATION: 1) A containment model for operations and data structures on a hierarchically structured text. 2) Discussion of a modular interface so the text can be treated like a database.
- KEYWORD: HT!model
- [Bus45] Vannevar Bush, 1945. As we may think. *The Atlantic*. As reprinted by Nelson [Nel90] also available in the World Wide Web at (URL:<http://www.isg.sfu.ca/%7educhier/misc/vbush/>).
- ANNOTATION: Believed to be the first description of hypertext
- SEE ALSO: Rayward's article about Paul Otlet [Ray94]
- KEYWORD: Classic
- [BW95] James Blustein and Robert E. Webber, 13 July 1995. Using LSI to evaluate the quality of hypertext links. In Maristella Agosti and James Allan (eds.), *IR and Automatic Construction of Hypermedia: A Research Workshop*, (pp. 8 – 13). ACM SIGIR.
- [BWB05] Bruce Beckles, Von Welch, and Jim Basney, July 2005. Mechanisms for increasing the usability of grid security. *International Journal of Human-Computer Studies*, 63(1 – 2):74 – 101. URL (URL:<http://dx.doi.org/10.1016/j.ijhcs.2005.04.017>). (URL:<http://www.sciencedirect.com/science/article/B6WGR-4G94J0R-3/2/5091b0c39ca9b9e17034b62db0004969>).
- KEYWORD: Usability • Security
- [BWBN92] A. Black, P. Wright, D. Black, and K. Norman, 1992. Consulting on-line dictionary information while reading. *Hypermedia*, 4(3). Official abstract at (URL:<http://www.comp.glam.ac.uk/~NRHM/h-volume4/ha-1992-7.htm>).
- SEE ALSO: [Wri93] and [Wri91]
- [BWTS97] James Blustein, Robert E. Webber, and Jean Tague-Sutcliffe, 1997. Methods for evaluating the quality of hypertext links. *Information Processing & Management*, 33(2):255 – 271. URL (URL:[http://dx.doi.org/10.1016/S0306-4573\(96\)00066-0](http://dx.doi.org/10.1016/S0306-4573(96)00066-0)).
- ANNOTATION: Abstract: 'We present two methods for evaluating automatically generated hypertext links. The first method is based on correlations between shortest paths in the hypertext structure and a semantic similarity measure. Experimental results with the first method show the degree to which the hypertext conversion process approximates semantic similarity. The semantic measure is in turn only an approximation of a user's internal model of the corpus. Therefore we propose a second evaluation method based on measuring user's performance using hypertext. Finally, we discuss the advantages and disadvantages of computer versus human evaluation, respectively.'

SEE ALSO: References in last paragraph before conclusion in Chapter 4 of
Hypertext in Context [MDR91b]

[Byt88] October 1988. Special issue. *BYTE*.

SEE ALSO: introductory editorial [Taz88]

KEYWORD: HT

[CA80] J. Douglas Carroll and Phipps Arabie, 1980. Multidimensional scaling. In *Annual Review of Psychology*, (pp. 607 – 649). Annual Reviews, Inc. Volume 31.

[CAC88] July 1988. Special issue. *Communications of the ACM*, 31(7).

SEE ALSO: [SW88]

KEYWORD: HT

[CAC94] Kaj Grønbaek and Randall H. Trigg (eds.), February 1994. Special issue. *Communications of the ACM*, 37(2).

KEYWORD: Hypermedia

[Cai94] R. Cailliau (ed.), 25 – 27 May 1994. *Selected Papers of the First World-Wide Web Conference*. CERN. Published in volume 27 no. 2 (November 1994) of *Computer Networks and ISDN Systems: The International Journal of Computer and Telecommunications Networking*.

[Can06] John Canny, July/August 2006. The future of human-computer interaction. *ACM Queue*, 4:24 – 32.

SEE ALSO: Brad Myers's Intro to HCI... in interactions I(1) [Mye98]

[Car89] Patricia Ann Carlson, 1989. Hypertext and intelligent interfaces for text retrieval. In Barrett [Bar89a], chapter 4, (pp. 59 – 76).

CALLNo: QA76.76.H94 S65 1989

[Car93a] J. B. Carroll, 1993. *Human Cognitive Abilities: A Survey of Factor-Analytic Studies*. New York: Cambridge University Press.

[Car93b] John Bissell Carroll, 1993. *Human Cognitive Abilities: A Survey of Factor-Analytic Studies*. New York: Cambridge University Press.

[Cas03] Roberto Casati, 2003. Topology and cognition. In Nadel [Nad03], (pp. 410 – 417). In four volumes.

KEYWORD: spatial ability • CogPsych

[CAU05] Andrea Calcaterra, Alessandro Antonietti, and Jean Underwood, May 2005. Cognitive style, hypermedia navigation and learning. *Computers & Education*, 44(4):441 – 457. URL [URL: http://www.sciencedirect.com/science/article/B6VCJ-4CHRC1X-3/2/a9a8db8a384d6e4c77864fd6b2814cdb](http://www.sciencedirect.com/science/article/B6VCJ-4CHRC1X-3/2/a9a8db8a384d6e4c77864fd6b2814cdb).

ANNOTATION: Abstract:

This study examined the influence of cognitive style, spatial orientation and computer expertise on hypertext navigation patterns and learning outcomes when participants interacted with a hypermedia presentation. A sample of 306 undergraduates was pre-tested both on their cognitive style and on their self-reported frequency and ability in using computers. From the initial sample, 40 students were selected to form four groups with the following characteristics: (a) 10 high computer users — sequential thinkers, (b) 10 high computer users — holistic thinkers, (c) 10 low computer users — sequential thinkers and (d) 10 low computer users — holistic thinkers. All participants completed a self-report questionnaire measuring spatial orientation and were then requested to browse freely a hypermedia presentation on the ancient Mayan civilisation. Finally, the students completed a post-test to assess the recall of the hypermedia presentation and the cognitive organisation of the acquired knowledge. The results indicated that hypermedia navigation behaviour was linked to computer skills rather than to cognitive style and that learning outcomes were unaffected by cognitive style or by computer skills. However, learning outcomes were positively affected by specific search patterns, that is by revisiting hypermedia sections and visiting overview sections in the early stages of hypermedia browsing. Further, navigating overview sections and holistic processing fostered knowledge representation in the form of maps. These findings suggest that individual differences can affect hypermedia navigation even though their role in learning is complex and the impact of cognitive style on learning outcomes was proved to be less important than initially predicted.

- [CB87] Jeff Conklin and Michael L. Begeman, 13 – 15 November 1987. gIBIS: A hypertext tool for team design deliberation. In *Hypertext '87 Papers* [ACM87], (pp. 247 – 251). URL [URL <URL:http://doi.acm.org/10.1145/317426.317444>](http://doi.acm.org/10.1145/317426.317444).

ANNOTATION: Experimental system to test graphical interface and design decisions

SEE ALSO: ACM Trans on OIS v.6 #4 Oct. 1988, pp. 303-331 [CB88]

KEYWORD: System!gIBIS

- [CB88] Jeff Conklin and Michael L. Begeman, October 1988. gIBIS: A hypertext tool for exploratory policy discussion. *ACM Transactions on Information Systems*, 6(4):303 – 331. URL [URL <URL:http://doi.acm.org/10.1145/58566.59297>](http://doi.acm.org/10.1145/58566.59297).

- [CB07] Aline Chevalier and Nathalie Bonnardel, September 2007. Articulation of web site design constraints: Effects of the task and designers' expertise. *Computers in Human Behavior*, 23(5):2455 – 2472. URL [URL <URL:http://www.sciencedirect.com/science/article/B6VDC-4K7NHK4-1/2/60bd5dfb9d8b15ce53e1ef16faab2a31>](http://www.sciencedirect.com/science/article/B6VDC-4K7NHK4-1/2/60bd5dfb9d8b15ce53e1ef16faab2a31).

ANNOTATION: Abstract:

This paper aims at contributing to a better understanding of the cognitive activities of web site designers and, more precisely, their articulation and satisfaction of various design constraints. In this paper, we first present an experiment in which professional and novice designers have to evaluate a web site developed for reflecting usability errors identified in web sites. Then, the results obtained in this evaluation task are compared with results previously obtained in a design task, in which professional and novice designers had to create a web site. Data analyses focused on the number and nature of constraints articulated by designers in these two types of tasks (evaluation vs design). In particular, we distinguished constraints linked with the client of the site and constraints linked with the future web users. The obtained results show effects of both the level of expertise and the task. While designing, all of the designers focused mainly on constraints linked with the client. In contrast, while evaluating the web site, novices focused on constraints linked with the user, whereas professionals shared their attention between these two kinds of constraints (client vs user-oriented constraints). Based on these results, we conclude with ways for supporting designers' activities.

SEE ALSO: Levi & Conrad's A heuristic evaluation of a WWW prototype [LC96]

KEYWORD: Expertise • System!WWW

- [CBR90] Raymond A. Carpenter, Ram R. Bishu, and Michael W. Rile, 1990. Are personality types and psychometric factors good predictors? In *Proceedings of the Human Factors Society 34th Annual Meeting*, volume 1, (pp. 351 – 355). ISSN 0163-5182.

CALLNO: TA 166 H794

ANNOTATION: Abstract: "The objective of this investigation was to experimentally evaluate possible relationships among personality types, selected psychometric factors, and categories of cognitive activity, with an intent to develop user behavioral models for interface design. Twenty subjects (10 novice and 10 experienced) participated in an interactive scheduling task with two levels of task complexity. The task involved navigation through ten action alternatives, with each alternative being represented by a screen, to allocate resources. The subjects were administered with Myers-Briggs Type Indicator (MBTI) tests and a battery of psychometric tests. Cognitive time, total number of menu selections, total number of assignments, and the distribution of cognitive time into intelligence, design and choice activities were the performance measures. Variables derived from measurements of personality traits and psychometric factors were evaluated as predictive measures of performance. The personality trait for sensing/knowing was significant in predicting overall performance, as were psychometric factors for induction, integrative processing, and spatial scanning. The personality trait of extrovert/introvert was found to be significant in predicting

the distribution of screen use times, as were derived factors for locus of control, memory ability, and personality. These results can form the basis for examining the usefulness of personality types and psychometric factors as variables in models of user characteristics.' Record From HCIBIB
 (URL:<http://hcibib.org/gs.cgi?word=checked&terms=C.HFS.90.351>)

KEYWORD: individual differences

- [CC57] William G. Cochran and Gertrude M. Cox, 1957. *Experimental Designs*. Wiley, second edition. Third printing, 1962.

CALLNo: Q180.A1C6

- [cC87] Ching chih Chen (ed.), 4 – 8 October 1987. *Information: The Transformation of Society ASIS '87 Proceedings of the 50th Annual Meeting of the American Society for Information Science*, volume 24. Boston, Massachusetts: Learned Information, Inc. ISBN 0-938734-19-9. ISSN 004-7870.

- [CC95] Tat-Seng Chua and Chui-Har Choo, 1995. Automatic generation and refinement of hypertext links. *The New Review of Hypermedia and Multimedia*.

ANNOTATION: Tries to rank nodes to create a tour based on user query. Evaluation uses the same method as creation.

KEYWORD: Information Retrieval • Spreading activation

- [CC97] Chaomei Chen and Mary Czerwinski, 1997. Spatial ability and visual navigation: An empirical study. *The New Review of Hypermedia and Multimedia*, 3:67 – 89. ISSN 1361-4568.

ANNOTATION:

- nice review of spatial studies (pp. 69 – 70)
- 'No strong correlation was found with consistency between spatial ability and task performance measures as predicted.' (p. 87)
- '... the mixed showing of spatial correlates with user behavior in hypermedia environments, as highlighted by Chen and Czerwinski (1997).' [Dil00, p. 526]
- Abstract: 'In this paper, we describe an empirical study of individuals' spatial navigation strategies and a number of performance and preference measures with regard to the design of a novel 3D visualisation. The underlying semantic space of the user interface consists of a collection of papers from the three most recent ACM SIGCHI conference proceedings, visualised as a virtual reality network. This network was automatically constructed based on semantic similarities derived from latent semantic analysis. We studied the search strategies and general preferences of eleven subjects who used this system to find papers on various topics. The study has led to a number of interesting findings, which should be valuable for designers and evaluators of 3D user interfaces. The results highlight the importance of structural elements in the design of a semantically based user interface, because search strategies

of users relied heavily on these mechanisms in the design. The results of this study also demonstrate that we are able to characterise and learn from users' search strategies in a visual environment strongly shaped by semantic relationships of the information content. Implications for user interface design based on users' psychological models of a semantic space are described.'

SEE ALSO:

- Chen & Rada's meta-analysis [CR96] for other factors that matter.
- Chen & Carr also had a paper at HT'99 about a visualization of ACM HT conference papers [CC99].

KEYWORD: spatial ability • CogPsych

[CC99] Chaomei Chen and Les Carr, February 1999. Trailblazing the literature of hypertext: Author co-citation analysis (1989–1998). In Tochtermann et al. [TWWL99], (pp. 51 – 60). URL [URL \(URL:http://doi.acm.org/10.1145/294469.294486\)](http://doi.acm.org/10.1145/294469.294486).

[CC01] T. Cribbin and C. Chen, 2001. Exploring cognitive issues in visual information retrieval. In *Proceedings of the Eighth IFIP TC.13 Conference on Human-Computer Interaction, INTERACT 2001*, (pp. 166 – 173).

[CCA89] Donald B. Crouch, Carolyn J. Crouch, and Glenn Andreas, 5 – 8 November 1989. The use of cluster hierarchies in hypertext information retrieval. In Meyrowitz [Mey89a], (pp. 225 – 237). URL [URL \(URL:http://doi.acm.org/10.1145/74224.74243\)](http://doi.acm.org/10.1145/74224.74243).

CALLNO: QA76.9D6H91987

ANNOTATION:

- a graphical interface to SMART's cluster based retrieval
- Abstract: 'The *graph-traversal approach* to HT IR is a conceptualization of HT in which the structural aspects of the nodes are emphasized. A user navigates through such HT systems by evaluating the semantics associated with links between nodes as well as info contained in nodes. In this paper we describe a hierarchical struture which effectively supports the graphical traversal of a document collection in a HT system. We provide an overview of an interactive browser based on cluster hierachies. Initial results obtained from the use of the browser in an experimental HT systems are presented.'

SEE ALSO: Sounds like [HT87]

KEYWORD: HT!Methodology • Cluster • System!SMART • Navigation

[CCC92] Erran Carmel, Stephen Crawford, and Hsinchun Chen, September–October 1992. Browsing in hypertext: a cognitive study. *IEEE Transactions on Systems, Man and Cybernetics*, 22(5).

KEYWORD: Browsing

- [CCM98] Carlo Castelli, Luigi Colazzo, and Andrea Molinari, 1998. Cognitive variables and patterns of hypertext performances: Lessons learned for educational hypermedia construction. *Journal of Educational Multimedia and Hypermedia*, 7(2/3):177 – 206.
- ANNOTATION: $n = 15$, Seven possible types of HT user, performance assumptions: should read node once only but would these authors expect the same out of book readers?
- SEE ALSO: types of HT readers:[LK98; RAK97; KH95]
- KEYWORD: taxonomy • spatial ability!Jason Satel
- [CCM00] Chaomei Chen, Mary Czerwinski, and Robert Macredie, April 2000. Individual differences in virtual environments — introduction and overview. *Journal of the American Society for Information Science*, 51(6):499 – 507.
- ANNOTATION: Introduction to a special issue [Cha00]
- KEYWORD: individual differences • spatial ability
- [CCM⁺02] Patrick Y. K. Chau, Melissa Cole, Anne P. Massey, Mitzi Montoya-Weiss, and Robert M. O’Keefe, October 2002. Cultural differences in the online behavior of consumers. *Communications of the ACM*, 45(10):138 – 143. URL [URL: http://doi.acm.org/10.1145/570907.570911](http://doi.acm.org/10.1145/570907.570911).
- KEYWORD: HCI!cultural factors
- [CdRGM03] Jen-Yao Chung and Kwei-Jay Lina dn Richard G. Mathieu, October 2003. Web services computing: Advancing software interoperability. *IEEE Computer*, 36:35 – 37.
- KEYWORD: CS4173 (WWW) • web services
- [CDT00a] Chun Wei Choo, Brian Detlor, and Don Turnbull, 2000. Information seeking. In *Web Work: Information Seeking and Knowledge Work on the World Wide Web* [CDT00e], chapter 1, (pp. 3 – 27).
- KEYWORD: HCI!CS6606 • information seeking
- [CDT00b] Chun Wei Choo, Brian Detlor, and Don Turnbull, 2000. Models of information seeking on the World Wide Web. In *Web Work: Information Seeking and Knowledge Work on the World Wide Web* [CDT00e], chapter 5, (pp. 133 – 158).
- KEYWORD: HCI!CS6606 • information seeking
- [CDT00c] Chun Wei Choo, Brian Detlor, and Don Turnbull, 2000. The structure and dynamics of organizational knowledge. In *Web Work: Information Seeking and Knowledge Work on the World Wide Web* [CDT00e], chapter 2, (pp. 29 – 67).
- KEYWORD: HCI!CS6606
- [CDT00d] Chun Wei Choo, Brian Detlor, and Don Turnbull, 2000. Understanding organizational Web use. In *Web Work: Information Seeking and Knowledge Work on the World Wide Web* [CDT00e], chapter 6, (pp. 159 – 187).
- ANNOTATION: Recommend combining with Zhang & Chignell (JASIS, 2001) [ZC01] for CS6606 class

KEYWORD: HCI!CS6606

- [CDT00e] Chun Wei Choo, Brian Detlor, and Don Turnbull, 2000. *Web Work: Information Seeking and Knowledge Work on the World Wide Web*. Information Science and Knowledge Management. Kluwer Academic Publishers. ISBN 0-77923-6460-0.
- [CE89] F. Campagoni and K. Ehrlich, 1989. Information retrieval using a hypertext-based help system. *ACM Transactions on Information Systems*, 7(8):271 – 291.
- [CG94] Mark Chignell and Gene Golovchinsky, 1994. User controlled interfaces for information exploration. ?? *Asked Chignell for info 6 July 1994* ??.
- [CG03] Fethi Calisir and Zafer Gurel, 2003. Influence of text structure and prior knowledge of the learner on reading comprehension, browsing, and perceived control. *Computers in Human Behavior*, 19:135 – 145.

KEYWORD: Expertise • Reading

- [CGF88] Michelene T. H. Chi, Robert Glaser, and Marshall J. Farr (eds.), 1988. *The Nature of Expertise*. Hillsdale, NJ, USA: Lawrence Erlbaum Associates. ISBN 0-8058-0404-8 (on back cover), 0-89859-711-0 (on p. iii).

CALLNo: BF 323 E2 N37 1988

SEE ALSO: Individual chapters [GC88; Pos88; Joh88; VP88]

KEYWORD: Expertise

- [CGM90] Chris Clifton and Hector Garcia-Molina, 13 – 16 August 1990. Indexing in a hypertext database. In McLeod et al. [MSDS90], (pp. 36 – 49).

CALLNo: QA76.9.D3I559

ANNOTATION: Concept of HT is that a db can be partitioned into subgraphs which are then searched; Seems to be an attempt to extend databases without much interest in hypertext

- [CGPA09] Apala Lahiri Chavan, Douglas Gorney, Beena Prabhu, and Sarit Arora, January +February 2009. The washing machine that ate my sari — mistakes in cross-cultural design. *interactions*, XVI(1):26 – 31. URL <http://doi.acm.org/10.1145/1456202.1456209>.

KEYWORD: HCI!cultural factors

- [CGPZ93] Mark H. Chignell, Gene Golovchinsky, Ferdie Poblete, and Sarah Zuberec, 1993. Information visualization and interactive querying for online documentation and electronic books. In A. Gawman, W. M. Gentleman, E. Kidd, P. Larson, and J. Slonim (eds.), *Proceedings of CASCON '93 Volume II: Distributed Computing*. Toronto, Canada: IBM Canada Ltd. Laboratory.

- [CH87a] Stuart K. Card and Austin Henderson, Jr., 1987. A multiple, virtual-workspace interface to support task switching. In *CHI + GI*, (pp. 53 – 59).

KEYWORD: CogPsych!LIS 861

- [CH87b] Roger Chaffin and Douglas J. Herrmann, 1987. Relation element theory: A new account of the representation and processing of semantic relations. In David S. Gorfein and Robert R. Hoffman (eds.), *Memory and Learning: The Ebbinghaus Centennial Conference*, chapter 14, (pp. 221 – 245). Hillsdale, NJ, USA: Lawrence Erlbaum Associates.

KEYWORD: CogPsych!LIS 861

- [Cha93] Daniel T. Chang, 14 – 18 November 1993. HieNet: A user-centered approach for automatic link generation. In *Hypertext 1993* [Hyp93].

KEYWORD: HT!AutoGen

- [Cha94] Davida Charney, 1994. The effect of hypertext on processes of reading and writing. In Cynthia L. Selfe and Susan Hilligoss (eds.), *Literacy and Computers: The Complications of Teaching and Learning with Technology*, chapter 10, (pp. 238 – 263). New York, NY: The Modern Language Association of America. URL [URL: http://www.cwrl.utexas.edu/%7Echarney/homepage/Articles/Charney_hypertext.pdf](http://www.cwrl.utexas.edu/%7Echarney/homepage/Articles/Charney_hypertext.pdf).

ANNOTATION: Charney presents an excellent synthesis of psychological and linguistic theory and experimentation to show what we know about the effects of hypertext on readers, and how writers might adapt their writing to new forms. She also points out where the research is lacking or contradictory.

KEYWORD: Review • Reading • CogPsych

- [Cha99] Matthew Chalmers, 1999. Informatics, architecture and language. In Munro et al. [MHB99], chapter 4, (pp. 55 – 79).

CALLNo: QA76.9 C66 S625 1999

- [Cha00] Chaomei Chen, Mary Czerwinski, and Robert Macredie (eds.), April 2000. Special issue about Individual Differences In Virtual Environments. *Journal of the American Society for Information Science*, 51(6). URL [URL: http://www.asis.org/Publications/JASIS/vol51n0600.html](http://www.asis.org/Publications/JASIS/vol51n0600.html).

SEE ALSO:

- overview and introduction [CCM00]
- Allen [All00]
- Dillon [Dil00]
- Ford [For00]

KEYWORD: individual differences

- [Che98] Chaomei Chen, 1998. Generalised similarity analysis and pathfinder network scaling. *Interacting With Computers*, 10(2):107 – 128.

ANNOTATION: Abstract from [URL: http://www.elsevier.nl/gej-ng/10/23/72/14/11/11/abstract.html](http://www.elsevier.nl/gej-ng/10/23/72/14/11/11/abstract.html): ‘This paper introduces a generic approach to the development of hypermedia information systems. This approach emphasises the role of intrinsic inter-document relationships in structuring and visualising a large hypermedia information space. In this

paper, we illustrate the use of this approach based on three types of similarity measurements: hypertext linkage, content similarity and usage patterns. Salient patterns in these relationships are extracted and visualised in a simple and intuitive associated network. The spatial layout of a visualisation is optimised such that closely related documents are placed near to each other and only those intrinsic connections among them are shown to users as automatically generated virtual links. This approach supports self-organised information space transformation based on usage patterns and other feedback such that the visual structure of the information space is incrementally tailored to users' search and browsing styles.'

SEE ALSO: Chen and Czerwinski in NRHM [CC97] and HT'99

- [Che00] Chaomei Chen, 2000. Individual differences in a spatial-semantic virtual environment. *Journal of the American Society for Information Science*, 51(6):529–542. URL [http://dx.doi.org/10.1002/\(SICI\)1097-4571\(2000\)51:6<529::AID-ASI5>3.0.CO;2-F](http://dx.doi.org/10.1002/(SICI)1097-4571(2000)51:6<529::AID-ASI5>3.0.CO;2-F).
- [CHH98] L. A. Carr, W. Hall, and S. Hitchcock, 20 – 24 June 1998. Link services of link agents? In Grønbaek et al. [GMS98], (pp. 113 – 122).
- [CHL10] Dianne Cyr, Milena Head, and Hector Larios, January/February 2010. Colour appeal in website design within and across cultures: A multi-method evaluation. *International Journal of Human-Computer Studies*, 68(1–2):1 – 21. URL <http://dx.doi.org/10.1016/j.ijhcs.2009.08.005>.
- KEYWORD: HCI!cultural factors • HCI!colour
- [CK94] Allen Cypher and Shifteh Karimi, July 1994. User-centered processes. *interactions*.
- [CK06] Aline Chevalier and Maud Kicka, October 2006. Web designers and web users: Influence of the ergonomic quality of the web site on the information search. *International Journal of Human-Computer Studies*, 64(10):1031 – 1048. URL <http://dx.doi.org/10.1016/j.ijhcs.2006.06.002>.
- [CKM⁺03] Francisco Curbera, Rania Khalaf, Nirmal Mukhi, Stefan Tai, and Sanjiva Weeawarana, October 2003. The next step in web services. *Communications of the ACM*, 46:29 – 34.
- KEYWORD: CS4173 (WWW) • web services
- [CKYS90] Richard A. Carlson, Boo Hock Khoo, Robin G. Yaure, and Walter Schneider, 1990. Acquisition of a problem-solving skill: Levels of organization and use of working memory. *Journal of Experimental Psychology: General*, 119(2):193 – 214.
- KEYWORD: CogPsych!LIS 861
- [Cla90] David Clayworth, 1990. File structures for text retrieval. In Gillman [Gil90], (pp. 147 – 158). Proceedings of 'The User's Perspective' (1988) and 'Text Management' (1989).
- CALLNo: QA76.9.T48 I59 1988-1989
- [Cla91] Helge Clausen, April 1991. Electronic mail as a tool for the information professional. *The Electronic Library*, 9(2):73 – 83. ISSN 0264-0473.

CALLNo: Z678.9.A1E45

KEYWORD: MSc!Justification

[Cle94] Gail Clement, October/November 1994. Evolution of a species: Science journals published on the internet. *Database*.

[Clo90] Robin Clough, 1990. Text retrieval: Technology and marketplace, reality and hype. In Gillman [Gil90], (pp. 93 – 96). Proceedings of ‘The User’s Perspective’ (1988) and ‘Text Management’ (1989).

CALLNo: QA76.9.T48 I59 1988-1989

[CLR91] Thomas H. Cormen, Charles E. Leiserson, and Ronald L. Rivest, 1991. *Introduction to Algorithms*. McGraw-Hill.

[CLvRC98] Fabio Crestani, Mounia Lalmas, Cornelias J. van Rijsbergen, and Iain Campbell, December 1998. “Is this document relevant?... Probably”: A survey of probabilistic models in information retrieval. *ACM Computing Surveys*, 30(4):528 – 552.

KEYWORD: Information Retrieval • Review • Information Retrieval!probabilistic

[CM85] Lynn A. Cooper and Randall J. Mumaw, 1985. Spatial aptitude. In Dillon [Dil85], (pp. 67 – 94).

CALLNo: BF 311 I5 1983 v.2

KEYWORD: spatial ability

[CM99] Christopher S. Campbell and Paul Maglio, 1999. Facilitating navigation in information spaces: Road-signs on the World Wide Web. *International Journal of Human-Computer Studies*, 50:309 – 327.

ANNOTATION: From the abstract: ‘A series of experiments were conducted to evaluate whether simple hyperlink annotations — traffic lights that represent Internet connection speeds — can facilitate web navigation. Traffic lights are small red, yellow or green images added around the anchor text of each link indicating its connection speed, red for slow, yellow for somewhat fast and green for fastest. The first two experiments showed that traffic lights do not facilitate perceptual processes involved in web navigation (i.e. link localization and visual search). However, traffic lights also *do not distract from the process of finding links in hypertext documents and, thus have no perceptual performance cost*. The third experiment showed that *traffic lights facilitate web navigation performance by improving link evaluation and decision processes. This improvement is particularly marked when link relevance is low or undifferentiated*. It was concluded that supplying users with information about Internet connection speeds improves web navigation performance. Thus, traffic lights provide functional cues for efficiently navigating the web.’ (emphasis added)

SEE ALSO: [MC00; WL88]

KEYWORD: annotation • System!WWW

[CN93] Mark Chignell and Bernd Nordhausen, ©1993. Text to hypertext conversion: A practical engineering approach course outline. Provided by Mark H. Chignell.

[CNBKO90] W. Bruce Croft, Marie-France Bruandet Nicholas Belkin, Rainer Kuhlen, and Tim Oren, November 1990. Hypertext and information retrieval: What are the fundamental concepts? In Streitz et al. [SRA90], (pp. 362 – 366). Proceedings of the First European Conference on Hypertext.

ANNOTATION: A brief elucidation of the similarities and differences between HT and IR research and methodologies. Presents HT as a method for using databases of primarily text documents

KEYWORD: MSc!Justification

[CO02] Samuel G. Charlton and Thoma O'Brien (eds.), 2002. *Handbook of Human Factors Testing and Evaluation*. Lawrence Erlbaum Associates, 2nd edition. ISBN 0-8058-3291-2.

[Coe88] Richard M. Coe, 1988. *Toward a Grammar of Passages*. Southern Illinois University Press. ISBN 0-8093-1420-7.

CALLNo: PE 1404.C57 1988

[Coh77] Gillian Cohen, 1977. *Problem Solving*, chapter 3, (pp. 46 – 71). London: Academic Press. ISBN 0-12-178750-8.

KEYWORD: HCI

[Col] Ellen C. Carter (ed.). Color: Research & application, Wiley Periodicals, Inc. ISSN 1520-6378 (print) / 0361-2317 (electronic). URL [URL \(http://www3.interscience.wiley.com/journal/35037/home\)](http://www3.interscience.wiley.com/journal/35037/home).

[com86] 1986. URL [URL \(ftp://ftp.csd.uwo.ca/pub/papers/webber/HypertextEvaluation/BlusteinThesisData\)](ftp://ftp.csd.uwo.ca/pub/papers/webber/HypertextEvaluation/BlusteinThesisData).

[Con87] Jeff Conklin, 1987. Hypertext: An introduction and survey. *IEEE Computer*, 20(9):17 – 41.

CALLNo: TK 7885.A1 I5 v.20 1987 JL-D

ANNOTATION: Probably the most cited introductory article about HT

SEE ALSO: unabridged version [Con91]

KEYWORD: HT!Intro • Classic • Review

[Con91] Jeff Conklin, 1991. Hypertext. In *Encyclopedia of Microcomputers*, volume 8, (pp. 377 – 432). Marcel Dekker, Inc., N.Y.

SEE ALSO: abridged version in *IEEE Computer* [Con87]

KEYWORD: HT!Intro • Classic • Review

- [Con95] Larry L. Constantine, April 1995. Essential modelling: Use cases user interfaces. *interactions*, (pp. 34 – 46).
KEYWORD: HCI • Design
- [Coo90] James H. Coombs, 5 – 7 September 1990. Hypertext, full text, and automatic linking. In Vidick [Vid90], (pp. 83 – 98).
CALLNo: Z699.A1.I 56 1990
ANNOTATION: use of ‘search & query’ to allow users to build dynamic HT structures proposed and tested. Includes examples of HT in a teaching environment (Dickens Web)
KEYWORD: System!IRIS
- [Cor] Netscape Communications Corporation. Netscape navigator. URL [\(URL:ftp://ftp.netscape.com/\)](ftp://ftp.netscape.com/). Unix version 4.04.
- [Cor92] Dan Corbett, 1992. Sidebar: Natural language processing. *Library Hi Tech*, 10:1–2:112. ISSN 0737-8831. Sidebar to [Jon92].
CALLNo: Z671.L696
KEYWORD: Misc!(AI)
- [COS98] S. S. Curl, L. Olfman, and J. W. Satzinger, 1998. An investigation of the roles of individual differences and user interface on database usability. *The DATA BASE for Advances in Information Systems*, 29(1):50–65.
- [CP95] Lara D. Catledge and James E. Pitkow, April 1995. Characterizing browsing strategies in the World-Wide web. *Computer Networks and ISDN Systems*, 27(6):1065 – 1073. URL [\(URL:http://dx.doi.org/10.1016/0169-7552\(95\)00043-7\)](http://dx.doi.org/10.1016/0169-7552(95)00043-7). Appeared in Proceedings of the Third International WWW Conference
 [\(URL:http://www.sciencedirect.com/science/article/B6TYT-3YGTSP5-2D/2/3d7d76f90f2aa10415bb0e92f2c57d0d\)](http://www.sciencedirect.com/science/article/B6TYT-3YGTSP5-2D/2/3d7d76f90f2aa10415bb0e92f2c57d0d).
- [CPP00] Ed H. Chi, Peter Pirolli, and James Pitkow, 2000. The scent of a site: a system for analyzing and predicting information scent, usage, and usability of a web site. In *Proceedings of the SIGCHI conference on Human factors in computing systems*, (pp. 161 – 168). ACM Press. ISBN 1-58113-216-6. URL [\(URL:http://doi.acm.org/10.1145/332040.332423\)](http://doi.acm.org/10.1145/332040.332423).
- [CR93] Shan-Ju Chang and Ronald E. Rice, 1993. Browsing: A multidimensional framework. In Martha E. Williams (ed.), *Annual Review of Information Science and Technology*, volume 28, (pp. 231 – 276). Learned Information, Inc.
KEYWORD: Browsing
- [CR96] Chaomei Chen and Roy Rada, 1996. Interacting with hypertext: A meta-analysis of experimental studies. *Human-Computer Interaction*, 11(2):125 – 156. URL [\(URL:http://dx.doi.org/10.1207/s15327051hci1102_2\)](http://dx.doi.org/10.1207/s15327051hci1102_2).

ANNOTATION: The authors synthesised the results of studies of hypertext from 20 published reports to perform an analysis of results from 23 experiments. They found three main factors in the evaluation of hypertext: user type, task type, tools provided by hypertext system. They evaluated the hypertext according to efficiency (speed) and effectiveness (performance on tasks set by experimenters).

SEE ALSO:

- McDonald and Stevenson (1996) [MS96] for a different summary of hypertext evaluation experiments;
- Dillon and Gabbard [DG98] for some criticism of the methodology and a survey of HT for learning;
- Chen and Czerwinski [CC97] for more references to spatial ability being important;
- Mahmood et al. for a meta-analysis of IT end-user satisfaction [MBGJ00]

KEYWORD: Evaluation • spatial ability • Review • individual differences

[CR98] B. Caplan and S. Romans, 1998. Assessment of spatial abilities. In Goldstein et al. [GNB98], (pp. 379–419).

[Cra91] Diane Crawford, November 1991. Technical correspondence. *Communications of the ACM*, 34(11):118 – 120. URL [URL: \$\langle\$ URL:http://doi.acm.org/10.1145/125490.376050 \$\rangle\$](http://doi.acm.org/10.1145/125490.376050) .

SEE ALSO: [Pea90]

KEYWORD: Hashing • Bloom Filters

[Cra06] Lorrie Faith Cranor, May + June 2006. What do they “indicate?”: evaluating security and privacy indicators. *interactions*, 13(3):45 – 47. URL [URL: \$\langle\$ URL:http://doi.acm.org/10.1145/1125864.1125890 \$\rangle\$](http://doi.acm.org/10.1145/1125864.1125890) .

[CRM89] Peter Clitherow, Doug Riecken, and Michael Muller, 5 – 8 November 1989. VISAR: A system for inference and navigation in hypertext. In Meyrowitz [Mey89a], (pp. 293 – 304). URL [URL: \$\langle\$ URL:http://doi.acm.org/10.1145/74224.74248 \$\rangle\$](http://doi.acm.org/10.1145/74224.74248) .

CALLNo: QA76.9D6H91987

SEE ALSO:

- Bernstein’s Apprentice paper for comments [Ber90], and
- cf TOPIC[HR88],
- MSc[Blu94] has a summary.

KEYWORD: HT!AutoGen • System!CYC • AI!CYC system • Navigation!perhaps?

[Cro57] Lee J. Cronbach, 1957. The two disciplines of scientific psychology. *American Psychologist*, 12:671 – 684. Address of the President at the Sixty-Fifth Annual Convention of the American Psychological Association, 1957. Available online at [URL: \$\langle\$ URL:http://www.yorku.ca/dept/psych/classics/Cronbach/Disciplines/ \$\rangle\$](http://www.yorku.ca/dept/psych/classics/Cronbach/Disciplines/) .

SEE ALSO:

- Gardner-Bonneau's The Joy of Psychology [GB01],
- Landauer's 'Relations between CogPsych and Computer System Design' [Lan87], and
- Bronowski's first chapter in 'Science and Human Values' [Bro65]

KEYWORD: CogPsych!LIS 861

[Cro81] Carolyn J. Crouch (ed.), 31 May – 2 June 1981. *SIGIR '81 Theoretical Issues in Information Retrieval Proceedings of the Fourth International Conference on Information Storage and Retrieval*. ACM-SIGIR, ACM. ISBN 0-89791-052-4.

[Cro08] Douglas Crockford, 2008. *JavaScript: The Good Parts*. O'Reilly Media, Inc. ISBN 978-0-596-51774-8. © 2008 Yahoo! Inc.

KEYWORD: System!WWW!CS4173 • CS4173 (WWW) • JavaScript

[CRSW94] Elizabeth Charnock, Roy Rada, Steve Stichler, and Peter Weygant, 1994. Task-based method for creating usable hypertext. *Interacting with computers*, 6(3):275 – 287.

ANNOTATION: Rule based (human) authoring methodology for creating hypertext from a well-defined information set produced for online reading. Concept of 'gateways' (buttons to click) to make link scope clear.

KEYWORD: Design • SGML/HyTime • Reading

[CRZ94] C. Chen, R. Rada, and A. Zeb, 1994. An extended fisheye view browser for collaborative writing. *International Journal of Human-Computer Studies*, 40:859 – 878.

ANNOTATION: I only have the first page

KEYWORD: Fisheye view

[CSDS03] Fabio Casati, Eric Shan, Umeshwar Dayal, and Ming-Chien Shen, October 2003. Business-oriented management of web services. *Communications of the ACM*, 46:55 – 60.

KEYWORD: CS4173 (WWW) • web services

[CT82] John M. Carroll and John C. Thomas, March/April 1982. Metaphor and the cognitive representation of computing systems. *IEEE Transactions of Systems, Man, and Cybernetics*, SMC-12(2).

[CT89] W. Bruce Croft and Howard Turtle, 5 – 8 November 1989. A retrieval model for incorporating hypertext links. In Meyrowitz [Mey89a], (pp. 213 – 224).

CALLNo: QA76.9D6H91987

ANNOTATION: Building a HT system

SEE ALSO: R. Akscyn and F. Halasz's *Topics on Hypertext* [AH91] (updated papers)

KEYWORD: Bayesian (probability)

- [CTCG93] Nipon Charoenkitkarn, Jim Tam, Mark H. Chignell, and Gene Golovchinsky, 14 – 18 November 1993. Browsing through querying: Designing for electronic books. In *Hypertext 1993* [Hyp93], (pp. 206 – 216).
- [CTR02] Mary Czerwinski, Desney S. Tan, and George Robertson, 2002. Women take a wider view. In *Changing the World, Changing Ourselves: CHI 2002 Human Factors in Computing Systems Conference Proceedings*. URL [URL \(http://doi.acm.org/10.1145/503376.503412\)](http://doi.acm.org/10.1145/503376.503412).
- [Cv94] W. Bruce Croft and C. J. van Rijsbergen (eds.), 3 – 6 July 1994. *SIGIR '94 Proceedings of the seventeenth annual International ACM-SIGIR Conference on Research and Development in Information Retrieval*. Dublin, Ireland: Springer-Verlag.
- CALLNo: QA76.9.D3I552 1994
- [CV01] Chris Coulston and Theresa M. Vitolo, 14 – 18 August 2001. A hypertext metric based on Huffman coding. In Davis et al. [DDD01], (pp. 243 – 244). URL [URL \(http://doi.acm.org/10.1145/504216.504275\)](http://doi.acm.org/10.1145/504216.504275).
- SEE ALSO:
- Botafogo et al. [BRS92]
 - Towards a practical measure of hypertext usability by Pauline Smith [Smi96]
- KEYWORD: Metric • Evaluation • information seeking
- [CW90] Jane Carrasco Chew and John Whiteside (eds.), 1 – 5 April 1990. *Empowering People: CHI '90 Conference Proceedings*. ACM SIGCHI, Seattle, Washington: Addison-Wesley. ISBN Addison-Wesley: 0-201-50932-6 / ACM: 0-89791-345-0. ISSN 0713 5424 (Special issue of the SIGCHI Bulletin).
- [CWW04] Wojciech Cellary, Wojciech Wiza, and Krzysztof Walczak, May 2004. Visualizing search results in 3D. *IEEE Computer*, 37:87 – 89.
- [CY92] Carolyn J. Crouch and Bokyoung Yang, 21 – 24 June 1992. Experiments in automatic statistical thesaurus construction. In Belkin et al. [BIP92], (pp. 77 – 88).
- CALLNo: Z699.A1A886 92-07-02
- ANNOTATION: Evaluation of a statistical method (Crouch's) to construct thesauri from several documents. Present their own method.
- KEYWORD: System!CODER
- [DB91] Nicholas Duncan and David T. Barnard, July 1991. The document-to-document correction problem. Technical Report 91-315, Department of Computing and Information Science, Queen's University at Kingston.
- [DB10] Patrick Dubroy and Ravin Balakrishnan, 2010. A study of tabbed browsing among mozilla firefox users. In *CHI '10: Proceedings of the 28th international conference on Human factors in computing systems*, (pp. 673 – 682). URL [URL \(http://doi.acm.org/10.1145/1753326.1753426\)](http://doi.acm.org/10.1145/1753326.1753426).

SEE ALSO: History from HT1996 [JC96] and Tabbing from HT2010 [HW10]

- [DD94] Steven J. DeRose and David G. Durand, 1994. *Making hypermedia work: a user's guide to HyTime*. Boston: Kluwer Academic.

KEYWORD: HyTime

- [DDB90] Scott Deerwester, Susan Dumais, and Michael Berry, 1990. LSI package. Copyright ©1990 Bell Communications Research, Inc.
Provided by Susan Dumais (dumais@bellcore.com) Bell Communications Research, 445 South St., Morristown, NJ 07960, USA.

- [DDD01] Hugh Davis, Yellowlees Douglas, and David G. Durand (eds.), 14 – 18 August 2001. *HYPERTEXT '01: Proceedings of the twelfth ACM conference on Hypertext and Hypermedia*. New York NY: ACM Press. ISBN 1-59113-420-7.

- [DDF⁺90] Scott Deerwester, Susan T. Dumais, George W. Furnas, Thomas K. Landauer, and Richard Harshman, September 1990. Indexing by latent semantic analysis. *Journal of the American Society for Information Science*, 41:391 – 407.

KEYWORD: LSI

- [DDL⁺88] Scott Deerwester, Susan Dumais, Thomas Landauer, George Furna, and Laura Beck, 23 – 27 October 1988. Improving information retrieval with latent semantic indexing. In Christine L. Borgman and Edward Y. H. Pai (eds.), *Information & Technology Planning for the Second 50 Years Proceedings of the 51st Annual Meeting of the American Society for Information Science*, volume 25, (pp. 36 – 40). Atlanta, Georgia: Learned Information, Inc.

KEYWORD: LSI

- [Ded88] Chris Dede, 1988. The role of hypertext in transforming information into knowledge. In Bernstein [Ber88c], (pp. 32 – 35).

ANNOTATION: HT can be used like an expert system and outliner

KEYWORD: MSc!Justification

- [Del06] Jean-Yves Delort, 2006. Identifying commented passages of documents using implicit hyperlinks. In ACM Hypertext [ACM06], (pp. 89 – 98). URL (URL:http://doi.acm.org/10.1145/1149941.1149960). General chair Uffe K. Wiil; Programme chairs Peter J. Nürnberg and Jessica Rubart.

KEYWORD: HCI!CS6606? • HCI!CS6606?

- [Dem00] Paul Dempsey, September 2000. Find yourself. *Web Techniques*, 5:72, 74, 76 – 77.

- [Den03] Peter J. Denning, July 2003. Accomplishment. *Communications of the ACM*, 46:19 – 23.

- [DeR89] Steven J. DeRose, 5 – 8 November 1989. Expanding the notion of links. In Meyrowitz [Mey89a], (pp. 249 – 255). URL (URL:http://doi.acm.org/10.1145/74224.74245).

CALLNO: QA76.9D6H91987

ANNOTATION: Hypertext is ideal for documents, citation lists with more than one structure — challenge for navigation.

SEE ALSO: R. Akscyn and F. Halasz's *Topics on Hypertext* [AH91] (updated papers)

KEYWORD: MSc!Justification • link types!taxonomy of

- [Der97] Brenda Dervin, 1997. Given a context by any other name: Methodological tools for taming the unruly beast. In Pertti Vakkari, Reijo Savolainen, and Brenda Dervin (eds.), *Information Seeking in Context*, (pp. 13 – 38). Taylor Graham. ISBN 0-947568-71-9.

KEYWORD: information seeking • Usability!context • context

- [DFAB98] Alan Dix, Janet Finlay, Gregory Abowd, and Russell Beale, 1998. *Human-Computer Interaction*. Prentice Hall Europe, 2nd edition. ISBN 0-13-239864-8.

- [DFAB04] Alan Dix, Janet Finlay, Gregory Abowd, and Russell Beale, 2004. *Human-Computer Interaction*. Prentice Hall, third edition. ISBN 0-13-046109-1.

- [DFJ⁺05] Li Ding, Tim Finin, Anupam Joshi, Yun Peng, Rong Pan, and Pavan Reddivari, October 2005. Search on the Semantic Web. *IEEE Computer*, 38(10):62 – 69. URL http://ieeexplore.ieee.org/xpls/abs_all.jsp?isnumber=32474&arnumber=1516060&count=19&index=9.

- [DFL88] Susan T. Dumais, George W. Furnas, and Thomas K. Landauer, 15 – 19 May 1988. Using latent semantic analysis to improve access to textual information. In Soloway et al. [SFS88].

CALLNo: QA76.9.H85C44 1988

KEYWORD: LSI

- [DG98] Andrew Dillon and Ralph Gabbard, Fall 1998. Hypermedia as an educational technology: A review of the quantitative research literature on learner comprehension, control and style. *Review of Educational Research*, 68(3):322 – 349.

ANNOTATION:

- reviewed empirical lit about use of HT and MM in education
- found that much of the lit were not up to ‘minimally acceptable scientific criteria’. Examined 30 articles from 1990–1996.
- Comprehension
 - Overall no sig. diff. however some authors have taken this to mean that HT is at least as good as paper and therefore worthy of further R&D efforts
- pp.8–11: found suggestion of strong task dependency on the successful exploitation of HT/MM. Paper may be beter for some things but HT/HM/MM for others.
- p.13: learner control
- pp.16–7 (337–8): field independant and field independant learners *but* no predictive or explanatory power

- Some features can help (e.g. cueing) poorer performing students
- HT ultimately viewed as a method of information delivery
- Comments about Chen & Rada (1996) [CR96] three times
- Frey & Simonson (1993):
 - measurement of learning styles
 - individual differences
- difficulty of measuring comprehension
- task-dependency
- user control of HT — using HT to create own structure

SEE ALSO:

- Chen & Rada's meta-analysis [CR96],
- Individual Diffs in IJHCS [DW96],
- Quentin-Baxter's survey [QB99]
- Dee-Lucas & Larkin's Hypertext Segmentation and Goal Compatibility [DLL99]

KEYWORD: Evaluation • Review

- [DHS96] Nils Dählback, Kristina Höök, and Marie Sjölander, 1996. Spatial cognition in the mind and in the world: The case of hypermedia navigation. In *The Eighteenth Annual Meeting of the Cognitive Science Society, CogSci '96*, (pp. 195 – 200).

KEYWORD: spatial ability!Jason Satel

- [Die06] Jan L. G. Dietz, 2006. The deep structure of business processes. *Communications of the ACM*, 49(5):58 – 64. URL ([URL:http://doi.acm.org/10.1145/1125944.1125976](http://doi.acm.org/10.1145/1125944.1125976)).

KEYWORD: task_analysis

- [Dil85] Ronna F. Dillon (ed.), 1985. *Individual Differences in Cognition*, volume 2. Academic Press, Inc. ISBN 0-12-216402-4.

CALLNO: BF 311 I5 1983 v.2

- [Dil91a] Andrew Dillon, 1991. Readers' models of text structures: the case of academic articles. *International Journal of Man-Machine Studies*, 35:913 – 925.

ANNOTATION:

- We know that readers form a mental representation of a paper document's structure that facilitates non-serial reading. The same holds for text presented on a computer screen.
- Also, a cloze test does not measure hypertext comprehension. (See also Ch. 4 of HT in Context [MDR91b])

SEE ALSO: Dillon & Schaap [DS96] for a follow-up with non-experts

KEYWORD: Reading • CogPsych

- [Dil91b] Martin Dillon (ed.), 1991. *Interfaces for Information Retrieval and Online Systems The State of the Art*. Greenwood Press. ISBN 0-313-27494-0.

CALLNo: Z699.35.U74 I57 1991

- [Dil92] Andrew Dillon, 1992. Reading from paper versus screens: a critical review of the empirical literature. *Ergonomics*, 35(10):1297 – 1326.

ANNOTATION: Considers differences in terms of outcome and processes. Concludes that single variable explanations are insufficient.

SEE ALSO:

- O'Hara & Sellen in CHI97 [OS97]
- Muter in Oostendorp and de Mul(1996) [Mut96]

KEYWORD: Review • CogPsych • Reading

- [Dil94] Andrew Dillon, 1994. *Designing Usable Electronic Text: Ergonomic Aspects of Human Information Usage*. Taylor & Francis. ISBN 0-7484-0112-1 (cloth) / 0-7484-0113-X (paper).

- [Dil96a] Andrew Dillon, 1996. Myths, misconceptions and an alternative perspective on information, usage and the electronic medium. In Jean-François Rouet, Jarmo J. Levonen, Andrew Dillon, and Rand J. Spiro (eds.), *Hypertext and Cognition*. Lawrence Erlbaum Associates.

KEYWORD: CogPsych

- [Dil96b] Andrew Dillon, 1996. TIMS: A framework for the design of usable electronic text. In Herre van Oostendorp and Sjaak de Mul (eds.), *Cognitive Aspects of Electronic Text Processing*, volume LVIII of *Advances in Discourse Processes*, chapter 5, (pp. 99 – 119). Ablex Publishing Corporation.

- [Dil99] Andrew Dillon, 1999. TIME — a multi-leveled framework for evaluating *International Journal on Digital Libraries*, 2(2/3):170 – 177. ISSN 1432-5012 (printed version), 1432-1300 (electronic version).

ANNOTATION: Contrast with Nielsen's *The Matters That Really Matter* [Nie89]

- [Dil00] Andrew Dillon, April 2000. Spatial-semantics: How users derive shape from information space. *Journal of the American Society for Information Science*, 51(6):521 – 528. URL [http://dx.doi.org/10.1002/\(SICI\)1097-4571\(2000\)51:6<521::AID-ASI4>3.0.CO;2-5](http://dx.doi.org/10.1002/(SICI)1097-4571(2000)51:6<521::AID-ASI4>3.0.CO;2-5).

ANNOTATION:

- pp. 521, 526: usability can be measured
by **time** efficiency
output cost effectiveness
affective cost satisfaction
- p. 523: 'early data from several studies which suggest that landmark, route, and survey knowledge are each best suited to different types of tasks' (cites Thorndyke & Hayes-Roth, 1982)

- p.523: shape defined (with reference to Dillon & Schaap, 1996) as ‘...notion of information possessing shape (those spatial-semantic properties that convey coherence) that users can exploit both semantically and physically to gather meaning.’ (Cf. p.525 ref to van D. & K.)
- p.523: ‘when asked to describe an information space after interaction, users employ terms that convey relationships and elaborations as well as purely spatial linkages such as position and sequence ... it makes best sense to think of the user’s model of information space as being constructed out of both.’
- p.525: ‘If, as van Dijk and Kintsch (1983) have long argued, information has a form that reflects its community’s practices, we may find that designing the information space to take account of the shaping process has commensurate benefits in training new practitioners in a discipline to construct meaning.’
- p.526 2nd last ¶: basic advice for structure to help novices (from the HT research with ref to Chen & Czerwinski [CC97])
- p.527: ‘... Only then can we move the field beyond designing for usability to designing for augmentation.’

SEE ALSO:

history

- Dillon et al. [DRM89] was about an experiment (with non-experts) reading journal articles. A major conclusion was that human cognition involves integration of information beyond the sentence level.
- Dillon & Schaap [DS96] followed-up that study using experts.

field (in-)dependence

- B. Allen in DL98 [All98] and JASIS [All00]
- Charney [Cha94, pp. 252, 262]
- Dillon & Watson in LJHCS v.45 [DW96, p.627]
- Dillon in JASIS 51(6) [Dil00]
- N. Ford’s *Cognitive Styles and Virtual Environments* also in JASIS 51(6) [For00]
- Jennings et al. in CogErg91 [JBM91]

KEYWORD: individual differences • Navigation • Classic • Info Shape

[Dil01] Andrew Dillon, March 2001. Beyond usability: Process, outcome and affect in human computer interactions. [URL:http://www.gslis.utexas.edu/~adillon/publications/beyond_usability.pdf](http://www.gslis.utexas.edu/~adillon/publications/beyond_usability.pdf). This paper was presented as the Lazerow Lecture, at the Faculty of Information Studies, University of Toronto.

[Dil04a] Andrew Dillon, 2004. *Designing Usable Electronic Text*. CRC Press, second edition.

[Dil04b] Andrew Dillon, 2004. Shape: information as a structured space. In *Designing Usable Electronic Text* [Dil04a], chapter 7, (pp. 116 – 133).

ANNOTATION:

defn 'shape'

- pp.118 & 126
- relating to three meanings of 'structure' in classical HT literature (p.118)
- 'those spatial-semantic properties that convey coherence' (p.126)

pp.119–120 Kintsch & van Dijk's schema theory of discourse comprehension contrasted with Johnson-Laird's view

- K&vanD: macropropositional hierarchy 'organised set of global or thematic units about the events, acts, and actors in the text'
- clarification about cloze test from [Dil91a]
- concludes (p.120) that no difference *in practice* for human factors work

p.120 'Viewing structure as a component of texts leads directly to the view of information as space and the readers as navigator. This in turn invites a direct mapping between psychological theory and information design that has been unquestioningly accepted by researchers in this domain.'

applications of schema theory

- there is a continuum from landmark knowledge to route knowledge to map (or survey) knowledge (p.121)
- expertise as socialisation in community (p.129) (see also Charney's chapter [Cha94])

evidence for shape

- p.123, first full paragraph
- p.127

narrative & imposition of structure

- 'intercoupling of spatial and semantic components of memory' (p.126)
- 'Humans manifest a native cognitive tendency to impose structure on information through use which is crucial to identifying appropriate information visualisations (p. 126 – 127)
- 'All the evidence we have accumulated on the spatial-semantic issues suggests that spatial cues are coupled to semantic information as the user naturally seeks to abstract regularities in the information space.' (p.132)

KEYWORD: Info Shape

[Dit01] Steve Ditlea, November 2001. The electronic paper chase. *Scientific American*, (pp. 50 – 55). URL <http://www.sciam.com/2001/1101issue/1101ditlea.html>.

KEYWORD: hardware!digital paper, hardware!e-paper

[DK06] Alexander J. DeWitt and Jasna Kuljis, May + June 2006. Is usable security an oxymoron? *interactions*, 13(3):41 – 44. URL <http://doi.acm.org/10.1145/1125864.1125889>.

SEE ALSO: Why Johnny Can't Encrypt [AW99]

- [DKB88] J. Davis, M. Kritchevsky, and U. Bellugi (eds.), 1988. *Spatial cognition: Brain bases and development*. Hillsdale, NJ: Lawrence Erlbaum Associates.

KEYWORD: spatial ability!Jason Satel

- [DL91] Paul Delany and George P. Landow (eds.), 1991. *Hypermedia and Literary Studies*. The MIT Press.

CALLNo: PN98.E4 H97 1991

- [DL96] Diana Dee-Lucas, 17 – 22June 1996. Instructional hypertext: Study strategies for different types of learning tasks. In *ED-MEDIA 96*. Boston, MA, USA: Association for the Advancement of Computing in Education.

ANNOTATION: (1) not in Dillon & Gabbards's survey [DG98], (2) 'The findings indicate that readers are flexible in developing goal-specific strategies for studying hypertext, and that different text features support different types of hypertext processing'

KEYWORD: Expertise

- [DL99] Diana Dee-Lucas, 1999. Information location in instructional hypertext: Effects of content domain expertise. In B. Collis and R. Oliver (eds.), *Proceedings of the ED-MEDIA 99 — World Conference on Educational Multimedia and Hypermedia*, (pp. 242 – 247). Charlottesville, VA: Association for the Advancement of Computing in Education.

SEE ALSO: SuperBook [ERG⁺89] for a contrasting experiment (compare the overlapping vs. non-overlapping)

KEYWORD: System!SuperBook • Expertise • spatial ability!Jason Satel

- [DL00] Nils Dählback and Peter Lönnqvist, 2000. Navigation and learning: A cognitive analysis of user tasks in electronic information spaces. In *Proceedings of NordiCHI '00*.

KEYWORD: spatial ability!Jason Satel

- [DL07] Diana DeStefano and Jo-Anne LeFevre, May 2007. Cognitive load in hypertext reading: A review. *Computers in Human Behavior*, 23(3):1616 – 1641. URL <http://dx.doi.org/10.1016/j.chb.2005.08.012>.

ANNOTATION: Abstract:

A process model of hypertext reading was used to generate predictions about the effects of hypertext features on cognitive processing during text navigation and comprehension. We evaluated the predictions of the model with respect to the extant literature, focusing on studies in which versions of hypertexts were compared. Consistent with our predictions, the increased demands of decision-making and visual processing in hypertext impaired reading performance. Individual differences in readers, such as working memory capacity and prior knowledge, mediated the impact of hypertext features. For example, readers with low working memory and low

prior knowledge were usually disadvantaged in hypertext. Some benefits were observed for learners with low prior knowledge, however, if the hypertext structure was hierarchical and consistent with that of the knowledge domain. We also surveyed the effectiveness of structural features designed to reduce cognitive load, including graphical overviews, restricted access to links, and visible link types. Complex graphical overviews did not reliably enable learning and navigation, whereas navigational support from restricted access and visible link types were helpful. We identified gaps in the empirical literature and suggested future studies to investigate cognitive processes in hypertext reading.

KEYWORD: CogPsych • HT • Reading

- [DLF89] Simon P. Davies, Anthony J. Lambert, and John M. Findlay, 1989. The effects of the availability of menu information during command learning in a word processing application. *Behaviour & Information Technology*, 8(2):135 – 144. ISSN 0144-929X.

KEYWORD: CogPsych!LIS 861 • menus

- [DLL95] Diana Dee-Lucas and Jill Larkin, 1995. Learning from electronic texts: Effects of interactive overview for information access. *Cognition and Instruction*, 13(3):431 – 468.

ANNOTATION: Not in Dillon & Gabbards's survey [DG98]

SEE ALSO:

- navigation as different uses of text [Spe99]
- individual differences and navigation [LK98]
- Robinson et al.'s Evidence of spatial encoding of study materials [RRK99]

KEYWORD: spatial ability • individual differences

- [DLL99] Diana Dee-Lucas and Jill Huston Larkin, 1999. Hypertext segmentation and goal compatibility: Effects on study strategies and learning. *Journal of Educational Multimedia and Hypermedia*, 8(3).

ANNOTATION:

Abstract 'Hypertext allows students to select information for study according to their individual needs. This flexibility potentially increases study efficiency, but may consequently decrease breadth of learning. The current research examined this trade-off for hypertext segmented either into many small units (more segmented) or fewer larger units (less segmented). It compared study strategies and text recall with a more- and less-segmented hypertext when (a) the more specific units of the more-segmented hypertext facilitated information location for the study goal, and (b) the location of goal-related information was equally apparent with both hypertexts. Readers with a more-segmented hypertext focused on goal-related content, resulting in detailed memory for goal

units but narrower overall recall. Readers with a less-segmented hypertext explored unrelated units, and recalled a broader range of content. However, when the larger size of these less-segmented units made information location more difficult, fewer readers completed the goal. This research suggests that different content segmentations may be appropriate for different types of goals with hypertext. When the text segmentation is incompatible with the study goal, effective use of hypertext may depend on learner characteristics influencing study persistence (e.g., prior knowledge, motivation, study skills, etc.).'

notes 'different content segmentations may be appropriate for different types of goals.' 'When segmentation is incompatible with study goal then indiv. diffs. may be deciding factors'

SEE ALSO:

- Domain Knowledge, Interest, and Hypertext Navigation: A Study of Individual Differences by Lawless et al. [LK98]
- Dillon & Gabbards's survey [DG98]

KEYWORD: individual differences

- [DM96] Andrew Dillon and Michael G. Morris, 1996. User acceptance of information technology: Theories and models. In Martha E. Williams (ed.), *Annual Review of Information Science and Technology*, volume 31, chapter 1, (pp. 3 – 32). American Society for Information Science.

SEE ALSO: [MBGJ00]

KEYWORD: Review • Usability

- [DM03] Roberto Di Pietro and Luigi V. Maancini, September 2003. Security and privacy issues of handheld and wearable wireless devices. *Communications of the ACM*, 46:75 – 79.
- [DMB05] Ricard E. Downing, Joi L. Moore, and Steven W. Brown, March 2005. The effects and interaction of spatial visualization and domain expertise on information seeking. *Computers in Human Behavior*, 21(2):195 – 209. URL [URL \(http://dx.doi.org/10.1016/j.chb.2004.03.040\)](http://dx.doi.org/10.1016/j.chb.2004.03.040).

ANNOTATION: Abstract:

Information seeking skills are becoming increasingly important as rapid and widespread developments in technology have made information available in more formats and from more sources than ever before. Research in human computer interaction (HCI) has demonstrated that primary cognitive abilities represent a powerful predictor of information-seeking success in electronic information systems. Specifically, spatial visualization ability (SVA) seems to be particularly related to hierarchical menus systems navigation within databases, online learning environments, information archival systems, and virtually all internet web sites. Research indicates that individuals with low SVA take longer to complete tasks and experience more errors on first attempts to find information

in hierarchical databases compared to those with high SVA. Understanding the influences of SVA as well as its interaction with other aspects of individual differences, such as domain expertise, is critical to the design of systems intended to accommodate individual differences in users.

Thirty-five college students (23 males and 12 females) were selected from the general student body of two universities and assigned to groups based upon their self-reported membership in one of two specific disciplines: business (n=26) or biology (n=9). Participants were then assigned to groups based upon scores on tests of SVA using a median-split. Each participant conducted five searches: one neutral search, two searches for business related information, and two searches for biology related information using the First-Search archival search tool.

A 2×2 factorial Analysis of Variance with one between-groups variable (high vs. low SVA) and one within-group variable (high vs. low domain expertise) indicated a significant main effect of SVA as well as a significant main effect of Domain Expertise on the time required to find their first relevant article on the search topic. The analysis also revealed that there was no main effect for SVA on the total number of relevant articles found during the search period but there was a significant main effect of Domain Expertise on the total total-number-of-relevant-articles found. There was no interaction between SVA and Domain Expertise on either time to first article or total number of articles found.

Results of the study extend existing knowledge regarding the effects of SVA and domain expertise on information seeking by demonstrating a strong effect of SVA and domain expertise on information seeking skills. The results of this study also provide evidence in support of interface designs that are friendlier to information seekers who have low SVA. Related findings and suggestions for further research are discussed.

- Seems to confirm Dillon & Watson's suggestion that training can overcome individual differencesDi:UAinHCI
- Seems to confirm findings reported in Charney's chapter [Cha94] that domain experts process text differently
- Methodology: used median-split on spatial ability
- Review of some earlier studies of individual differences with apparent effects on success with hypertext

KEYWORD: spatial ability • Expertise • individual differences

[DMR93] Andrew Dillon, Cliff McKnight, and John Richardson, 1993. Space — the final chapter or why physical representations are not semantic intentions. In McKnight et al. [MDR93], chapter 8, (pp. 169 – 191). URL ([URL:http://telecaster.lboro.ac.uk/HaPP/contents.html](http://telecaster.lboro.ac.uk/HaPP/contents.html)).

CALLNo: QA76.76.H94 H95 1993

KEYWORD: CogPsych

- [DMW05] Gord Davison, Steve Murphy, and Rebecca Wong, 2005. The use of eBooks and interactive multimedia as alternative forms of technical documentation. In *SIGDOC '05: Proceedings of the 23rd annual international conference on Design of communication*, (pp. 108–115). New York, NY: ACM Press. ISBN 1-59593-175-9. URL [URL: http://doi.acm.org/10.1145/1085313.1085340](http://doi.acm.org/10.1145/1085313.1085340).

- [DNB02] Devanshu Dhyani, Wee Keong Ng, and Sourav S. Bhowmick, 2002. A survey of web metrics. *ACM Computer Surveys*, 34(4):469 – 503. URL [URL: http://doi.acm.org/10.1145/592642.592645](http://doi.acm.org/10.1145/592642.592645).

SEE ALSO: Botafogo et al. [BRS92]

KEYWORD: Evaluation • Metric • System!Hyperties • Survey

- [Döm94] Peter Dömel, May 20 1994. Webmap — a graphical hypertext navigation tool.

- [Dou09] Paul Douglas, February 2009. The future of search. *Practical Webdesign*, (185):36 – 41.

KEYWORD: information search • System!WWW!Search

- [DR96] Christine Diehl and Michael Ranney, 1996. Assessing spatial navigation tools with instructional hypermedia for cognitive science. In *ICLS '96: Proceedings of the 1996 international conference on Learning sciences*, (pp. 36 – 43). International Society of the Learning Sciences. ISBN 1-880094-23-1.

ANNOTATION: Abstract

We investigated the influence of spatial visualization, spatial reasoning, and environmental cognition skills on students' use of instructional hypermedia navigation tools. Forty undergraduate cognitive science students were randomly assigned to one of two hypermedia system conditions: a map-like navigation tool ("spatial" representation) or a menu-like navigation tool ("less spatial"). All students performed a searching activity, then browsed freely through the system. Students then commented on their perceptions of the system and drew concept maps of the contents. Regression analyses indicate that performance with the map-like navigation tool is positively correlated with environmental cognition, whereas performance with the menu-like navigation tool is positively correlated with spatial visualization and reasoning. The general findings suggest that spatial navigation tools should be incorporated into instructional hypermedia with less spatial navigation methods to complement students' spatial cognitive abilities.

KEYWORD: spatial ability

- [Dr.05] Dr. Usability, 2005. Ask dr.usability. *interactions*, 12(1):9. URL [URL: http://doi.acm.org/10.1145/1041280.1041287](http://doi.acm.org/10.1145/1041280.1041287).

KEYWORD: discount usability evaluation

- [Dr06] Dr. Usability, May + June 2006. Lost in the localization forest. *interactions*, 13(3):8. URL [URL <URL:http://doi.acm.org/10.1145/1125864.1125872>](http://doi.acm.org/10.1145/1125864.1125872).

KEYWORD: HCI!cultural factors • CS4173 (WWW)

- [Dra94] Nikos Drakos, 1994. From text to hypertext: A post-hoc rationalisation of LaTeX2HTML. *Computer Networks and ISDN Systems*, 27:215 – 224. Presented at the First World-Wide Web Conference.

ANNOTATION: Converting hierarchical and structured text to HTML.

KEYWORD: HT!Conversion

- [Dri04] Siobhán Clarke and Cormac Driver, August 2004. Context-aware trails. *IEEE Computer*, 37:97 – 99.

SEE ALSO: Tague-Sutcliffe's *Measuring Information* [TS95]

- [DRM89] Andrew Dillon, John Richardson, and Cliff McKnight, 1989. Human factors of journal usage and design of electronic texts. *Interacting with Computers*, 1(2):183 – 189. URL [URL <URL:http://dx.doi.org/10.1016/0953-5438\(89\)90025-8>](http://dx.doi.org/10.1016/0953-5438(89)90025-8).

SEE ALSO: NATO Conference [JM90]

KEYWORD: e-pubs • CogPsych

- [DS83] Ronna F. Dillon and Ronald R. Schmeck (eds.), 1983. *Individual Differences in Cognition*, volume 1. Academic Press, Inc. ISBN 0-12-216401-4.

CALLNo: BF 311 I5 1983 v.1

- [DS87] Norman M. Delisle and Mayer D. Schwartz, April 1987. Contexts — a partitioning concept for hypertext. *ACM Transactions on Office Information Systems*, 5(2):168 – 186.

- [DS96] Andrew Dillon and Dille Schaap, October 1996. Expertise and the perception of shape in information. *Journal of the American Society for Information Science*, 47(10):786 – 788. URL [URL <URL:http://dx.doi.org/10.1002/\(SICI\)1097-4571\(199610\)47:10<786::AID-ASI7>3.0.CO;2-Z>](http://dx.doi.org/10.1002/(SICI)1097-4571(199610)47:10<786::AID-ASI7>3.0.CO;2-Z).

ANNOTATION: Also available from [URL:http://www3.interscience.wiley.com.ezproxy.library.dal.ca/cgi-bin/abstract/57664/ABSTRACT](http://www3.interscience.wiley.com.ezproxy.library.dal.ca/cgi-bin/abstract/57664/ABSTRACT)

SEE ALSO:

- followed-up by Spatial Semantics [Dil00] (also about shape of information)
- sounds like Bonnie Meyer's (1984) experiment with text expectations [Cha94, pp.246 – 247]
- follows-up 'Readers' models of text structures: the case of academic articles' [Dil91a] with non-experts

KEYWORD: Expertise • Navigation • Info Shape

[DSHF07] Prabu David, Mei Song, Andrew Hayes, and Eric S. Fredin, February 2007. A cyclic model of information seeking in hyperlinked environments: The role of goals, self-efficacy, and intrinsic motivation. *International Journal of Human-Computer Studies*, 65(2):170 – 182. URL [URL <URL:http://dx.doi.org/10.1016/j.ijhcs.2006.09.004>](http://dx.doi.org/10.1016/j.ijhcs.2006.09.004).

[Dub90] CPR Dubois, 1990. Composite document architecture: Increased scope for text retrieval systems. In Gillman [Gil90]. Proceedings of ‘The User’s Perspective’ (1988) and ‘Text Management’ (1989).

CALLNo: QA76.9.T48 I59 1988-1989

[Duc05] Bob Ducharme, April 2005. RDF: The resource description framework. *Dr. Dobbs Journal*, (pp. 38 – 41).

[Dum91] Susan T. Dumais, 1991. Improving the retrieval of information from external sources. *Behavior Research Methods, Instruments, & Computers*, 23(2):229 – 236.

KEYWORD: LSI

[Dum93a] Susan T. Dumais, 5 May 1993. Personal communication. e-mail. Dumais is the corresponding author on many papers about latent semantic indexing and a co-author of others. [FDD⁺88; DDL⁺88; DDF⁺90; Dum91].

[Dum93b] Susan T. Dumais, 18 June 1993. Personal communication. e-mail.

[Dum96a] Susan T. Dumais, 29 January 1996. Personal communication. e-mail.

[Dum96b] Susan T. Dumais, 9 July 1996. Personal communication.

[Dum03] Joseph S. Dumas, 2003. User-based evaluations. In Julie A. Jacko and Andrew Sears (eds.), *The Human-Computer Interaction Handbook: Fundamentals, Evolving Technologies, And Emerging Applications*, chapter 56, (pp. 1093 – 1117). Lawrence Erlbaum and Associates. ISBN 0-8058-4468-6 (paper).

KEYWORD: Evaluation • Testing • Review

[Dun90] Jeff Duntemann, May 1990. Grinding the speckled axe. *Dr. Dobb’s Journal*, 15(5):141 – 145. Issue #164.

KEYWORD: Programming

[DV97] Andrew Dilon and Misah Vaughan, 1997. “it’s the journey and the destination”: Shape and the emergent property of genre in evaluating digital documents. *The New Review of Hypermedia and Multimedia*, 3:91 – 106. CITATION DETAILS NOT CONFIRMED — OBTAINED FROM WWW.

KEYWORD: Info Shape • Navigation • Review

[DvDD07] Christian Doerr, Daniel von Dincklage, and Amer Diwan, 2007. Simplifying web traversals by recognizing behavior patterns. In *HT’07: Proceedings of the 18th conference on Hypertext and hypermedia* [ACM07], (pp. 105 – 114). General Chair-Simon Harper and Program Chairs Helen Ashman, Mark Bernstein, Alexandra Cristea, Hugh C. Davis, Paul De Bra, Vicki Hanson, and Dave Millard.

ANNOTATION: Server code to insert shortcut links based on observed patterns of user behaviour. Interesting that many users do not use the shortcuts but follow previous patterns.

KEYWORD: HT!well-trodden paths • HT!AutoGen

- [DW96] Andrew Dillon and Charles Watson, 1996. User analysis in HCI—the historical lessons from individual differences research. *International Journal of Human-Computer Studies*, 45(6):619 – 637. URL [URL \(URL:http://dx.doi.org/10.1006/ijhc.1996.0071\)](http://dx.doi.org/10.1006/ijhc.1996.0071).

ANNOTATION: Some notes:

- p. 625 '[F]or most components of info processing that have been subjected to differential investigations, individual differences have been observed.'
- p. 626 "Cognitive style" refers to relatively stable patterns of information processing that are displayed by an individual. In a sense it can be seen as the cognitive-psychological. or more accurately, information-processing equivalent of personality.'
- p. 627 comment about uselessness of field dependence/independence distinctions
- pp. 631 – 3 Implications section. 'What is interesting from both these studies is the explicit mapping of individual differences to interface characteristics. Both show that even though there are differences amongst users that predict performance with interactive systems, appropriate design of the interface and/or training can reduce these differences.' (p. 633)

SEE ALSO:

general

- The Matters That Matter by Nielsen [Nie89]

field (in-)dependence

- B. Allen in DL98 [All98, p. 9] and JASIS [All00]
- Charney [Cha94, pp. 252, 262]
- Dillon & Watson in IJHCS v.45 [DW96, p. 627]
- Dillon in JASIS 51(6) [Dil00]
- N. Ford's *Cognitive Styles and Virtual Environments* also in JASIS 51(6) [For00]
- Jennings et al. in CogErg91 [JBM91]

KEYWORD: Review • HCI • individual differences

- [EAR⁺05] Marco Eichelberg, Thomas Aden, Jörg Riesmeier, Asuman Dogac, and Gokce B. Laleci, 2005. A survey and analysis of electronic healthcare record standards. *ACM Computer Surveys*, 37(4):277 – 315. URL [URL \(URL:http://doi.acm.org/10.1145/1118890.1118891\)](http://doi.acm.org/10.1145/1118890.1118891).

KEYWORD: EHR

[Eas84] K. D. Eason, 1984. Towards the experimental study of usability. *Behaviour And Information Technology*, 3(2):133 – 143.

KEYWORD: HCI

[Eas88] Ken Eason, 1988. *Information Technology and Organisational Change*. Philadelphia: Taylor & Francis. ISBN 0-85066-388-1. Reprinted 1990.

[Eas90] Steve M. Easterbrook, 1990. What is hypertext? In Gillman [Gil90], (pp. 119 – 137). Proceedings of ‘The User’s Perspective’ (1988) and ‘Text Management’ (1989).

CALLNo: QA76.9.T48 I59 1988-1989

KEYWORD: HT!General • MSc!Justification

[EBT04] K. Andrew Edmonds, James Blustein, and Don Turnbull, 2004. A personal information & knowledge infrastructure integrator. *Journal of Digital Information (JoDI)*, 5(1). Article number 243, 2004-05-12.

SEE ALSO:

- Wireless Location Privacy Protection [SHG03]
- Welcome to the mobile life! (about ubicomp) [Hol06]

[ECFH06] K. Anders Ericsson, Neil Charness, Paul J. Feltovich, and Robert R. Hoffman (eds.), 2006. *The Cambridge Handbook of Expertise and Expert Performance*. Cambridge University Press. ISBN 052184097X.

KEYWORD: Expertise

[Edm03] Andrew Edmonds, 2003. Uzilla: A new tool for web usability testing. *Behavior Research Methods, Instruments, & Computers*, 35(2):194 – 201.

[Edw95] Edward A. Fox, Robert M. Akscyn, Richard K. Furuta, and John J. Leggett (eds.), April 1995. Special issue. *Communications of the ACM*, 38(4).

SEE ALSO: May 2001 issue [Edw01]

KEYWORD: DL

[Edw01] Edward A Fox and Gary Marchionini (eds.), May 2001. Special issue. *Communications of the ACM*, 44(5).

SEE ALSO: April 1995 issue [Edw95]

KEYWORD: DL

[EE01] Pamela Ellis and Steve Ellis, February 2001. Measuring user experience. *Web Techniques*, 6(2):29 – 31. ISSN 1086-556X.

SEE ALSO: advice from Don Norman about focus groups [Nor98, pp. ?]

KEYWORD: Usability • HCI!Intro

[EFH79] Ruth B. Ekstrom, John W. French, and Harry H. Harman, 1979. Cognitive factors: Their identification and replication. *Multivariate Behavioral Research Monographs*, 79-2.

- [EFHD76] R. B. Ekstrom, J. W. French, H. H. Harman, and D. Dermen, 1976. *Manual for Kit of Factor-Referenced Cognitive Tests*. Educational Testing Service, Princeton, NJ.
- ANNOTATION: Cited by Allen [All98; All00], Chen [CCM00], Cribbin and Chen [CC01], Curl et al. [COS98], Stanney and Salvendy [SS95]
- [EFHW93] David Ellis, Jonathan Furner-Hines, and Peter Willett, 1993. Measuring the degree of similarity between objects in text retrieval systems. *Perspectives in Information Management*, 3(2).
- SEE ALSO: Jones and Furnas [JF87]
- [EFHW94a] David Ellis, Jonathan Furner-Hines, and Peter Willett, June 1994. On the creation of hypertext links in full-text documents: Measurement of inter-linker consistency. *The Journal of Documentation*, 50(2):67 – 98.
- SEE ALSO:
- JASIS 1996 article [EFW96],
 - SIGIR 1994 paper [EFHW94b],
 - Computing Survey's 1999 article [FEW99]
- KEYWORD: Metric • Evaluation • Classic
- [EFHW94b] David Ellis, Jonathan Furner-Hines, and Peter Willett, 3 – 6 July 1994. On the measurement of inter-linker consistency and retrieval effectiveness in hypertext databases. In W. Bruce Croft and C. J. van Rijsbergen (eds.), *Proceedings of the 17th Annual International ACM-SIGIR Conference on Research and Development in Information Retrieval*, (pp. 51 – 60). Dublin, Ireland: Springer Verlag. ISBN 3-540-19889-X.
- SEE ALSO: [EFHW94a; EFW96; FEW99]
- [EFW96] David Ellis, Jonathan Furner, and Peter Willett, April 1996. On the creation of hypertext links in full-text documents: Measurement of retrieval effectiveness. *Journal of the American Society for Information Science*, 47(4):287 – 300.
- SEE ALSO: JDoc paper [EFHW94a], and Computing Surveys paper [FEW99]
- [EG85] Dennis E. Egan and Louis M. Gomez, 1985. Assaying, isolating, and accomodating individual differences in learning a complex skill. In Dillon [Dil85], (pp. 174 – 218).
- CALLNO: BF 311 I5 1983 v.2
- KEYWORD: spatial ability • spatial ability!Jason Satel
- [EG98] Max J. Egenhofer and Reginald G. Golledge (eds.), 1998. *Spatial and Temporal Reasoning in Geographic Information Systems*. Oxford University Press. ISBN 0-19-510342-4.
- [Ega98] D. Egan, 1998. Individual differences in human-computer interaction. In Helander et al. [HLP97], (pp. 543–568).
- CALLNO: QA 76.9 H85 H36 1997
- SEE ALSO: Selected chapters: [May97; Vor97; WW97; Tul97]
- KEYWORD: spatial ability • spatial ability!Jason Satel

- [EH89] Deborah M. Edwards and Lynda Hardman, 1989. 'lost in hyperspace': Cognitive mapping and navigation in a hypertext environment. In McAleese [McA89].
CALLNo: QA76.76.H94H97 1989
KEYWORD: spatial ability • Navigation • Info Shape?
- [EK00a] Michael W. Eysenck and Mark T. Keane, 2000. *Cognitive Psychology: A Students's Handbook*. Taylor & Francis, fourth edition. ISBN 0-86377-551-9.
- [EK00b] Michael W. Eysenck and Mark T. Keane, 2000. *Language Comprehension*, chapter 12, (pp. 335 – 362). Taylor & Francis, fourth edition. ISBN 0-86377-551-9.
KEYWORD: CogPsych • Reading
- [ELK⁺91] Dennis E. Egan, Michael E. Lesk, R. Daniel Ketchum, Carol C. Lochbaum, Joel R. Remde, Michael Littman, and Thomas K. Landauer, 15 – 18 December 1991. Hypertext for the electronic library? CORE sample results. In *Hypertext '91 Proceedings* [ACM91], (pp. 299 – 312).
KEYWORD: System!CORE
- [Eng] User Interface Engineering. Articles and other resources. URL [URL: http://www.world.std.com/%7euieweb/moreart.com](http://www.world.std.com/%7euieweb/moreart.com). Articles reprinted from User Interface Engineering's newsletter 'Eye for Design' [Eye].
KEYWORD: HCI!Intro
- [ERG⁺89] Dennis E. Egan, Joel R. Remde, Louis M. Gomez, Thomas K. Landauer, Jennifer Eberhardt, and Carol C. Lochbaum, January 1989. Formative design-evaluation of SuperBook. *ACM Transactions on Information Systems*, 7(1):30 – 57.
ANNOTATION: not really HT, conflicting accounts of an experiment, mostly about user interfaces evaluation, read for GSLIS 861
SEE ALSO: HT '87 [RGL87] and Chapter in HT:A ψ Persp. [LER⁺93]
KEYWORD: Evaluation • System!SuperBook
- [ES93] K. Anders Ericsson and Herbert A. Simon, 1993. *Protocol Analysis: Verbal Reports as Data*. The MIT Press, revised edition. ISBN 0-262-05047-1/0-262-55023-7 (pbk.).
- [Eye] Jared M. Spool (ed.). Eye for design, User Interface Engineering, Inc., 800 Turnpike St., Ste. 101, North Andover, MA 01854, USA. ISSN 1095-2594. URL [URL: http://www.uie.com/](http://www.uie.com/).
SEE ALSO: Sample articles [Eng] and related special issue of WebTechs [Use01]
KEYWORD: HCI
- [f2c] f2c [computer program]. Available by ftp from [research.att.com](ftp://research.att.com) (login netlib, in directory f2c).
ANNOTATION: FORTRAN to C converter

- [Fag89] Joel L. Fagan, March 1989. The effectiveness of a nonsyntactic approach to automatic phrase indexing for document retrieval. *Journal of the American Society for Information Science*, 40(2):115 – 132.

ANNOTATION: differs from Salton et al: doesn't use thesaurus classes, uses adjacency and frequency instead. p.126 suggestion for approximate phrase matching.

SEE ALSO: [PJ93]

KEYWORD: Concept Identification • Information Retrieval • Classic

- [Fah88] Eanass Fahmy, 1988. *Programmatically Generating Connections in Document Forests*. Master's thesis, Queen's University, Kingston, Ontario, Canada. Department of Computing and Information Science.

- [FB89] Eanass Fahmy and David T. Barnard, 14 December 1989. Adding hypertext links to an archive of documents. Technical Report 86-265, Department of Computing and Information Science, Queen's University at Kingston.

KEYWORD: System!MAESTRO

- [FB90] Eanass Fahmy and David T. Barnard, September 1990. Adding hypertext links to an archive of documents. *The Canadian Journal of Information Science*, 15(3):25 – 41. ISSN 0380-9218.

ANNOTATION: Takes structured text marked up in SGML as input and makes links. Uses 4 kinds of links: structural, index, cross-reference and user-supplied. Built on Fahmy's MSc Thesis.

SEE ALSO: [Fah88]

KEYWORD: System!MAESTRO • SGML

- [FBS05] Ching-Lung Fu, James Blustein, and Daniel L. Silver, 2005. Information visualization for an intrusion detection system. In ACM Hypertext [ACM05], (pp. 278 – 279). URL [URL: http://doi.acm.org/10.1145/1083356.1083419](http://doi.acm.org/10.1145/1083356.1083419). Refereed poster.

ANNOTATION: General chair: Siegfried Reich; Program chair: Manolis Tzagarakis

- [FBY92] William B. Frakes and Ricardo Baeza-Yates (eds.), 1992. *Information Retrieval Data Structures & Algorithms*. Prentice-Hall. ISBN 0-13-463837-9.

CALLNo: QA76.9.D351543

- [FC89] Mark E. Frisse and Steve B. Cousins, 5 – 8 November 1989. Information retrieval from hypertext: Update on the dynamic medical handbook project. In Meyrowitz [Mey89a], (pp. 199 – 212). URL [URL: http://doi.acm.org/10.1145/74224.74241](http://doi.acm.org/10.1145/74224.74241).

CALLNo: QA76.9D6H91987

ANNOTATION:

- HT philosophy and computer inference about useful text units

- Abstract: ‘This paper attempts to provide a perspective from which to develop a more complete theory of IR from HT docs. Viewing HTs as large information spaces, we compare two general classes of navigation methods, classes we call local and global. We argue that global methods necessitate some form of "information space" conceptually separate from the HT "doc space". We note that the architecture of both spaces effect the ease with which one can apply various information retrieval algorithms. We identify a number of index space and doc space architectures and we discuss some of the associated tradeoffs between HT functionality and computational complexity. We show how some index space architectures can be exploited for enhancing IR, query refinement and automated reasoning. Through analysis of a number of prototype systems, we discuss current limitations and future potential for various HT IR structures’.

SEE ALSO: Frisse in CACM 31(7) [Fri88b]

KEYWORD: Design • HT!Conversion • Navigation • System!DMH

- [FD88] Mohammad U. Farooq and Wayne D. Dominick, 1988. A survey of formal tools and models for developing user interfaces. *International Journal of Man-Machine Studies*, 29:479 – 496.

KEYWORD: CogPsych!LIS 861 • Survey

- [FD92] Peter W. Foltz and Susan T. Dumais, December 1992. Personalized information delivery: An analysis of information filtering methods. *Communications of the ACM*, 35(12):51 – 60.

KEYWORD: Information Filtering

- [FDD⁺88] George W. Furnas, Scott Deerwester, Susan T. Dumais, Thomas K. Landauer, Richard A. Harshman, Lynn A. Streeter, and Laren E. Lochbaum, 1988. Information retrieval using a singular value decomposition model of latent semantic structure. In *SI-GIR '88*. Grenoble, France. URL <http://doi.acm.org/10.1145/62437.62487>.

SEE ALSO: faster LSI? [KO98]

KEYWORD: LSI

- [Fei88] Steven Feiner, 1988. Automating hypermedia design and layout. In Bernstein [Ber88c], (pp. 40 – 43).

- [FEW99] Jonathan Furner, David Ellis, and Peter Willett, December 1999. Inter-linker consistency in the manual construction of hypertext documents. *ACM Computing Surveys*, 31(4es). Electronic publication only. Available from <http://doi.acm.org/10.1145/345966.346008>, See Ashman and Simpson’s editorial overview in printed journal [AS99].

SEE ALSO:

- Original articles: [EFW96; EFHW94b]
- Refs. for Dice measure:

- Jones & Furnas [JF87]
- Ellis et al. [EFHW93]
- Salton [Sal89, Table 10.1, p. 318]

[FF03] Christopher Ferris and Joel Farrell, June 2003. What are web services. *Communications of the ACM*, 46:31.

KEYWORD: CS4173 (WWW) • web services

[FGH⁺00] Kenneth P. Fishkin, Anuj Gujar, Beverly L. Harrison, Thomas P. Moran, and Roy Want, September 2000. Embodied user interfaces for *Really* direct manipulation. *Communications of the ACM*, 43(9). URL [URL: `http://doi.acm.org/10.1145/348941.348998`](http://doi.acm.org/10.1145/348941.348998).

KEYWORD: HCI • annotation

[FHHD90] Andrew M. Fountain, Wendy Hall, Ian Heath, and Hugh C. Davis, November 1990. MICROCOSM: An open model for hypermedia with dynamic linking. In Streitz et al. [SRA90], (pp. 298 – 311). Proceedings of the First European Conference on Hypertext.

KEYWORD: Design • System!Microcosm

[FHJS00] Jacqueline Fenner, David Heathcote, and Jennifer Jerrams-Smith, June 2000. The development of wayfinding competency: Asymmetrical effects of visuo-spatial and verbal ability. *Journal of Environmental Psychology*, 20(2):165 – 175. URL [URL: `http://dx.doi.org.ezproxy.library.dal.ca/10.1006/jevp.1999.0162`](http://dx.doi.org.ezproxy.library.dal.ca/10.1006/jevp.1999.0162) \& [URL: `http://www.sciencedirect.com/science/article/B6WJ8-45FCBWY-V/2/40b23e5e1c328843786e9272d031cff0`](http://www.sciencedirect.com/science/article/B6WJ8-45FCBWY-V/2/40b23e5e1c328843786e9272d031cff0).

KEYWORD: spatial ability

[Fic87] David K. Fickes, November 1987. Usenet in Hypertext form. Usenet Message-ID `<8711130839.AA02525@bucsb.bu.edu>`, posted to comp.society.futures. Obtained using anonymous ftp from site `<URL:n1.cs.cmu.edu>` (Internet protocol (IP) address 128.2.222.56) in directory `/usr/toad/hypertext`. File name `hyperusenet.proposal.1`.

[Fid88] Janet Fiderio, October 1988. A grand vision. *Byte*, (pp. 237 – 240, 242, 244).

[Fie94] Roy T. Fielding, 1994. Maintaining distributed hypertext infostructures: Welcome to MOMspider's Web. *Computer Networks and ISDN Systems*, 27:193 – 204.

[FIF95] Edward A. Fox, Peter Ingwersen, and Raya Fidel (eds.), 9 – 14 July 1995. *SIGIR '95 Proceedings of the eighteenth annual International ACM SIGIR Conference on Research and Development in Information Retrieval*. Seattle, Washington.

[FJE02] J. Shawn Farris, Keith S. Jones, and Peter D. Elgin, October 2002. Users' schemata of hypermedia: what is so 'spatial' about a website? *Interacting with Computers*, 14:487 – 502. URL [URL: `http://www.sciencedirect.com/science/article/B6V0D-45JPM5W-1/2/1779f289001204c079f5536a4c628d7e`](http://www.sciencedirect.com/science/article/B6V0D-45JPM5W-1/2/1779f289001204c079f5536a4c628d7e).

ANNOTATION:

This study examined users' schemata of hypermedia. It is frequently assumed that users' schemata contain spatial information about how the pages of a website are interconnected. However, it is not clear how these schemata could contain such information when none is presented to the user while he/she is exploring the website. Unfortunately, there has been little research addressing this assumption. Toward that end, the reported study examined the mental representations (i.e. schemata) acquired when using hypermedia by systematically varying the interconnections within a website while holding the information that the website contained constant. Analyses of 40 participants' drawings of the website's organization indicate that drawings largely reflected conceptual (i.e. semantic) relationships, and not the true nature of the website's interconnections. In light of this research, it is suggested that we reevaluate the conjecture that hypermedia is mentally represented in ways similar to the physical world.

This is an example of why IwC is such a lousy journal, did they ever consider their underlying assumption about why so many people are talking about SpAb and HT? Nope. See Dillon for InfoShape, see homeopathic fallacy for an earlier debunking of this myth.

SEE ALSO:

- Dillon in JASIS 51(6) [Dil00]
- Homeopathic Fallacy [MRH95]
- Usability News reported on a study where readers drew maps of websites
- S. Jones and G. E. Burnett (at U Nottingham) *Children's navigation of hyperspace — Are spatial skills important?*
- Bryce Allen in JASIS (2000) [All00] for other experiments observing people using an IR systems

KEYWORD: spatial ability • information shape

[FKA⁺05] James Fogarty, Andrew J. Ko, Htet Htet Aung, Elspeth Golden, Karen P. Tang, and Scott E. Hudson, 2 – 7April 2005. Examining task engagement in sensor-based statistical models of human interruptibility. In Wendy Kellog, Shumin Zhai, Carolyn Cale, and Gerritt van der Veer (eds.), *CHI '05: Proceedings of the SIGCHI conference on Human factors in computing systems*, (pp. 331 – 340). New York, NY: ACM Press. ISBN 1-58113-998-5.

[FL89] David M. Frohlich and Paul Luff, 1989. Some lessons from an exercise in specification. *Human Computer Interaction*, 4:121 – 147. ISSN 0737-0024?

KEYWORD: HCI

[FLGD87] G. W. Furnas, T. K. Landauer, L. M. Gomez, and S. T. Dumais, November 1987. The vocabulary problem in human-system communication. *Communications of the ACM*, 30(11):964 – 971.

SEE ALSO: Krovetz&Croft (TOIS, 1992) [KC92]

KEYWORD: Classic

[Flo99] Luciano Floridi, 1999. *Philosophy and Computing: An Introduction*. Routledge. ISBN 0-415-18024-4 (hbk) / 0-415-18025-2 (pbk).

[FMM77] George E. Forsythe, Michael A. Malcolm, and Cleve B. Moler, 1977. Least squares and the singular value decomposition. In *Computer Methods for Mathematical Computations*, chapter 9, (pp. 192 – 239). Prentice-Hall, first edition. ISBN 0-13-165332-6.

CALLNo: QA 297.F568

KEYWORD: LSI

[FMM89] Gerhard Fischer, Raymond McCall, and Anders Mørch, 5 – 8 November 1989. JANUS: Integrating hypertext with a knowledge-based design environment. In Meyrowitz [Mey89a], (pp. 105 – 117).

CALLNo: QA76.9D6H91987

SEE ALSO: R. Akscyn and F. Halasz's *Topics on Hypertext* [AH91] (updated papers)

KEYWORD: System!JANUS

[Fol90] Peter W. Foltz, April 1990. Using latent semantic indexing for information filtering. In Lochovsky and Allen [LA90], (pp. 40 – 47). Published in SIG OIS Bulletin v.11.

CALLNo: HF5547.5.A1A886 v.11

ANNOTATION: work with Usenet suggested designed for pools of e-text

SEE ALSO: [Con87]

KEYWORD: LSI • Information Filtering

[Fol96] Peter Foltz, 17 January 1996. Personal communication. telephone conversation.

[For00] Nigel Ford, April 2000. Cognitive styles and virtual environments. *Journal of the American Society for Information Science*, 51(6):543 – 557. URL [http://dx.doi.org/10.1002/\(SICI\)1097-4571\(2000\)51:6<543::AID-ASI6>3.0.CO;2-S](http://dx.doi.org/10.1002/(SICI)1097-4571(2000)51:6<543::AID-ASI6>3.0.CO;2-S).

ANNOTATION:

- Abstract: ‘Virtual environments enable a given information space to be traversed in different ways by different individuals, using different routes and navigation tools. However, we urgently need robust user models to enable us to optimize the deployment of such facilities. Research into individual differences suggests that the notion of cognitive style may be useful in this process. Many such styles have been identified. However, it is argued that Pask’s work on holist and serialist strategies and associated styles of information processing are particularly promising in terms of the development of adaptive information systems. These constructs are reviewed, and their potential utility in “real-world” situations assessed. Suggestions are made for ways in which they

could be used in the development of virtual environments capable of optimizing the stylistic strengths and complementing the weaknesses of individual users. The role of neural networks in handling the essentially fuzzy nature of user models is discussed. Neural networks may be useful in dynamically mapping users' navigational behavior onto user models to enable them to generate appropriate adaptive responses. However, their learning capacity may also be particularly useful in the process of improving system performance and in the cumulative development of more robust user models.' (from BUBL [Ser])

- Description from JASIS webpage ((URL:<http://www.asis.org/Publications/JASIS/vol51n0600.html>)): Nigel Ford's article focuses on the distinction between holists and serialists in learning, and its implications for supporting individual users through user interface design. Of particular interest to the theme of this special issue, Ford addresses some interesting behavioral patterns of holists and serialists. While holists like to use concept maps, serialists prefer keyword indices. A concept map, or the overview of an underlying structure, is designed for global orientation regarding the overall structure of the subject matter.

Having recognized the fuzzy nature of identifying individuals' cognitive styles and learning strategies, Ford introduces a modeling approach based on Kohonen self-organizing feature maps, an artificial neural-network based classification technique. This self-organized approach has potential as a possible route for further research and development of adaptive virtual environments. Virtual environments provide a wider framework for integrating and directly manipulating global and analytic aspects of an information space.

Ford's article also draws our attention to the connection between field-dependence and cognitive styles in terms of individuals' behavioral patterns in navigation of hyperspace. Like holists, field-dependent individuals use overview maps more often than field-independent individuals. In the next article, Palmquist and Kim examine the effects of field-dependence in Web search.'

SEE ALSO:

field (in-)dependence

- B. Allen in DL98 [All98] and JASIS [All00]
- Charney [Cha94, pp. 252, 262]
- Dillon & Watson in IJHCS v.45 [DW96, p. 627]
- Dillon in JASIS 51(6) [Dil00]
- N. Ford's *Cognitive Styles and Virtual Environments* also in JASIS 51(6) [For00]
- Jennings et al. in CogErg91 [JBM91]

KEYWORD: individual differences • Survey • HT!adaptive hypermedia • AI!neural networks

- [Fox87] Edward A. Fox, 4 – 8 October 1987. An intelligent information system for electronic mail digests. In chih Chen [cC87], (pp. 74 – 78).

ANNOTATION: The CODER project aimed at investigating the applicability of AI techniques to information storage and retrieval. Initial testing on a archive of the AI-List e-mail mailing list using PROLOG.

KEYWORD: System!CODER • System!SMART

- [FPS89a] Richard Furuta, Catherine Plaisant, and Ben Shneiderman, December 1989. Automatically transforming regularly structured linear documents into hypertext. *Electronic Publishing — Origination, Dissemination and Design*, 2(4):211 – 229.

SEE ALSO: [FPS89b]

- [FPS89b] Richard Furuta, Catherine Plaisant, and Ben Shneiderman, 1989. A spectrum of automatic hypertext constructions. *Hypermedia*, 1(2):179 – 195.

ANNOTATION: From the abstract: ‘We describe our experiences with four separate conversions from paper documents into HT and discuss the lessons we have learned. The paper documents organisation affects the ease with which it can be converted and the appropriateness of the resulting HT. The form of the paper doc’s machine-readable “mark-up” description affects the ability to transform the structure automatically. Designing the link structures that tie together the parts of the HT takes special care in automating, as badly designed and incorrectly formed links destroy the integrity of the hypertext. Overall, each of the conversions followed the same basic methodology, providing the handle for the development of “power tools” that can be applied to simplify subsequent conversions.’

SEE ALSO: [FPS89a]

KEYWORD: Advice • HT!AutoGen

- [Fra88] Carl Franklin, March 1988. An annotated hypertext bibliography. *Online*, (pp. 42 – 46).

- [Fra92a] W. B. Frakes, 1992. Introduction to information storage and retrieval systems. In William B. Frakes and Ricardo Baeza-Yates (eds.), *Information Retrieval Data Structures & Algorithms*, chapter 1, (pp. 1 – 12). Prentice-Hall. ISBN 0-13-463837-9.

CALLNo: QA76.9.D351543

- [Fra92b] W. B. Frakes, 1992. Introduction to information storage and retrieval systems. In Frakes and Baeza-Yates [FBY92], chapter 1, (pp. 1 – 12).

CALLNo: QA76.9.D351543

- [Fri88a] Mark Frisse, October 1988. From text to hypertext. *Byte*, (pp. 247 – 251, 253).

ANNOTATION: Introduction to auto generation

KEYWORD: HT!AutoGen

- [Fri88b] Mark E. Frisse, July 1988. Searching for information in a hypertext medical handbook. *Communications of the ACM*, 31(7). URL [URL: http://doi.acm.org/10.1145/48511.48518](http://doi.acm.org/10.1145/48511.48518).

ANNOTATION:

- Lessons to be learned from a real system
- Abstract: 'Medicine is an ideal domain for hypertext applications and research. Implementing a popular medical handbook in hypertext underscores the need to study hypertext in the context of full-text document retrieval, machine learning, and user interface issues'

SEE ALSO: Frisse & Cousins in HT89 [FC89]

KEYWORD: MSc!Justification • System!DMH

- [FS91] Gerhard Fischer and Curt Stevens, 27 April – 2 May 1991. Information access in complex, poorly structured information spaces. In Robertson et al. [ROO91], (pp. 63 – 70).

CALLNO: QA76.9.H85C4419912

ANNOTATION: An attempt to structure information found in Usenet into virtual newsgroups. Presents a new user interfaces and suggests the use of threads. Use of agents to suggest articles to the user based on heuristics (no analysis of messages just filters).

KEYWORD: System!InfoScope • System!Information Lens

- [FS92] H. P. Frei and D. Stieger, 30 November – 4 December 1992. Making use of hypertext links when retrieving information. In Lucarella et al. [LNNP92].

ANNOTATION: An excellent presentation of HT as a graph with a distinction between semantic and reference links. Uses spreading activation to maintain accurate similarity measures.

SEE ALSO: [FS95; Sav93]

KEYWORD: Spreading activation • HT!Intro

- [FS95] H. P. Frei and D. Stieger, 1995. The use of semantic links in hypertext information retrieval. *Information Processing & Management*, 31(1):1 – 13.

ANNOTATION: Improved retrieval by using spreading activation of weights following HT links. Where else have I seen this? The Tree paper in the MSc perhaps.

SEE ALSO: [FS92]

KEYWORD: Information Retrieval • Indexing • Spreading activation

- [fS97] International Organization for Standardization, 1997. *Information technology Hypermedia/Time-based Structuring Language (HyTime)*. International Organization for Standardization, second 1997-08-01 edition. International standard ISO/IEC JTC1/SC18/WG8 N1920.

KEYWORD: HyTime

- [FSB05] Ching-Lung Fu, D. Silver, and J. Blustein, 24 – 29 July 2005. Chronological sampling for email filtering. In *Proceedings of the Workshop on Machine Learning for User Modeling: Challenges [at 10th International Conference on User Modeling (UM'2005)]*, (pp. 9 – 16). URL [URL: http://www-connex.lip6.fr/~artieres/UM2005/Proceedings.pdf](http://www-connex.lip6.fr/~artieres/UM2005/Proceedings.pdf).

- [FSM94] D. Feldman-Stewart and D.J.K. Mewhort, 1994. Learning in small connectionist networks does not generalize to large networks. *Psychological Research*, 56:99 – 103.

KEYWORD: CogPsych!LIS 861

- [Fur86] G. W. Furnas, 13 – 17 April 1986. Generalized fisheye views. In Mantei and Orbeton [MO86], (pp. 16 – 23).

CALLNo: QA76.9.H85C44 1986

ANNOTATION: Fisheye views present close objects in detail and far objects as smaller and less detailed. Furnas conjectures that such views should be useful for examining unfamiliar parts of a large file. He presents a method with nodes stored in a tree and uses the shortest path between nodes as a distance function. Nielsen says: ‘Fisheye views show the context immediately surrounding the information of interest in greater detail while information farther away is elided...’ — Nielsen[Nie90c, p.222 – 3]

SEE ALSO: Enhanced views [TD92] and Effective View Navigation [Fur97] and especially the TCHI 1994 review [LA94]

KEYWORD: Classic • Fisheye view

- [Fur97] George W. Furnas, 22 – 27 March 1997. Effective view navigation. In Pemberton [Pem97].

SEE ALSO: Generalized Fisheye Views also by Furnas [Fur86]

KEYWORD: Fisheye view

- [FZC93] George W. Fitzmaurice, Shumin Zhai, and Mark H. Chignell, July 1993. Virtual reality for palmtop computers. *ACM Transactions on Information Systems*, 11(3):197 – 218.

- [Gal94a] Kathleen M. Galotti, 1994. *Cognitive Psychology In and Out of the Laboratory*. Brooks/Cole Publishing Company. ISBN 0-534-21054-6.

CALLNo: BF 201 G35 1994

KEYWORD: CogPsych

- [Gal94b] Kathleen M. Galotti, 1994. Individual and gender differences in cognition. In *Cognitive Psychology In and Out of the Laboratory*, chapter 13, (pp. 408 – 439). Brooks/Cole Publishing Company. ISBN 0-534-21054-6.

CALLNo: BF 201 G35 1994

ANNOTATION:

meta-analyses pp. 423, 431 (see Hedges & Olkin [HO85])

visual-spatial abilities pp. 425 – 429

expertise p. 437 has recommended readings

KEYWORD: spatial ability • CogPsych

- [Gao04] Huan Gao, January 2004. *Support of Hypertextual Annotation on the Web*. Master's thesis, Dalhousie University, Halifax, NS, Canada. Published as a technical report at [URL:https://www.cs.dal.ca/research/techreports/cs-2004-20/](https://www.cs.dal.ca/research/techreports/cs-2004-20/).

ANNOTATION: Relied on MVD (Multivalent Document Model) [PW97]

KEYWORD: System!Multivalent Document • interface • annotation • System!WWW

- [Gav95] William W. Gaver, 1995. Oh what a tangled web we weave: Metaphor and mapping in graphical interfaces. In *CHI '95 Mosaic of Creativity*. Denver, CO, USA.

- [GB01] Daryle Gardner-Bonneau, January + February 2001. The joy of Sex psychology. *interactions*, viii(1):19 – 22. Appeared in 'the whiteboard' column edited by Elizabeth Buie.

ANNOTATION: Promote Gibsonian ecological view of interfaces

SEE ALSO:

- Landauer's 'Relations between CogPsych and Computer System Design' [Lan87],
- Bronowski's first chapter in 'Science and Human Values' [Bro65], and
- Cronbach's 'The two disciplines of scientific psychology' [Cro57]

KEYWORD: HCI • Misc • Psych!intro

- [GB06] Gerald Graff and Cathy Birkenstein, 2006. *They Say I Say: The Moves That Matter in Academic Writing*. W. W. Norton. ISBN 978-0-393-92409-1.

KEYWORD: Basic skills for grad students

- [GBB⁺99] Shelley Gullikson, Ruth Blades, Marc Bragdon, Shelley McKibbin, Marnie Sparling, and Elaine G. Toms, October 1999. The impact of information architecture on academic web site usability. *The Electronic Library*, 17(5):293 – 304.

KEYWORD: Usability • Testing • System!WWW

- [GC88] Robert Glaser and Michelene T. H. Chi, 1988. Overview. In Chi et al. [CGF88], (pp. xv – xxviii).

CALLNo: BF 323 E2 N37 1988

ANNOTATION:

SEE ALSO: Other chapters in the same book [Pos88; Joh88; VP88]

KEYWORD: Expertise

- [GC93] Gene Golovchinsky and Mark Chignell, 24 – 29 April 1993. Queries-R-Links: Graphical markup for text navigation. In *INTERCHI '93*, (pp. 454 – 460). ACM.
KEYWORD: Information Retrieval • System!Queries-R-Links
- [GEAG90] Ruth Guttman, Elizabeth E. Epstein, Marianne Amir, and Louis Guttman, September 1990. A structural theory of spatial abilities. *Applied Psychological Measurement*, 14:217 – 236. URL (URL:<http://apm.sagepub.com/cgi/content/abstract/14/3/217>).
KEYWORD: spatial ability
- [Ged97] Renee Gedge, 1 – 5 April 1997. Navigating in hypermedia — interfaces and individual differences. In *Proceedings of SITE 97 Eighth International Conference of the Society for Information Technology and Teacher Education (SITE)*. Orlando, Florida, USA. URL (URL:http://www.coe.uh.edu/insite/elec_pub/HTML1997/re_gedg.htm).
- [Gey95] Fredric C. Gey, 7 July 1995. Evaluation of probabilistic retrieval methods. Paper distributed at SIGIR '95 [FIF95] poster session.
ANNOTATION: Uses chi-square test to measure the accuracy of probability estimates used in IR methods.
- [GG92] Alison J. K. Green and K. J. Gilhooly, 1992. Empirical advances in expertise research. In M. T. Keane and K. J. Gilhooly (eds.), *Advances in the Psychology of Thinking*, chapter 2, (pp. 45 – 70). Toronto: Harvester Wheatsheaf. ISBN 0745009816.
KEYWORD: Expertise
- [Gha06] Claude Ghaoui (ed.), 2006. *Encyclopedia of Human Computer Interaction*. Idea Group Reference. ISBN 1-59140-798-2.
- [Gil90] Peter Gillman (ed.), 1990. *Text Retrieval The State of the Art*. Institute of Information Scientists, Taylor Graham. ISBN 0-947568-44-1. Proceedings of 'The User's Perspective' (1988) and 'Text Management' (1989).
CALLNo: QA76.9.T48 I59 1988-1989
- [Gil92] Douglas J. Gillan, 1992. Network and multidimensional representations of the declarative knowledge of human-computer interface experts. *International Journal of Man-Machine Studies*, 36:587 – 615.
KEYWORD: System!Pathfinder • HCI • mental model
- [GJA93a] Wayne D. Gray, Bonnie E. John, and Michael E. Atwood, 1993. Project Ernestine: Validating a GOMS analysis for predicting and explaining real-world task performance. *Human-Computer Interaction*, 8.
KEYWORD: HCI • GOMS
- [GJA93b] Wayne D. Gray, Bonnie E. Jon, and Michael E. Atwood, 1993. Project Ernestine: Validating a GOMS analysis for predicting and explaining real-world task performance. *Human-Computer Interaction*, 8:237 – 309.
KEYWORD: HCI • GOMS

- [GKMM10] Theresia Gschwandtner, Katharina Kaiser, Patrick Martini, and Silvia Miksch, June 2010. Easing semantically enriched information retrieval—an interactive semi-automatic annotation system for medical documents. *International Journal of Human-Computer Studies*, 68(6):370 – 385. URL [URL {URL:http://dx.doi.org/10.1016/j.ijhcs.2009.08.002}](http://dx.doi.org/10.1016/j.ijhcs.2009.08.002). Human-Computer Interaction for Medicine and Health care (HCI4MED): Towards making Information usable.

KEYWORD: annotation

- [GLB99] Gramm, Leach, and Bliley, 1999. The financial modernization act of 1999, public law 106-102. URL [URL {URL:\url{http://www.ftc.gov/privacy/glbact/glbsub1.htm}}](http://www.ftc.gov/privacy/glbact/glbsub1.htm). Also known as Gramm-Leach-Bliley (GLB) Act).

- [Glu89] Robert J. Glushko, 30 April – 4 May 1989. Transforming text into hypertext for a compact disc encyclopedia. In Bice and Lewis [BL89a], (pp. 293 – 298).

CALLNO: QA76.9.H85C44 1989

ANNOTATION: The Compendium workers used programs to identify possible links in the text. After these links had been identified, people chose which links to include in the hypertext document. They were guided in their choices by a model of what they thought users would want from a hypertext version of an engineering encyclopaedia.

SEE ALSO: [SAB94]

KEYWORD: Authoring/Conversion

- [GLW86] Alan Griffiths, H. Claire Luckhurst, and Peter Willett, January 1986. Using interdocument similarity information in document retrieval systems. *Journal of the American Society for Information Science*, 37(1):3 – 11.

KEYWORD: Information Retrieval!Cluster • Ward's Method

- [GM90] Cath Green and Ray McAleese (eds.), 29 – 30 June 1989 1990. *Hypertext 2*. University of York: INTELLECT Ltd.

- [GM96] Barbara Gorayska and Jacob L. Mey (eds.), 1996. *Cognitive Technology: In Search of a Humane Interface*. Number 113 in Advances in Psychology. Elsevier Science B.V. ISBN 0-444-82275-5.

CALLNO: BF 311 C55346 1996

- [GM97] F. Garzotto and M. Matera, 1997. A systematic method for hypermedia usability inspection. *The New Review of Hypermedia and Multimedia*, 3:39 – 65.

KEYWORD: Design • System!SUE

- [GM00] Gene Golovchinsky and Catherine C. Marshall, 30 May – 4 June 2000. Hypertext interaction revisited. In Anderson [And00b], (pp. 171 – 179). URL [URL {URL:http://doi.acm.org/10.1145/336296.336358}](http://doi.acm.org/10.1145/336296.336358).

- [GM06] Franca Garzotto and Luca Megale, 2006. CHEF: a user centered perspective for cultural heritage enterprise frameworks. In *AVI '06: Proceedings of the working conference on Advanced visual interfaces*, (pp. 293 – 301). New York, NY: ACM Press. ISBN 1-59593-353-0. URL (URL:http://doi.acm.org/10.1145/1133265.1133325).
- [GMS98] Kaj Grønbaek, Elli Mylanos, and Frank M. Shipman, III (eds.), 20 – 24 June 1998. *Hypertext 98: Proceedings of the ninth ACM conference on Hypertext and hypermedia: links, objects, time and space—structure in hypermedia systems: links, objects, time and space—structure in hypermedia systems*. Pittsburgh, PA: ACM SIGLINK and ACM SIGIR.
- [GN96] Don Gentner and Jakob Nielsen, 1996. The anti-mac interface. *Communications of the ACM*, 39(8):70 – 82. URL (URL:http://doi.acm.org/10.1145/232014.232032).
- KEYWORD: HCI!CS6606
- [GNB98] Gerald Goldstein, Paul David Nussbaum, and S. Beers (eds.), 1998. *Neuropsychology*. Plenum Press. ISBN 0-306-45646-X.
- [Gol84a] Robert Goldenberg, 1984. Talmud. In Barry W. Holtz (ed.), *Back To The Sources: Reading the Classic Jewish Texts*, chapter 2. New York: Summit Books.
- [Gol84b] Robert M. Goldenson (ed.), 1984. *Longman Dictionary of Psychology and Psychiatry*. A Walter D. Glanze book. New York: Longman, Inc.
- CALLNO: BF31.L66 1983
- [Gol86] Lev Goldfarb, Spring – Summer 1986. Metric data models and associated search strategies. *SIGIR Forum*, 20(1 – 4):7 – 11.
- ANNOTATION: Tree Models
- SEE ALSO: [FB90]
- KEYWORD: tree models • Spreading activation
- [Gol90] Charles F. Goldfarb, 1990. *The SGML Handbook*. Clarendon Press. ISBN 0-19-853737-9.
- [Gra93] Susan H. Gray, 1993. *Hypertext and the Technology of Conversation: Orderly Situational Choice*. 88 Post Rd. West, Westport, CT 06881, USA: Greenwood Press. ISBN 0-313-28962-X.
- CALLNO: QA76.9.H85G72 1993
- [Gre96] Stephen J. Green, 14 March 1996. Using lexical chains to build hypertext links in newspaper articles. Submitted to the AAAI-96 Workshop on Internet-based Information Systems. Distributed at poster session of *Hypertext '96* conference [ACM96].
- [Gre97] Stephen J. Green, 1997. *Automatically generating hypertext by computing semantic similarity*. Ph.D. thesis, University of Toronto, Toronto, Ontario, Canada.
- KEYWORD: System!WordNet • lexical chaining • AutoGen

[Gre99] Stephen J. Green, September/October 1999. Building hypertext links by computing semantic similarity. *IEEE Transactions on Knowledge and Data Engineering*, 11(5):713 – 730.

[Gri80] Belver C. Griffith (ed.), 1980. *Key Papers in Information Science*. White Plains, New York: Knowledge Industry Publications, Inc. ISBN 0-914236-50-4. Published for the American Society for Information Science.

CALLNo: 51205 980 00/Z699.K422

KEYWORD: Classic

[Gri89] Roger A. Grice, 1989. Online information: What do people want? what do people need? In Barrett [Bar89a].

CALLNo: QA76.76.H94 S65 1989

[GS92] Catherine Guinan and Alan F. Smeaton, 30 November – 4 December 1992. Information retrieval from hypertext using dynamically planned guided tours. In Lucarella et al. [LNNP92].

ANNOTATION: Given a small, hand crafted HT their system will rank nodes by order of usefulness to a natural language query and present them to the user in order.

SEE ALSO:

- Tague-Sutcliffe's *Measuring Information* [TS95],
- Amsterdam Model [HBv]

KEYWORD: HT!Guided Tour

[GS07] Jacek Gwizdka and Ian Spence, 2007. Implicit measures of lostness and success in web navigation. *Interacting with Computers*, 19:357 – 369. URL [URL <URL:dx.doi.org/10.1016/j.intcom.2007.01.001>](http://dx.doi.org/10.1016/j.intcom.2007.01.001).

SEE ALSO: Botsfago et al. [BRS92]

KEYWORD: Metric • Evaluation • information seeking • Navigation!Lostness

[GTAE04] Leo Gugerty, Richard A. Tyrrell, Thomas R. Aten, and K. Andy Edmonds, 2004. The effects of subpixel addressing on users' performance and preferences during reading-related tasks. *ACM Transactions on Applied Perception*, 1(2):81 – 101. ISSN 1544-3558. URL [URL <URL:http://doi.acm.org/10.1145/1024083.1024084>](http://doi.acm.org/10.1145/1024083.1024084).

ANNOTATION: Abstract:

Subpixel addressing is a font-rendering technology that triples the apparent horizontal resolution of liquid crystal displays. Four experiments measured the effects of subpixel addressing (Microsoft's ClearType) relative to standard (aliased) font-rendering techniques. Participants preferred, and gave higher readability ratings to, text

that had been rendered using subpixel addressing. Subpixel addressing also significantly improved the accuracy of lexical decisions and the accuracy and speed of sentence comprehension. Subpixel addressing did not affect word-naming performance or reading speed during pleasure reading. Taken together, these findings suggest that subpixel addressing provides substantial benefits to users while adding no costs to display hardware.

[Gui94] Nuno Guimaraes (ed.), 19 – 23 September 1994. *ECHT '94: European Conference on Hypermedia Technology*. Edinburgh, Scotland: ACM SIGLINK, ACM SIGOIS. ISBN 0-89791-640-9.

[GW09] Andrew Gelman and David Weakliem, July-August 2009. Of beauty, sex and power. *American Scientist*, 97(4):270, 310–316. URL <http://dx.doi.org/10.1511/2009.79.310>.

[HA87] M. Horton and R. Adams, December 1987. Standard for interchange of USENET messages. Request for Comments 1036, Internet Engineering Task Force. Obsoletes RFC 850 [Hor83].

[Hal88] Frank G. Halasz, July 1988. Reflections on Notecards: Seven issue for the next generation of hypermedia systems. *Communications of the ACM*, 31(7):836 – 852.

ANNOTATION: Abstract: ‘NoteCards, developed by a team at Xerox PARC, was designed to support the task of transforming a chaotic collection of unrelated thoughts into an integrated, orderly interpretation of ideas and their interconnections. This article presents NoteCards as a foil against which to explore some of the major limitations of the current generation of hypermedia systems, and characterizes the issues that must be addressed in designing the next generation systems.’

KEYWORD: Design • Classic • System!NoteCards

[Hal92] Diane F. Halpern, 1992. *Sex Differences in Cognitive Abilities*. Lawrence Erlbaum Associates, Inc., 2nd edition. ISBN 0-8058-0845-0.

CALLNO: BF 311 H295 1992

SEE ALSO:

- Galotti’s book [Gal94a]
- Halpern and Collaer’s chapter [HC05]

KEYWORD: spatial ability • CogPsych

[Hal01] Roger R. Hall, 2001. Prototyping for usability of new technology. *International Journal of Human-Computer Studies*, 55:485 – 501. URL <http://www.sciencedirect.com/science/article/B6WGR-458NDYJ-15/1/58f22af92c41a9471beb1147d44b0071>.

KEYWORD: HCI!prototyping • HCI!CS6606

- [Ham93] Nick Hammond, 1993. Learning with hypertext: Problems, principles and prospects. In McKnight et al. [MDR93], chapter 4, (pp. 51 – 69). URL ([URL:http://telecaster.lboro.ac.uk/HaPP/contents.html](http://telecaster.lboro.ac.uk/HaPP/contents.html)).
- CALLNo: QA76.76.H94 H95 1993
- [Har86] Donna Harman, 8 – 10 September 1986. An experimental study of factors important in document ranking. In Rabitti [Rab86].
- KEYWORD: Information Retrieval!weighting
- [Har87] Donna Harman, 3 – 5 June 1987. A failure analysis on the limitations of suffixing in an online environment. In Yu and Rijsbergen [YR87].
- KEYWORD: Stemming • Information Retrieval
- [Har88] L. Hardman, 1988. Hypertext tips: Experiences in developing a hypertext tutorial. In D. M. Jones and R. Winder (eds.), *People and Computers IV*, (pp. 437 – 451). Cambridge University Press.
- ANNOTATION: ‘Experience from the development of a tutorial on the structure of the brain for physiology students and some general comments on hypertext style. As a practical comment, the reader should note that the pictures shown in Figures 1 and 2 in the paper have accidentally been swapped’ — Nielsen [Nie90c, p.224]
- KEYWORD: Author
- [Har92a] Lynda Hardman, July 1992. Hypertext ’91 trip report. *SIGCHI Bulletin*, 24(3):30 – 39.
- [Har92b] Donna Harman, July – August 1992. Evaluation issues in information retrieval. *Information Processing & Management*, 28(4):439 – 440.
- KEYWORD: Evaluation • Information Retrieval
- [Har93a] Donna Harman, 27 June – 1 July 1993. Overview of the first TREC conference. In Korfhage et al. [KRW93], (pp. 36 – 47).
- CALLNo: Z699.A1A886 93-07-15
- KEYWORD: Information Retrieval!TREC
- [Har93b] Richard Harshman, 1993. Personal communication. e-mail. Harshman is one of the authors of PARAFAC [LH85] and a co-author of some papers about LSA [FDD⁺88; DDF⁺90].
- [Har99] Rob3ert L. Harris, 1999. *Information Graphics: A Comprehensive Illustrated Reference*. Oxford University Press. ISBN 978-0-19-513532-9.
- KEYWORD: Basic skills for grad students
- [Hay93] Robert M. Hayes, 1993. Measurement of information. *Information Processing & Management*, 29(1):1 – 11.

- [Hay96] Timothy A. Hays, 1996. Spatial abilities and the effects of computer animation on short-term and long-term comprehension. *Journal of Educational Computing Research*, 14(2):139 – 157. ISSN 0735-6331.
- KEYWORD: spatial ability
- [HBM03] Kristina Höök, David Benyon, and Alan J. Munro (eds.), 2003. *Designing Information Spaces: The Social Navigation Approach*. Computer supported cooperative work. Springer-Verlag London Limited. ISBN 1-85233-661-7.
- [HBv] Lynda Hardman, Dick C. A. Bulterman, and Guido van Rossum. The Amsterdam hypermedia model: extending hypertext to support real multimedia. Lynda.Hardman@cw.nl.
- ANNOTATION: Combines Dexter hypertext model and CMIF multimedia model to create a model of synchronized hypermedia.
- KEYWORD: HT!model!Dexter • HT!model!Amsterdam
- [HBv93] Lynda Hardman, Dick C. A. Butlerman, and Guido van Rossum, 14 – 18 November 1993. Links in hypermedia: the requirement for context. In Hypertext 1993 [Hyp93], (pp. 183 – 191).
- ANNOTATION: Context = timing info
- SEE ALSO: Amsterdam Model info [HBv]
- KEYWORD: HT!model!Amsterdam • hypermedia
- [HC93] Shannon L. Halgreen and Nancy J. Cooke, 1993. Towards ecological validity in menu research. *International Journal of Man-Machine Studies*, 39:51 – 70.
- SEE ALSO:
- Kiger on depth/breadth trade-off in IJMMS v.20 [Kig84] and
 - Larson and Czerwinski's work with webpages [LC98]
- KEYWORD: CogPsych!LIS 861 • menus
- [HC05] Diane F. Halpern and Marcia L. Collaer, 2005. Sex differences in visuospatial abilities: More than meets the eye. In Shah and Miyake [SM05], chapter 5, (pp. 170 – 212).
- KEYWORD: spatial ability • CogPsych
- [HD] Kristina Höök and Nils Dahlbäck. Designing navigational aids for individuals. URL http://www.sics.se/~kia/papers/navigation_ws.html. 'Submitted to the workshop "CHI 97 Workshop on Navigation in Electronic Worlds" to be held in Atlanta, March 23–24th'.
- [HdRC95] Garry Hill, Dave de Roure, and Les Carr, 1995. Applying open hypertext principles to the WWW. In Sylvain Fraïssé, Franca Garzotto, Tomas Isakowitz, Jocelyne Nanard, and Marc Nanard (eds.), *International Workshop on Hypermedia Design*, (pp. 193 – 201).
- KEYWORD: System!Microcosm • System!Open

- [HDS96] Kristina Höök, Nils Dählback, and Marie Sjölander, 1996. Individual differences and navigation in hypermedia. Research Report R96-01, Swedish Institute of Computer Science SICS. URL [URL: \url{ftp://ftp.sics.se/pub/SICS-reports/Reports/SICS-R--96-01--SE.ps.Z}](ftp://ftp.sics.se/pub/SICS-reports/Reports/SICS-R--96-01--SE.ps.Z).

KEYWORD: spatial ability!Jason Satel

- [HEE⁺02] Marti Hearst, Ame Elliott, Jennifer English, Rashmi Sinha, Kirsten Swearingen, and Ka-Ping Yee, September 2002. Finding the flow in web site search. *Communications of the ACM*, 45:42 – 49. URL [URL: http://doi.acm.org/10.1145/567498.567525](http://doi.acm.org/10.1145/567498.567525).

KEYWORD: HCI!CS6606 • HCI

- [Hei07] Steven Heim, 2007. *The Resonant Interface: HCI Foundations for Interaction Design*. Addison-Wesley Longman Publishing Co., Inc. ISBN 0-321-37596-3.

KEYWORD: HCI!Intro!textbook • HCI!CS3160 (UID) • CS3160 (UID)

- [Hen90] Diane Henderson (ed.), 4 – 8 November 1990. *Information in the Year 2000: From Research to Applications Proceedings of the 53rd ASIS Annual Meeting*, volume 27. Toronto, Ontario: Learned Information, Inc. ISBN 0-938734-48-2. ISSN 0044-7870.

- [Hen98] Harold Henke, 1998. Are electrons better than papyrus? (or can adobe acrobat reader files replace hardcopy?). In *Proceedings of the sixteenth annual international conference on Computer documentation*, (pp. 29 – 37). Quebec, Quebec, Canada.

KEYWORD: interface

- [Hen00a] Austin Henderson, September + October 2000. Design for what? Six dimensions of activity (Part 1 of 2). *interactions*, VII(5):17 – 22.

SEE ALSO: Part 2 [Hen00b]

KEYWORD: HCI

- [Hen00b] Austin Henderson, November + December 2000. Design for what? Six dimensions of activity (Part 2 of 2). *interactions*, VII(6):25 – 30.

SEE ALSO: Part 1 [Hen00a]

KEYWORD: HCI

- [Her93] Paula Hertel, 1993. Implications of external memory for investigations of mind. *Applied Cognitive Psychology*, 7:665 – 674.

KEYWORD: CogPsych!LIS 861

- [HH93] Deborah Hix and H. Rex Hartson, 1993. *Developing User Interface Ensuring Usability Through Product & Process*. Wiley Professional Computing. John Wiley & Sons, Inc. ISBN 0-471-57813-4.

- [HHD93] Wendy Hall, Gary Hill, and Hugh Davis, 14 – 18 November 1993. The Microcosm link service. In *Hypertext 1993* [Hyp93]. See also [URL: http://www.multicosm.com/microcosm/](http://www.multicosm.com/microcosm/).

KEYWORD: System!Microcosm

- [HHN86] Edwin L. Hutchins, James D. Hollan, and Donald A. Norman, 1986. Direct manipulation interfaces. In Norman and Draper [ND86], chapter 5, (pp. 87 – 124).
CALLNo: QA76.9.I58U73
KEYWORD: HCI
- [Hic95] Thomas B. Hickey, Spring 1995. Present and future capabilities of the online journal. *Library Trends*, 43(4):528 – 543.
KEYWORD: e-pubs
- [Hir81] Graeme Hirst, 1981. *Anaphora in Natural Language Understanding: A Survey*. Number 119 in Lecture notes in computer science. Springer-Verlag.
- [HK90] Yoshinori Hara and Yukata Kasahara, April 1990. A set-to-set linking strategy for hypertext systems. In Lochovsky and Allen [LA90], (pp. 131 – 135). Published in SIG OIS Bulletin v.11.
CALLNo: HF5547.5.A1A886 v.11
KEYWORD: Methodology
- [HK94] Rainer Hammwöhner and Rainer Kuhlen, 1994. Semantic control of open hypertext systems by typed objects. *Journal of Information Science*, 20(3):175 – 184.
KEYWORD: System!KHS
- [HKS06] Martin Halvey, Mark T. Keane, and Barry Smyth, 2006. Mobile web surfing is the same as web surfing. *Communications of the ACM*, 49(3):76 – 81. URL [URL: http://doi.acm.org/10.1145/1118178.1118179](http://doi.acm.org/10.1145/1118178.1118179).
SEE ALSO: The Laws of the Web book [Hub01]
- [HLP97] Martin G. Helander, Thomas K. Landauer, and Prasad V. Prabhu (eds.), 1997. *Handbook of Human-Computer Interaction*. Amsterdam: Elsevier Science B.V., 2nd edition. ISBN 0-444-81862-6 (hc) / 0-444-81876-6 (paper).
CALLNo: QA 76.9 H85 H36 1997
SEE ALSO: Selected chapters: [May97; Vor97; WW97; Tul97]
- [HM05] Keith J. Holyoak and Robert G. Morrison (eds.), 2005. *The Cambridge Handbook of Thinking and Reasoning*. Cambridge University Press. ISBN 978-0-521-53101-6.
KEYWORD: spatial ability • CogPsych
- [HMR⁺05] Mary Hegarty, Daniel R. Montello, Anthony E. Richardson, Toru Ishikawa, and Kristin Lovelace, 2005. Spatial abilities at different scales: Individual differences in aptitude-test performance and spatial-layout learning. *Intelligence*, 34:151 – 176. URL [URL: dx.doi.org/10.1016/j.intell.2005.09.005](http://dx.doi.org/10.1016/j.intell.2005.09.005).
ANNOTATION: Abstract:

Most psychometric tests of spatial ability are paper-and-pencil tasks at the “figural” scale of space, in that they involve inspecting, imagining or mentally transforming small shapes or manipulable objects. Environmental spatial tasks, such as wayfinding or learning the layout of a building or city, are carried out in larger spaces that surround the body and involve integration of the sequence of views that change with one’s movement in the environment. In a correlational study, 221 participants were tested on psychometric measures of spatial abilities, spatial updating, verbal abilities and working memory. They also learned the layout of large environments from direct experience walking through a real environment, and via two different media: a desktop virtual environment (VE) and a videotape of a walk through an environment. In an exploratory factor analysis, measures of environmental learning from direct experience defined a separate factor from measures of learning based on VE and video media. In structural-equation models, smallscale spatial abilities predicted performance on the environmental-learning tasks, but were more predictive of learning from media than from direct experience. The results indicate that spatial abilities at different scales of space are partially but not totally dissociated. They specify the degree of overlap between small-scale and large-scale spatial abilities, inform theories of sex differences in these abilities, and provide new insights about what these abilities have in common and how they differ.

KEYWORD: spatial ability • Navigation

- [HO85] L. V. Hedges and I. Olkin, 1985. *Statistical Methods for Meta-analysis*. New York: Academic Press. Citation from Galotti [Gal94a, p. 494].

ANNOTATION: recommended by Galotti (p.423, 438)

- [Hol91] Patrick A. Holleran, 1991. A methodological note on pitfalls in usability testing. *Behaviour & Information Technology*, 10(5):345 – 357.

SEE ALSO: [SDB94; JMWU91]

KEYWORD: CogPsych!LIS 861 • Testing

- [Hol00] Molly E. Holzschlag, September 2000. Color my world. *Web Techniques*, 5:38, 40, 42. ISSN 1086-556X.

KEYWORD: HCI!cultural factors • HCI!colour

- [Hol03] Erik Hollnagel (ed.), 2003. *Handbook of Cognitive Task Design*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc. ISBN 0-8058-4003-6.

- [Hol05a] Lars Erik Holmquist, March + April 2005. Prototyping: generating ideas or cargo cult designs? *interactions*, 12(2):48 – 54. URL <http://doi.acm.org/10.1145/1052438.1052465>.

SEE ALSO:

- 22 Tips (especially #3) [RI94b]
- Berghel's response to 22 Tips [Ber94b]
- Reply to Berghel [RI94a]

KEYWORD: HCI!prototyping • HCI!prototyping!paper prototypes

- [Hol05b] Keith J. Holyoak, 2005. Analogy. In Holyoak and Morrison [HM05], chapter 6, (pp. 117 – 142).

SEE ALSO: Tversky in the same volume [Tve05, p. 225]

KEYWORD: spatial ability • CogPsych

- [Hol06] Lars Erik Holmquist, May + June 2006. Welcome to the mobile life! *interactions*, 13(3):57, 71. URL (URL:<http://doi.acm.org/10.1145/1125864.1125898>).

SEE ALSO: PIKII [EBT04]

- [Hö097] Kristina Höök, 1997. Evaluating the utility and usability of an adaptive hypermedia system. In *Proceedings of the Conference on Intelligent User Interfaces (IUI'97)*.

KEYWORD: spatial ability!Jason Satel

- [Hor83] Mark R. Horton, June 1983. Standard for interchange of USENET messages. Request for Comments 850, Internet Engineering Task Force. Updated by RFC 1036 [HA87].

- [Hor89] Robert E. Horn, 1989. *Mapping Hypertext Analysis Linkage, and Display of Knowledge for the Next Generation of On-Line Text and Graphics*. Lexington Institute. ISBN 0962556505.

CALLNo: QA76.76.H94.H67 1990

ANNOTATION: Horn describes: (1) hypertext as a graph of nodes connected by links, and (2) a proprietary technology called Information Mapping. The book is presented with many cross-references and icons to approximate a hypertext document. The appendix contains information about germinal figures and ideas in the development of hypertext and some related areas. A good overview and introduction to one type of hypertext.

KEYWORD: General!(Background)

- [Hor90] Sally Horton, 1990. Handling full text. In Gillman [Gil90], (pp. 56 – 64). Proceedings of 'The User's Perspective' (1988) and 'Text Management' (1989).

CALLNo: QA76.9.T48 I59 1988-1989

ANNOTATION: Abstract: '... This case study will concentrate on full text requirements of lawyers, the methods used by the law firm of LWD for processing full text material and the practical problems associated with it.'

SEE ALSO: Agosti et al. in SIGIR'91 [ACG91] for another application to law resources

KEYWORD: Misc!(Other field) • full text

- [Hor95a] William Horton, November 1995. Top ten blunders by visual designers. *Computer Graphics*, 29(4):20 – 24.

KEYWORD: HCI!Intro

- [Hor95b] William Horton, 1995. Top ten blunders by visual designers. *SIGGRAPH Comput. Graph.*, 29(4):20–24. ISSN 0097-8930.

- [Hor06] Kasper Hornbæk, February 2006. Current practice in measuring usability: Challenges to usability studies and research. *International Journal of Human-Computer Studies*, 64(2):79 – 102. URL [URL \(URL:\url{http://dx.doi.org/10.1016/j.ijhcs.2005.06.002}\)](http://dx.doi.org/10.1016/j.ijhcs.2005.06.002) & [URL \(URL:http://www.sciencedirect.com/science/article/B6WGR-4GWB6G-2/2/20dceaf90dde9c54e59adbbd6abe810b\)](http://www.sciencedirect.com/science/article/B6WGR-4GWB6G-2/2/20dceaf90dde9c54e59adbbd6abe810b).

KEYWORD: Review • Usability

- [HP93] Marti A. Hearst and Christian Plaunt, 27 June – 1 July 1993. Subtopic structuring for full-length document access. In *SIGIR '93. Proceedings of the sixteenth annual international ACM SIGIR conference on Research and Development in Information Retrieval*. Pittsburgh, PA, USA: ACM SIGIR.

- [HP02] Jörg M. Haake and José A. Pino (eds.), 1 – 4 September 2002. *CRIWG '02: Proceedings of the 8th International Workshop on Groupware: Design, Implementation and Use*. London, UK: Springer-Verlag. ISBN 3-540-44112-3. ISSN 0302-9743. Published in Lecture Notes in Computer Science volume 2440/2002.

- [HPW03] Alice F. Healy, Robert W. Proctor, and Irving B. Weiner (eds.), 2003. *Experimental Psychology*, volume 4 of *Handbook of Psychology*. New York: Wiley.

- [HR88] Udo Hahn and Ulrich Reimer, 23 – 25 March 1988. Automatic generation of hypertext knowledge bases. In *Proceedings of the ACM Conference on Office Information Systems*, (pp. 182 – 188). Palo Alto, CA: ACM. URL [URL \(URL:http://doi.acm.org/10.1145/45410.45429\)](http://doi.acm.org/10.1145/45410.45429). Published in SIGOIS Bulletin v.9 #2 – 3 (April – July 1988).

ANNOTATION: ‘By natural language parsing/semi-recognition, full-text bases are supplied with an abstraction hierarchy of so-called text graph concept browsers with hypertextual links.’ — Nielsen [Nie90c, p.223]

SEE ALSO: [HT87; CRM89]

KEYWORD: HT!AutoGen • AI • System!TOPIC

- [HR97] JoAnn Hackos and Janice Redish, 1997. Building usability in from the beginning: analyzing users and their tasks. In *Annual ACM Conference on Systems Documentation*, (pp. 105 – 130).

KEYWORD: task_analysis • HCI

- [HR06] Robin K. Henson and J. Kyle Roberts, 2006. Use of exploratory factor analysis in published research: Common errors and some comment on improved practice. *Educational And Psychological Measurement*, 66(3):393 – 416. URL [URL \(URL:http://dx.doi.org/10.1177/0013164405282485\)](http://dx.doi.org/10.1177/0013164405282485).

ANNOTATION: Abstract:

Given the proliferation of factor analysis applications in the literature, the present article examines the use of factor analysis in current published research across four psychological journals. Notwithstanding ease of analysis due to computers, the appropriate use of factor analysis requires a series of thoughtful researcher judgments. These judgments directly affect results and interpretations. The authors examine across studies (a) the decisions made while conducting exploratory factor analyses ($N = 60$) and (b) the information reported from the analyses. In doing so, they present a review of the current status of factor analytic practice, including comment on common errors in use and reporting. Recommendations are proffered for future practice as regards analytic decisions and reporting in empirical research.

KEYWORD: Meta-analysis!methodology for • Statistics!factor analysis!recommended guides and guidelines • Statistics!principal components analysis • CogPsych • Statistics!MDS

- [HS90] Frank Halasz and Mayer Schwartz, 1990. The Dexter hypertext reference model. In *Proceedings of the Hypertext Standardization Workshop*, (pp. 95 – 133).

SEE ALSO: A revised (and Z-less) version appeared in CACM [HS94]

KEYWORD: HT!model!Dexter

- [HS93a] Darren R. Hardy and Michael F. Schwartz, 25 – 29 January 1993. Essence: A resource discovery system based on semantic file indexing. In *1993 Winter USENIX*. San Diego, CA.

ANNOTATION: uses `grep` to find keywords in documents for WAIS indexing. Includes a description of the Semantic File System (SFS) from MIT.

KEYWORD: System!Essence • System!SFS • Indexing • AutoGen

- [HS93b] Koichi Hayashi and Akifumi Sekijima, December 1993. Mediating interface between hypertext and structured documents. *Electronic Publishing — Origination, Dissemination and Design*, 6(4):423 – 434.

KEYWORD: Authoring

- [HS94] Frank Halasz and Mayer Schwartz, February 1994. The Dexter hypertext model. *Communications of the ACM*, 37(2):28 – 39. A revised (and Z-less) revision of an earlier paper [HS90].

SEE ALSO: [HS90]

KEYWORD: HT!model!Dexter

- [HS99a] Kristina Höök and Martin Sennson, 1999. Evaluating adaptive navigation support. In Munro et al. [MHB99], chapter 10, (pp. 237 – 249).

CALLNo: QA76.9 C66 S625 1999

KEYWORD: HT!adaptive hypermedia

- [HS99b] Kristina Höök and Martin Svennson, 1999. Footprints in the snow. In Munro et al. [MHB99], chapter 1, (pp. 1 – 17).
CALLNo: QA76.9 C66 S625 1999
- [HSL90] Martin Hoffman, Uwe Schreiweis, and Horst Langendörfer, November 1990. An integrated approach of knowledge acquisition by the hypertext system CONCORDE. In Streitz et al. [SRA90], (pp. 166 – 179). Proceedings of the First European Conference on Hypertext.
ANNOTATION: Application of HT to task
KEYWORD: HT!AutoGen!(AI) • System!CONCORDE • AI!AutoGen
- [HT87] Rainer Hammwöhner and Ulrich Thiel, 13 – 15 November 1987. Content oriented relations between text units — a structural model for hypertexts. In *Hypertext '87 Papers* [ACM87], (pp. 155 – 176). URL [URL: http://doi.acm.org/10.1145/317426.317439](http://doi.acm.org/10.1145/317426.317439).
SEE ALSO: [HR88]
KEYWORD: HT!AutoGen • System!Semantic network • database
- [Hub78] L. J. Hubert, 1978. Generalized proximity function comparisons. *British Journal of Mathematical and Statistical Psychology*, 31:179 – 192.
- [Hub79] L. J. Hubert, 1979. Generalized concordance. *Psychometrika*, 44:135 – 142.
ANNOTATION: 'Methods that can be used to measure the proximity of two hierarchical structures and that can be applied to the problem of measuring how far the structure of the user's conceptual model is from a hypertext's structure....' — Nielsen[Nie90c, p.227]
SEE ALSO: [LKL93; Hub78]
KEYWORD: HT!Conversion
- [Hub01] Bernardo A. Huberman, 2001. *The Laws of the Web: Patterns in the Ecology of Information*. The MIT Press. ISBN 0-262-58225-2.
SEE ALSO: Mobile Web Surfing is the Same as Web Surfing [HKS06]
KEYWORD: CS4173 (WWW)
- [Hud05] William Hudson, 2005. A tale of two tutorials: A cognitive approach to interactive system design and interaction design meets agility. *interactions*, 12(1):49 – 51. URL [URL: http://doi.acm.org/10.1145/1041280.1041297](http://doi.acm.org/10.1145/1041280.1041297).
KEYWORD: task_analysis
- [Hul93] David Hull, 27 June – 1 July 1993. Using statistical testing in the evaluation of retrieval experiments. In Korfhage et al. [KRW93], (pp. 329 – 338).
CALLNo: Z699.A1A886 93-07-15
KEYWORD: Information Retrieval • Evaluation

[Hul04] Larry Hull, March + April 2004. It's not just for disabilities any more. *interactions*, (pp. 36 – 41).

KEYWORD: Navigation!Lostness • WWW • HCI!cultural factors!hearing-impaired users • HCI!CS6606

[Hv99] Rijk Hofman and Herre van Oostendorp, April 1999. Cognitive effects of a structural overview in a hypertext. *British Journal of Educational Technology*, 30(2):129 – 140. ISSN 007-1013. URL [URL: http://dx.doi.org/10.1111/1467-8535.00101](http://dx.doi.org/10.1111/1467-8535.00101).

ANNOTATION:

- McNamara et al. found that a well-developed structure improved the comprehension of readers with low prior knowledge, but impaired comprehension of high prior knowledge readers (cf. with spatial ability and success with HT)
- task and user characteristics are important

SEE ALSO: McDonald and Stevenson in JEHM [MS99] (also influenced by Dee-Lucas)

KEYWORD: CogPsych • spatial ability • spatial ability!Jason Satel

[HVSK99] Linda Hermer-Vazquez, Elizabeth S. Spelke, and Alla S. Katsnelson, August 1999. Sources of flexibility in human cognition: Dual-task studies of space and language. *Cognitive Psychology*, 39(1):3 – 36. URL [URL: \url{http://dx.doi.org.ezproxy.library.dal.ca/10.1006/cogp.1998.0713}](http://dx.doi.org.ezproxy.library.dal.ca/10.1006/cogp.1998.0713) \&\url{http://www.sciencedirect.com/science/article/B6WCR-45GWC3G-7/2/00d5973ebf90626e78c6a4b66c6d6009}}.

KEYWORD: spatial ability

[HW05] Mary Hegarty and David A. Waller, 2005. Individual differences in spatial abilities. In Shah and Miyake [SM05], chapter 4, (pp. 121 – 169).

ANNOTATION:

- p. 129** In the most extensive study to date, Carroll (1993) surveyed and reanalyzed more than 90 data sets that bear on the factor structure of visuospatial ability. Carroll examined the support for five visuospatial factors in the category that he referred to as “abilities in the domain of visual perception.” These were visualization (VZ), spatial relations (SR), closure speed (CS), flexibility of closure (CF), and perceptual speed (P). A fifth factor, visual memory (MV) is described in a chapter of Carroll’s book on the domains of learning and memory. It should be noted that Carroll’s definition is somewhat broader than those of McGee (1979b) and Lohman (1979). For example, Lohman acknowledged the existence of [CS], [P], and [MV], but referred to them as minor factors that are not central to what is meant by “spatial ability.”
- p. 131** A somewhat surprising result of Carroll’s study is that he failed to find strong and consistent evidence for the separability of spatial relations from the spatial visualization factor; only 7 of the 94 data sets

that he examined showed such a distinction. ...Despite this observation, the distinction between spatial relations and spatial visualization has remained important in the cognitive analysis of spatial test performance.

p. 140 Thus, it appears that to some extent spatial visualization tests measure the ability to choose the optimal strategy for solving a particular item, given one's abilities. the Factor-Analytic Literature)] concluded that pencil-and-paper tests of spatial abilities can be used effectively for the recruitment and selection of personnel for which cognitive mapping skill is important. [There is no definition of the term 'cognitive mapping' or 'cognitive map' in this Chapter.]

KEYWORD: spatial ability •

[HW10] Jeff Huang and Ryen W. White, 2010. Parallel browsing behavior on the web. In *HT'10: Proceedings of the 21st ACM conference on Hypertext and hypermedia* [ACM10], (pp. 13 – 18). URL (URL:<http://doi.acm.org/10.1145/1810617.1810622>). General Chair-Mark Chignell, and Program Chair-Elaine Toms.

SEE ALSO: History from HT1996 [JC96] and Tabbing from CHI2010 [DB10]

[HWM06] Jefferson B. Hardee, Ryan West, and Christopher B. Mayhorn, May + June 2006. To download or not to download: an examination of computer security decision making. *interactions*, 13(3):32 – 37. URL (URL:<http://doi.acm.org/10.1145/1125864.1125887>).

[HY96] Leah K. Hennings and Nong Ye, 1996. Interaction of screen distances, screen letter heights and source document distances. *Interacting with Computers*, 8(4):311 – 322.

ANNOTATION: Task was proof-reading

KEYWORD: Reading

[Hyd81] Janet Shibley Hyde, August 1981. How large are cognitive gender differences? a meta-analysis using ω^2 and d . *American Psychologist*, 36(8):892 – 901.

KEYWORD: spatial ability

[Hyp93] ACM SIGLINK, SIGIR, SIGOIS, 14 – 18 November 1993. *The Fifth ACM Conference on Hypertext Proceedings*. Seattle, Washington USA: ACM Press.

[Hyp94] 1989 – 1994. Hypermedia, London, United Kingdom: Taylor Graham Publishing. ISSN 0955-8543. Continued as The New Review of Hypermedia and Multimedia [The].

[Hyp03] 26 – 30 August 2003. *HYPERTEXT '03: Proceedings of the fourteenth ACM conference on Hypertext and hypermedia*. New York, NY: ACM Press. ISBN 1-58113-704-4.

[IEE88] January 1988. Special issue. *IEEE Computer*, 21(1).

KEYWORD: HT

- [IJHa] Masamitsu Oshima Kay M. Stanney, Gavriel Salvendy (ed.). International journal of human-computer interaction, Lawrence Erlbaum Associates, Inc. ISSN 1044-7318. Not to be confused with IJHCS [IJHb], URL [URL: http://www.erlbaum.com/Journals/journals/IJHCI/ijhci.htm](http://www.erlbaum.com/Journals/journals/IJHCI/ijhci.htm).
- [IJHb] B. R. Gaines (ed.). International journal of human-computer studies, Academic Press. ISSN 1071-5819. Continuation of International Journal of Man-Machine Studies.
- [Ill91] Valerie Illingworth (ed.), 1991. *Dictionary of Computing*. Oxford Reference. Oxford University Press, third edition. ISBN 0-19-286131-X.
- SEE ALSO: Additions the OED [SW93b], Toyanne's MSc thesis [Lau90]
- KEYWORD: Definition
- [IM93] Satoshi Ichimura and Yutaka Matsushita, 14 – 18 November 1993. Another dimension to hypermedia access. In Hypertext 1993 [Hyp93].
- KEYWORD: System!OpenBook
- [Inf] Paul B. Kantor and Stephen E. Robertson (eds.). Information retrieval, Kluwer. ISSN 1386-4564. URL [URL: http://www.wkap.nl/journals/ir/](http://www.wkap.nl/journals/ir/).
- [Ins99] Keith Instone, 15 January 1999. Personal communication.
- [Inta] Interacting with computers, Elsevier. ISSN 0953-5438. URL [URL: http://www.elsevier.com/locate/intcom/](http://www.elsevier.com/locate/intcom/).
- [Intb] N. R. Adam and Y. Yesha (eds.). International journal on digital libraries, Germany: Springer. ISSN 1432-5012 (printed version), 1432-1300 (electronic version). URL [URL: http://link.springer.de/link/service/journals/00799/](http://link.springer.de/link/service/journals/00799/).
- [Int05] C. Karat, J. Karat, and C. Brodie (eds.), July 2005. Special issue. *International Journal of Human-Computer Studies*, 63(1-2):1-270. Contents: [URL: http://www.sciencedirect.com/science/article/B6WGR-4GJ0D2P-2/2/05277044c863277eb04801311bf84d28](http://www.sciencedirect.com/science/article/B6WGR-4GJ0D2P-2/2/05277044c863277eb04801311bf84d28).
- [int06] Ryan West (ed.), May + June 2006. Special issue. *interactions*, 13(3). HCI and security.
- SEE ALSO:
- [KPW06]
 - [HWM06]
 - [DK06]
 - [Cra06]
 - [SRD06]
- KEYWORD: HCI • Security
- [int] 1994-. *interactions*, New York, NY: Association for Computing Machinery. ISSN 1072-5220.

[ISO95] ISO, 1995. ISO 17799 - information security 'code of practice'. URL (URL:\url{http://www.iso-17799.com/}). Revised 1999, 2000, 2002.

[IT89] Peggy M. Irish and Randall H. Trigg, 1989. Supporting collaboration in hypermedia: Issues and experiences. In Barrett [Bar89a].

CALLNO: QA76.76.H94 S65 1989

[ITL93] Keith Instone, Barbee Mynatt Teasley, and Laura Marie Leventhal, 24 – 29 April 1993. Empirically-based re-design of a hypertext encyclopedia [sic]. In Stacey Ashlund, Kevin Mullet, Austin Henderson, Erik Hollnagel, and Ted White (eds.), *Proceedings of INTERCHI 1993*, (pp. 500 – 506). Addison-Wesley.

SEE ALSO: SuperBook [RGL87]

KEYWORD: System!SuperBook

[Itt01] Johannes Itten, 2001. *The Elements of Color: A Treatise on the Color System of Johannes Itten Based on his book The Art of Color Edited and with a forward and Evaluation by Faber Birren. Translated by Ernst van Hagen.*. John Wiley & Sons, Inc. From page 2: 'Originally published in German under the title KUNST DER FABRE, Studeienausgabe by Johannes Itten Copyright © 2001 Seemann Verlag, Leipzig'.

KEYWORD: colour

[Jac96a] Rob Jackson, 1 May 1996. Personal communication. Jackson was then the manager of the Statlab in the department of Statistical and Actuarial Science at the University of Western Ontario.

[Jac96b] Rob Jackson, 11 June 1996. Personal communication. Jackson was then the manager of the Statlab in the department of Statistical and Actuarial Science at UWO.

[Jac01] H. J. Jackson, 2001. *Marginalia: Reader's Writing in Books*. Yale University Press. ISBN 0-300-08816-7.

KEYWORD: annotation

[JB07] S. Jones and G. E. Burnett, 14 – 16 March 2007. Children's navigation of hyperspace — are spatial skills important? In *6th IASTED International conference on Web-based education*. URL (URL:http://www.mrl.nott.ac.uk/~sjj/Final%20paper_WBE2007.pdf).

ANNOTATION: Abstract

Hypertext is becoming increasingly popular as a platform for educational material, allowing the user autonomy and flexibility in choosing a route through the presented information. However, the required decision-making process places extra cognitive demands on the user, and this may result in disorientation and the phenomenon known as 'lost in hyperspace'. Individuals with high spatial ability appear to demonstrate superior navigational skills within hypertext, completing tasks more quickly and with fewer errors

then those with low spatial ability. They tend to form more accurate internal representations, or cognitive maps, of hypertext systems that correspond better to the underlying physical structure. Little research has been carried out with children to assess their formation of cognitive maps of hyperspace. In this study, 32 children aged 10–11 years from a primary school in the UK were given search tasks to complete on an environmental Web site. Various measures were made of their navigational efficiency, their degree of lostness, and their ability to complete a map of the routes they had traversed. Those with high spatial ability completed the tasks in shorter time, became lost less frequently, and completed the maps more accurately. This paper discusses the implications of these results to the success of hypertext learning environments for learners with low spatial ability.

KEYWORD: spatial ability

[JBM91] Frances Jennings, David Benyon, and Dianne Murray, 1991. Adapting systems to differences between individuals. In van der Veer et al. [vBK91], (pp. 243 – 256). Selected papers published in revised form in *Acta Psychologica* volume 78.

CALLNO: BF 1 A17 v.76-78 1991

ANNOTATION:

- Abstract: 'Adaptive systems should be able to accommodate the preferred interface styles of different users. An experiment was conducted in order to determine whether significant differences exist between individuals performing the same task, using different interfaces. Individual users' performances on five different interfaces to a computer database system, after the initial learning stage, were compared with their scores on various cognitive and personality tests. The results suggested that two interface styles are necessary for database systems in order for them to suit a range of users: an aided-navigation interface with a constrained dialogue for low spatial ability users, and a non-aided navigation interface with a flexible dialogue for high spatial ability users. Both interfaces should minimize the amount of verbal input necessary.' (Record from HCIBIB ([URL:http://hcibib.org/gs.cgi?word=checked&terms=E.vanderVeer.92.243](http://hcibib.org/gs.cgi?word=checked&terms=E.vanderVeer.92.243)))
- differences in high/low spatial ability, field (in-)dependence
- measures of time (efficiency), score (effectiveness), and satisfaction (affect)

SEE ALSO:

- User analysis in HCI—the historical lessons from individual differences research [DW96]
- Accommodating Individual Differences in Searching a Hierarchical File System [VW88]

field (in-)dependence

- B. Allen in DL98 [All98] and JASIS [All00]
- Charney [Cha94, pp. 252, 262]
- Dillon & Watson in IJHCS v.45 [DW96, p. 627]
- Dillon in JASIS 51(6) [Dil00]
- N. Ford's *Cognitive Styles and Virtual Environments* also in JASIS 51(6) [For00]
- Jennings et al. in CogErg91 [JBM91]

KEYWORD: individual differences • spatial ability • HCI

- [JC96] Steve Jones and Andy Cockburn, 1996. A study of navigational support provided by two World Wide Web browsing applications. In *HYPERTEXT '96: Proceedings of the the seventh ACM conference on Hypertext*, (pp. 161 – 169). URL [URL: http://doi.acm.org/10.1145/234828.234844](http://doi.acm.org/10.1145/234828.234844).

SEE ALSO: Tabbing from HT2010 [HW10] and Tabbing from CHI2010 [DB10]

- [JF87] William P. Jones and George W. Furnas, November 1987. Pictures of relevance: A geometric analysis of similarity measures. *Journal of the American Society for Information Science*, 38(6):420 – 442.

SEE ALSO:

- Used in MSc[Blu94].
- Compare
 - Zobel & Moffat (1998) [ZM98],
 - Ellis et al.[EFHW93]

KEYWORD: Information Retrieval!weighting

- [JK89] Bryon Jones and Michael G. Kenward, 1989. *Design and Analysis of Cross-Over Trials*. Number 34 in *Mongraphs on Statistics and Applied Probability*. Chapman and Hall. ISBN 0-412-30000-1.

- [JK96a] Bonnie E. John and David E. Kieras, December 1996. The GOMS family of user interface analysis techniques: comparison and contrast. *ACM Transactions on Computer-Human Interaction*, 3(4):320 – 351.

KEYWORD: HCI • GOMS • Review

- [JK96b] Bonnie E. John and David E. Kieras, December 1996. Using GOMS for user interface design and evaluation: which technique? *ACM Transactions on Computer-Human Interaction*, 3(4):287 – 319.

KEYWORD: HCI • GOMS

- [JM90] David H. Jonassen and Heinz Mandl (eds.), 1990. *Designing Hypermedia for Learning*. NATO Advanced Science Institutes Series, F: Computer and Systems Sciences, Vol. 67. Springer-Verlag. Updated proceedings of the NATO Advanced Research Workshop on

Designing Hypertext/Hypermedia for Learning, held in Rottenburg/Neckar, FRG, 3 – 8 July 1989. Includes typed hypertext annotation links, made by the authors, connecting passages in papers to each other.

- [JMWU91] Robin Jeffries, James R. Miller, Cathleen Wharton, and Kathy M. Uyeda, 27 April – 2 May 1991. User interface evaluation in the real world: A comparison of four techniques. In Robertson et al. [ROO91], (pp. 119 – 124).

CALLNO: QA76.9.H85C4419912

SEE ALSO: [Hol91; SDB94; PG94]

KEYWORD: CogPsych!LIS 861 • Evaluation

- [JoD] Cliff McKnight (ed.). Journal of digital information. [URL:http://jodi.ecs.soton.ac.uk/](http://jodi.ecs.soton.ac.uk/). ISSN 1368-7506. A peer-reviewed electronic journal supported by the British Computer Society and Oxford University Press, maintained in the Multimedia Research Group, University of Southampton, United Kingdom.

- [Joh88] Eric J. Johnson, 1988. Expertise and decision under uncertainty: Performance and process. In Chi et al. [CGF88], chapter 7, (pp. 209 – 228).

CALLNO: BF 323 E2 N37 1988

ANNOTATION:

SEE ALSO: Other chapters in the same book [GC88; Pos88; VP88]

KEYWORD: Expertise

- [Joh92] Mark Johnston, 1992. Sidebar: Qualitative reasoning. *Library Hi Tech*, 10:1–2:96 – 97. ISSN 0737-8831. CYC project — sidebar to [RR92].

CALLNO: Z671.L696

KEYWORD: AI!(reasoning system) • System!CYC

- [Joh95] Bonnie E. John, 1995. Why GOMS? *interactions*, II(4).

KEYWORD: HCI • GOMS

- [Joh00] Lise Ann Johnson, 18 October 2000. Digital storytelling. Radio Broadcast.

- [Jon87] Henry W. Jones, III, 13 – 15 November 1987. Developing and distributing hypertext tools: Legal inputs and paramaters. In *Hypertext '87 Papers* [ACM87], (pp. 367 – 374).

KEYWORD: Legal Issues

- [Jon90a] David H. Jonassen, 1990. Semantic network elicitation: Tools for structuring hypertext. In Ray McAleese and Catherine Green (eds.), *Hypertext: State of the Art*, (pp. 142 – 152). Intellect.

- [Jon90b] Kevin P. Jones, October 1990. Natural-language processing and automatic indexing: A reply. *The Indexer*, 17(2):114 – 115.

SEE ALSO: Original article by Korycinski & Newell [KN90]

- [Jon90c] Richard Jones, 1990. Case study: Hypertext-based integrated laboratory information system. In Gillman [Gil90], (pp. 138 – 146). Proceedings of ‘The User’s Perspective’ (1988) and ‘Text Management’ (1989).
CALLNo: QA76.9.T48 I59 1988-1989
- [Jon92] Richard L. Jones, 1992. Automatic document content analysis: The AIDA project. *Library Hi Tech*, 10:1–2:111, 113 – 117. ISSN 0737-8831.
CALLNo: Z671.L696
ANNOTATION: From the abstract: [The AIDA project’s] primary objective is to develop practical methods for carrying out document content analysis with minimal human intervention. Following a very successful independent assessment of the techniques, the first commercial-strength tool has now been developed. It links the different AIDA analyses (point form summary, keywords and so on) with the original document to form a ‘complete’ hyperdoc. The techniques employed are described.
SEE ALSO: [HS93a]
KEYWORD: HT!AutoGen • System!AIDA
- [Jon93] David H. Jonassen, 1993. Effects of semantically structured hypertext knowledge bases on users’ knowledge structures. In McKnight et al. [MDR93], chapter 7, (pp. 153 – 168). URL [URL: http://telecaster.lboro.ac.uk/HaPP/contents.html](http://telecaster.lboro.ac.uk/HaPP/contents.html).
CALLNo: QA76.76.H94 H95 1993
SEE ALSO:
 - Homeopathic Fallacy [MRH95] argues that the process is not the same as the result
 - Bryce Allen’s DL98 [All98] experiment with a similar interface
KEYWORD: CogPsych
- [Jon99] Steve Jones, 4 March 1999. Automatic hypertext/my student. E-mail message.
- [Jon02] Erik Jonsson, 2002. *Inner Navigation: Why we get lost and how we find our way*. Scribner. ISBN 0-7432-2206-7.
KEYWORD: KNavigation
- [Jor98] Patrick W. Jordan, 1998. *What is Usability?*, chapter 2, (pp. 5–23). Taylor and Francis Ltd. ISBN 0-7484-0762-6.
- [Joua] Gary H. Marks (ed.). *Journal of educational multimedia and hypermedia*, Association for the Advancement of Computing in Education. ISSN 1055-8896. URL [URL: http://www.aace.org/pubs/jemh/](http://www.aace.org/pubs/jemh/).
- [Joub] Donald H. Kraft (ed.). *Journal of the American Association for Information Science and Technology*, American Society for Information Science and Technology, John Wiley & Sons, Inc. ISSN Online 1532-2890 / Print 1532-2882. Formerly *Journal of the American Association for Information Science*, URL [URL: http://www.asis.org/Publications/JASIS/](http://www.asis.org/Publications/JASIS/).

CALLNO: Z1008 A51

[Joy91a] Michael Joyce, 1991. Selfish interaction or subversive texts. In Emily Berk and Joseph Devlin (eds.), *Hypertext/Hypermedia Handbook*, chapter 8, (pp. 79 – 92). Intertext Publications.

[Joy91b] Michael Joyce, 15 – 18 December 1991. Storyspace as a hypertext system for writers and readers of varying ability. In *Hypertext '91 Proceedings* [ACM91], (pp. 381 – 387).

KEYWORD: System!Storyspace

[JPJ05] Carlos Jensen, Colin Potts, and Christian Jensen, July 2005. Privacy practices of internet users: Self-reports versus observed behavior. *International Journal of Human-Computer Studies*, 63(1 – 2):203 – 227. URL ([URL:http://dx.doi.org/10.1016/j.ijhcs.2005.04.019](http://dx.doi.org/10.1016/j.ijhcs.2005.04.019)). ([URL:http://www.sciencedirect.com/science/article/B6WGR-4G9GPOG-1/2/c3694d1f71dbc4c60dcba8d50751021a](http://www.sciencedirect.com/science/article/B6WGR-4G9GPOG-1/2/c3694d1f71dbc4c60dcba8d50751021a)).

SEE ALSO: Shibu Basheer's MEC report

KEYWORD: Usability • Security

[JQ77] J. A. John and M. H. Quenouille, 1977. *Experiments: Design and Analysis*. John Griffin & Co. Ltd., second edition.

CALLNO: Q180.A1.J65 1977

[JS92] Robert Alun Jones and Rand Spiro, 30 November – 4 December 1992. Imagined conversations: The relevance of hypertext, pragmatism, and cognitive flexibility theory to the interpretation of “classic texts” in intellectual history. In Lucarella et al. [LNNP92], (pp. 141 – 148).

KEYWORD: MSc!Justification

[JS04] Peder Jungck and Simon S. Y. Shim, July 2004. Issues in high-speed internet security. *IEEE Computer*, 37:36 – 42.

[Juv06] Ion Juvina, 2006. *Development of a Cognitive Model for Navigating on the Web*. Ph.D. thesis, Utrecht University. URL ([URL:http://igitur-archive.library.uu.nl/dissertations/2006-1025-201007/index.htm](http://igitur-archive.library.uu.nl/dissertations/2006-1025-201007/index.htm)).

ANNOTATION: Abstract:

The objective of this thesis is to build a cognitive model of human performance in Web-assisted tasks. The research is driven by the following questions: What are the most important factors in determining success in Web-assisted tasks? What cognitive mechanisms are involved in these factors? What kind of Web navigation support can be conceived based on the knowledge gained from the previous questions?

The approach is based on the simultaneous consideration of theory, method and real-world applicability. Web navigation is grounded in theories of Cognitive Science (Text Comprehension

in particular), and Information Science (Human-Computer Interaction in particular). Experimentation, statistical analysis and modeling are conducted. Practical needs of Web engineering are taken into consideration.

This research investigates how real Web applications are used. A sequence of repeated studies shows that a combination of two factors is the most important determinant of human performance in Web-assisted tasks: a structure-related factor (spatial ability) and a content-related factor (domain expertise). Spatial cognition is involved in representing the structure of the information space, while domain knowledge is necessary for understanding and selecting relevant content.

Factors, such as spatial ability and domain expertise, can only be measured with specialized tests, which cannot be implemented in realistic Web applications. For this reason, Web-logging data is used to calculate metrics of Web navigation behavior. Metrics referring to the structure of user navigation are called *syntactic*, whereas metrics referring to the visited content are called *semantic*. It is demonstrated that *syntactic* (structural) metrics indicate users' navigation styles, for example, if they prefer to revisit pages rather than viewing new pages, or if they return to previously viewed pages using the back button or just by following links. Semantic metrics indicate if users are effective in pursuing their goals independent of their navigation styles. These navigation metrics can be used in building user-models for adaptive Web applications such as recommender systems.

A cognitive model of Web navigation (labeled CoLiDeS+) is proposed. Theoretical and empirical arguments are used to motivate the main assumptions of the model which are: (a) users build and update a mental representation of the information space being navigated; and (b) they assess relevance and make decisions to select particular contents based on both prior knowledge they have about those contents, and knowledge they gain from the local context of those particular contents (i.e., what contents they link to). CoLiDeS+, an augmented version of CoLiDeS (Kitajima, Blackmon, & Polson, 2000), uses Latent Semantic Analysis to model assessments of relevance and user navigation history (sequence of selected links) to model contextual information involved in making navigational decisions. This latter feature is the main distinguishing characteristic of CoLiDeS+. The model has been empirically tested for its accuracy in simulating actual user behavior and its utility in generating Web navigation support. It is shown that CoLiDeS+ performs better in modeling user behavior than its previous version (CoLiDeS) and the navigation support generated from its simulations has a positive impact on user behavior and task outcomes. This thesis advances the scientific understanding of human perfor-

mance in knowledge-intensive tasks and contributes to designing useable and accessible information environments.

Keywords:

Web navigation, human performance, cognitive modeling, spatial ability, domain expertise, Web useability, Web accessibility, navigation metrics, navigation support, user modeling

SEE ALSO: article in IJHCS [vOJ07]

KEYWORD: HCI!CS6606 • Navigation!Lostness • CogPsych • spatial ability • HT!System!WWW • CoLiDeS

- [KA92] B. Kirwan and L.K. Ainsworth (eds.), 1992. *A Guide To Task Analysis*. Washington, DC: Taylor & Francis Inc. ISBN 0-7484-0057-5(cloth)/0-7484-0058-3(paper).

KEYWORD: task_analysis

- [Kah89] P. Kahn, 1989. Linking together books: Experiments in adapting published material into hypertext. *Hypermedia*, 1(2):111 – 145.

ANNOTATION: ‘Describes the conversion of a set of books on Chinese poetry into Intermedia format, giving plenty of screen shots. One interesting illustration is an overview diagram of the translators [sic] of the poet Tu Fu, which are ordered in two dimensions: Chronologically [sic] on the on the [sic] y-axis and according to the translator’s emphasis on sinology or poetry on the x-axis. The author distinguishes between *objective links* (those present in the text being converted such as explicit literature references) and *subjective links* (those being added because the converter or other hypertext user sees a connection between two items.’ — Nielsen[Nie90c, p.227]

KEYWORD: System!Intermedia • HT!Conversion

- [Kah90] Paul Kahn, 16 – 18 January 1990. Hypermedia bibliography, 1989. In Moline et al. [MBB90], (pp. 249 – 264). NIST Special Publication 500-178.

CALLNo: QA76.76.H94 H96 1990

- [Kan96] Mark Kantrowitz, 13 May 1996. FAQ: Artificial Intelligence FTP Resources 6/6 [Monthly posting]. Cross-posted to the `<URL:comp.ai>`, `news.answers`, and `comp.answers newsgroups` with message-ID `<<URL:AI_6_831988938@CS.CMU.EDU>>`. Author’s e-mail address is `<mkant+@cs.cmu.edu>`.

ANNOTATION: In the section labelled Subject: [6-3] Where can I get a machine readable dictionary, thesaurus, and other text corpora? it says:

CORPORA is a mailing list for Text Corpora. It welcomes information and questions about text corpora such as availability, aspects of compiling and using corpora, software, tagging, parsing, and bibliography. To be added to the list, send a message to `corpora-request@x400.hd.uib.no`. Contributions should be sent to `<URL:corpora@x400.hd.uib.no>`.

- [Kap96] Frank Kappe, 1996. The need for second-generation hypermedia systems. In Hermann Maurer (ed.), *Hyper-G now HYPERWAVE: The Next Generation Web Solution*, chapter 8, (pp. 88 – 102). Addison Wesley Longman Limited. ISBN 0-201-40346-3.
- [Kar03] Alan H. Karp, July 2003. E-speak E-xplained. *Communications of the ACM*, 46:112 – 118.
- [KB89] Stan Kelly-Bootle, August 1989. It takes two to intuit. *Computer Language*, (pp. 131, 133, 134, 137, 138).
- SEE ALSO: [Ras94], [Ras97], [Tur08]
- KEYWORD: HCI!Intro!Intuitive
- [KB99] B. Kemp and K. Buckner, 1999. A taxonomy of design guidance for hypermedia design. *Interacting with Computers*, 12(2):143 – 160. ISSN 0953-5438.
- SEE ALSO: SUE [GM97]
- KEYWORD: Design • Survey
- [KC91] Gary A. Klein and Roberta Calderwood, September/October 1991. Decision models: Some lessons from the field. *IEEE Transactions on Systems, Man, and Cybernetics*, 21(5):1018 – 1026.
- KEYWORD: CogPsych!LIS 861
- [KC92] Robert Krovetz and W. Bruce Croft, April 1992. Lexical ambiguity and information retrieval. *ACM Transactions on Information Systems*, 10(2):115 – 141.
- SEE ALSO: Furnas et al. 'The Vocabulary Problem ...' CACM 30(11) [FLGD87]
- [KFK98] Piet A. M. Kommers, Alcindo F. Ferreira, and Alex W. Kwak, 1998. *Graph Computation in Structuring Hypermedia*, chapter 14, (pp. 142 – 166). Berlin: Springer-Verlag. ISBN 3-540-59483-3.
- [KH95] Hanhwe Kim and Stephen C. Hirtle, 1995. Spatial metaphors and disorientation in hypertext browsing. *Behaviour & Information Technology*, 14(4):239 – 250.
- ANNOTATION:
- suggests types of user/searcher strategies and methods of organizing using spatial metaphors,
 - suggests three type of problems with HT:
 - embedded task
 - navigational
 - lack of recall for detail
 all related to cognitive overload
 - p. 247 menu types (cites experiments)
- SEE ALSO: types of HT readers:[LK98; RAK97; CCM98]
- KEYWORD: Review • spatial ability • taxonomy • menus • Navigation

- [KI05] Piet Kommers and Pedro Isaías (eds.), February 2005. *IADIS International Conference on Web Based Communities*. ISBN 9-729-93537-8.
- [Kie80] David E. Kieras, 1980. Initial mention as a signal to thematic content in technical passages. *Memory & Cognition*, 8(4):345 – 353.
- ANNOTATION: Brief survey of some literature about conventional use of ‘topic sentences’ at the beginning of paragraphs (pp. 345 – 346, 351 – 352). Studies found, however, that initial mention of topic is not essential for a reader to determine the topic of a passage. Used articles from *Scientific American* for experiments.
- [Kig84] John I. Kiger, 1984. The depth/breadth trade-off in the design of menu-driven user interfaces. *International Journal of Man-Machine Studies*, 20:201 – 213.
- SEE ALSO: Halgren and Cooke on menus [HC93]
- KEYWORD: CogPsych!LIS 861 • menus
- [Kim90] Catherine Kimmel, 1990. Integrating text into management information. In Gillman [Gil90], (pp. 101 – 111). Proceedings of ‘The User’s Perspective’ (1988) and ‘Text Management’ (1989).
- CALLNO: QA76.9.T48 I59 1988-1989
- [Kim97] Eliot W. Kimber, 1997. *Practical Hypermedia: An Introduction To HyTime*. Professional Technical Reference. New York: Prentice-Hall.
- KEYWORD: HyTime
- [Kin89] Roger King, 1989. *My cat is object-oriented*, (pp. 23 – 30). ACM Press. ISBN 0-201-14410-7. URL [URL: http://doi.acm.org/10.1145/63320.66469](http://doi.acm.org/10.1145/63320.66469).
- KEYWORD: Programming
- [Kin92] Mark Kinnucan, 1992. The size of retrieval sets. *Journal of the American Society for Information Science*, 43(1):72 – 79.
- KEYWORD: CogPsych!LIS 861
- [KJVK07] Petr Kveton, Martin Jelinek, Dalibor Voboril, and Helena Klimusova, January 2007. Computer-based tests: the impact of test design and problem of equivalency. *Computers in Human Behavior*, 23(1):32 – 51. URL [URL: http://www.sciencedirect.com/science/article/B6VDC-4C604BH-1/2/33158dab7fefea965f8818ca393817f4](http://www.sciencedirect.com/science/article/B6VDC-4C604BH-1/2/33158dab7fefea965f8818ca393817f4).
- ANNOTATION: Abstract:
- Nowadays, computerized forms of psychodiagnostic methods are often produced without providing appropriate psychometric characteristics, or without proving equivalency with conventional forms. Moreover, there exist tests with more than one computerized versions, which are mostly designed differently. Study I focused on the impact of test design. It was found that even simple change of color scheme (light stimuli on dark background vs. dark stimuli

on light background) had a significant effect on subjects' performance. Study II examined equivalency of a computerized speeded test, which is broadly used within psychological practitioners in the Czech Republic; this form was found non-equivalent with its conventional counterpart.

KEYWORD: HCI!colour

- [KK95] Masaaki Kurosu and Kaori Kashimura, 1995. Apparent usability vs. inherent usability: Experimental analysis on the determinants of the apparent usability. In *CHI '95 Proceedings*.
- [KK99] Hermann Kaindl and Stefan Kramer, February 1999. Semiautomatic generation of glossary links: A practical solution. In Tochtermann et al. [TWWL99], (pp. 3 – 12).
- [KKBF05] John Karat, Clare-Marie Karat, Carolyn Brodie, and Jinjuan Feng, July 2005. Privacy in information technology: Designing to enable privacy policy management in organizations. *International Journal of Human-Computer Studies*, 63(1 – 2):153 – 174. URL [URL \(http://dx.doi.org/10.1016/j.ijhcs.2005.04.011\)](http://dx.doi.org/10.1016/j.ijhcs.2005.04.011). [URL \(http://www.sciencedirect.com/science/article/B6WGR-4G94HXR-2/2/48131a577ae4dd148e0e6ab105df6a30\)](http://www.sciencedirect.com/science/article/B6WGR-4G94HXR-2/2/48131a577ae4dd148e0e6ab105df6a30).

KEYWORD: Usability • Security

- [KLCK98] Clare-Marie Karat, Arnold Lund, Joëlle Coutaz, and John Karat (eds.), 18 – 23 April 1998. *Making the Impossible Possible: CHI 98 Human Factors in Computing Systems Conference Proceedings*. New York, NY: ACM Press. ISBN 0-201-30987-4.
- [Kle00] Matthew Klee, March/April 2000. Five paper prototyping tips. *Eye For Design*, 7(2):2 – 4. URL [URL \(http://world.std.com/~uieweb/paperproto.htm\)](http://world.std.com/~uieweb/paperproto.htm).

SEE ALSO:

- Paper Prototypes: Still Our Favorite [Sca98]
- Using Paper Prototypes to Manage Risk [Use96]

KEYWORD: HCI!prototyping!paper prototypes

- [KLRH04] Petros Kavassalis, Stelios Lelis, Mahmoud Rafea, and Seif Haridi, February 2004. What makes a website popular? *Communications of the ACM*, 47:51 – 55.

SEE ALSO: 'Aesthetics and usability: A look at color and balance' [BP03] and 'The role of context in perception of the aesthetics of web pages over time' [vSL09]

- [KMB07] Robert Klanten, Kika Mischler, and Silja Bilz (eds.), 2007. *The Little Know-It-All: Common Sense for Designers*. Berlin: Die Gesalten Verlag. ISBN 978-3-89955-167-9.

- [KN90] C. Korycinski and Alan F. Newell, April 1990. Natural-language processing and automatic indexing. *The Indexer*, 17(1):21 – 29. ISSN 0019-4131.

SEE ALSO: reply by Jones [Jon90b]

- [Knu73a] Donald E. Knuth, 1973. *Fundamental Algorithms*, volume I of *The Art of Computer Programming*. Addison-Wesley Publishing Company, 2nd edition.

CALLNo: QA76.5.K57 v.1

- [Knu73b] Donald E. Knuth, 1973. *Sorting and Searching*, volume III of *The Art of Computer Programming*. Addison-Wesley Publishing Company, first edition.

CALLNo: QA76.5.K57 v.3

- [KO98] Tamara G. Kolda and Dianne P. O'Leary, October 1998. A semidiscrete matrix decomposition for latent semantic indexing information retrieval. *ACM Transactions on Information Systems*, 16(4):322 – 346.

ANNOTATION: Abstract: 'The vast amount of textual information available today is useless unless it can be effectively and efficiently searched. The goal in information retrieval is to find documents that are relevant to a given user query. We can represent a document collection by a matrix whose (i, j) entry is nonzero only if the i th term appears in the j th document; thus each document corresponds to a column vector. The query is also represented as a column vector whose i th term is nonzero only if the i th term appears in the query. We score each document for relevancy by taking its inner product with the query. The highest-scoring documents are considered the most relevant. Unfortunately, this method does not necessarily retrieve all relevant documents because it is based on literal term matching. Latent semantic indexing (LSI) replaces the document matrix with an approximation generated by the truncated singular-value decomposition (SVD). This method has been shown to overcome many difficulties associated with literal term matching. In this article we propose replacing the SVD with the semidiscrete decomposition (SDD). We will describe the SDD approximation, show how to compute it, and compare the SDD-based LSI method to the SVD-based LSI methods. We will show that SDD-based LSI does as well as SVD-based LSI in terms of document retrieval while requiring only one-twentieth the storage and one-half the time to compute each query. We will also show how to update the SDD approximation when documents are added or deleted from the document collection.'

KEYWORD: LSI

- [Kob98] Shigenobu Kobayashi, 1998. *Colorist: A Practical Handbook for Personal and Professional Use*. Kodansha International. ISBN 4-7700-2323-5. First published in Japanese by Kodansha International Limited as *Karaarisuto (Colorist)*. Translated by Keiichi Ogata and Leza Lowitz. Copyright by the author.

KEYWORD: colour

- [Koc07] Peter-Paul Koch, 2007. *hp{ on JavaScript*. New Riders. ISBN 0-321-42330-5.

KEYWORD: System!WWW!CS4173 • CS4173 (WWW) • JavaScript

- [Kos94] Martijn Koster, 1994. ALIWEB — Archie-like indexing in the WEB. *Computer Networks and ISDN Systems*, 27:175 – 182.

- [Kos07] Stephen M. Kosslyn, 2007. *Clear and to The Point: 8 Pyschological Principles for Compelling PowerPoint® Presentations*. Oxford University Press. ISBN 978-0-19-532069-5.
KEYWORD: HCI!colour • Basic skills for grad students
- [KP93] Eila Kuikka and Martti Penttonen, December 1993. Tranformation of structured document with the use of grammar. *Electronic Publishing — Origination, Dissemination and Design*, 6(4):373 – 383.
SEE ALSO: From Text to Hypertext by Indexing by Slaminen *et al.* [STSM95]
- [KPW06] Cynthia Kuo, Adrian Perrig, and Jesse Walker, May + June 2006. Designing an evaluation method for security user interfaces: lessons from studying secure wireless network configuration. *interactions*, 13(3):28 – 31. URL [URL: http://doi.acm.org/10.1145/1125864.1125886](http://doi.acm.org/10.1145/1125864.1125886).
- [Kra02] Jim Krause, 2002. *Color Index: Over 1100 Color Combinations CMYK and RGB Formulas For Print and Web Media*. 4700 East Galbraith Road, Cincinnati, Ohio, 45236: HOW Design Books (an imprint of F&W Publications, Inc. ISBN 1-58180-236-6. Copyright by the author.
KEYWORD: colour
- [Kra04] Jim Krause, August 2004. Color chameleon. *How*, XIX(4):58 – 63. ISSN 0886-0483.
KEYWORD: HCI!colour
- [Kri88] M. Kritchevsky, 1988. The elementary spatial functions of the brain. In Davis et al. [DKB88], (pp. 111–140).
KEYWORD: spatial ability!Jason Satel
- [Kro92] Ed Krol, 1992. *The Whole Internet User's Guide & Catalog*. O'Reilly & Associates, Inc. ISBN 1-56592-025-2.
- [KRW93] Robert Korfhage, Edie Rasmussen, and Peter Willett (eds.), 27 June – 1 July 1993. *SIGIR '93 Proceedings of the Sixteenth Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*. SIGIR, Pittsburgh, PA, USA: ACM.
CALLNO: Z699.A1A886 93-07-15
- [KW81] Joseph B. Krushkal and Myron Wish, 1981. *Multidimensional Scaling*. Sage University Press Paper on Quantitative Applications in the Social Sciences. 275 South Beverly Drive, Beverly Hills, California 90212, USA: Sage Publications. ISBN 0-8039-0940-3. Series / Number 07-011.
KEYWORD: LSI
- [KW96] Bryan Kolb and Ian Q. Wishaw, 1996. *Fundamentals of Human Neuropsychology*. New York: W. H. Freeman.
KEYWORD: spatial ability!Jason Satel
- [KW03] Bryan Kolb and Ian Q. Whishaw, 2003. *Fundamentals of Human Neuropsychology*. Worth Publishers. ISBN 0-7167-5300-6.

ANNOTATION:

p. 573 'There is a growing consensus among researchers that two-dimensional paper-and-pencil tests may not tap the same spatial abilities that are exercised in the real-life process of way finding. Just as it is difficult to subject brain-injured patients to real-life tests of navigating through novel and familiar environments, it is not possible to perform brain scans on subjects as they perform real-life tasks. Consequently, the use of computer-based virtual spatial tasks has increased in the hope that these tasks can evaluate the same abilities as those used in a real spatial world.'

KEYWORD: spatial ability • Navigation

- [Kwo86] K. L. Kwok, 8 – 10 September 1986. An interpretation of index term weighting schemes based on document components. In Rabitti [Rab86].

ANNOTATION: Impractical

KEYWORD: Bayesian (probability)

- [KY91] Robert R. Korfhage and Jing-Jye Yang, Fall 1991. A cautionary tale. *SIGIR Forum*, 25(2):104 – 105.

ANNOTATION: There exist test collections that are inappropriate for testing with.

SEE ALSO: [FLGD87]

KEYWORD: Information Retrieval • Evaluation • Classic

- [KZCv05] Wendy Kellog, Shumin Zhai, Carolyn Cale, and Gerritt van der Veer (eds.), 2 – 7 April 2005. *CHI '05: Proceedings of the SIGCHI conference on Human factors in computing systems*. New York, NY: ACM Press. ISBN 1-58113-998-5.

- [LA90] Fredrick H. Lochovsky and Robert B. Allen (eds.), April 1990. *Conference on OIS*. Published in SIG OIS Bulletin v.11.

CALLNo: HF5547.5.A1A886 v.11

- [LA94] Y. K. Leung and M. D. Apperley, 1994. A review and taxonomy of distortion-oriented presentation techniques. *ACM Transactions Computer-Human Interaction*, 1(2):126 – 160. URL [URL: http://doi.acm.org/10.1145/180171.180173](http://doi.acm.org/10.1145/180171.180173).

KEYWORD: Fisheye view

- [Lag00] Olin Lagon, September 2000. Culturally correct site design. *Web Techniques*, 5:49 – 51.

KEYWORD: HCI!cultural factors • CS4173 (WWW)

- [Lam04] Butler W. Lampson, June 2004. Computer security in the real world. *IEEE Computer*, 37:37 – 46.

- [Lan68] F. W. Lancaster, January 1968. *Evaluation of the MEDLARS Demand Search Service*. U.S. Department of Health, Education, And Welfare.

KEYWORD: MEDLARS

- [Lan78] F. W. Lancaster, March 1978. *Guidelines for the Evaluation of Information Systems and Services*. United Nations Educational, Scientific and Cultural Organization.
- [Lan87] Thomas K. Landauer, 1987. Relations between cognitive psychology and computer system design. In John M. Carroll (ed.), *Interfacing Thought: Cognitive Aspects of Human-Computer Interaction*, chapter 1, (pp. 1 – 25). Cambridge, MA, USA: The MIT Press.

SEE ALSO:

- Gardner-Bonneau's The Joy of Psychology [GB01],
- Bronowski's first chapter in 'Science and Human Values' [Bro65], and
- Cronbach's 'The two disciplines of scientific psychology' [Cro57]

KEYWORD: CogPsych!LIS 861 • HCI • Misc • Psych!intro

- [Lan90] George P. Landow, 1990. Popular fallacies about hypertext. In David H. Jonassen and Heinz Mandl (eds.), *Designing Hypermedia for Learning*, chapter 3. Springer-Verlag.
- [Lan91] George P. Landow, 1991. The rhetoric of hypermedia: Some rules for authors. In Paul Delany and George P. Landow (eds.), *Hypermedia and Literary Studies*, (pp. 81 – 103). The MIT Press.

CALLNO: PN98.E4 H97 1991

ANNOTATION: Reviewed in Computing Reviews [Par94]

- [Lan96] Rabbi L. Lander, 31 May 1996. Personal communication.
- [Lan03] Christoph Schlueter Langdon, July 2003. The state of Web services. *IEEE Computer*, 38:93 – 94.

KEYWORD: CS4173 (WWW) • web services

- [Lau90] Toyanne M. Lauriston, 1990. *Concurrency Control in Hypertext Databases*. Master's thesis, University of Western Ontario, London, Ontario, Canada.

CALLNO: AS42.L8 L3669

ANNOTATION: Has a good introduction to HT

KEYWORD: General • Definition

- [Lau02] Alan P. Laudicina, May 2002. Nessus — a powerful, free remote security scanner. *SysAdmin*, 11(5):24, 26, 28 – 30.
- [Lau04] Stephen Lau, June 2004. The spinning cube of potential doom. *Communications of the ACM*, 47:25 – 26. URL [URL <URL:http://doi.acm.org/10.1145/990680.990699>](http://doi.acm.org/10.1145/990680.990699).

SEE ALSO: Efficient Summarization of Spatiotemporal events [AS03]

- [Laz09] Jonathan Lazar, January +February 2009. Designing senior-friendly living, or why doesn't my cable work? *interactions*, XVI(1):32 – 34. URL [URL <URL:http://doi.acm.org/10.1145/1456202.1456210>](http://doi.acm.org/10.1145/1456202.1456210).

KEYWORD: HCI!cultural factors

- [LB97] Håkon Wium Lie and Bert Bos, 1997. *Cascading Style Sheets: Designing for the Web*. Addison-Wesley. ISBN 0-201-41998-X.
- [LB03a] Young Eun Lee and Izak Benbasat, December 2003. Interface design for mobile commerce. *Communications of the ACM*, 46:49 – 52.
- [LB03b] Charlie Lindahl and Elise Blount, October 2003. Weblogs: Simplifying Web publishing. *IEEE Computer*, 36:114 – 116.

KEYWORD: CS4173 (WWW) • blog

- [LBAO08] Stefan Leuthold, Javier A. Bargas-Avila, and Klaus Opwis, April 2008. Beyond web content accessibility guidelines: Design of enhanced text user interfaces for blind internet users. *International Journal of Human-Computer Studies*, 66(4):257 – 270. URL [URL: http://dx.doi.org/10.1016/j.ijhcs.2007.10.006](http://dx.doi.org/10.1016/j.ijhcs.2007.10.006).

KEYWORD: HCI!cultural factors!blind users • Navigation

- [LBC05] Linda Little, Pam Briggs, and Lynne Coventry, July 2005. Public space systems: Designing for privacy? *International Journal of Human-Computer Studies*, 63(1 – 2):254 – 268. URL [URL: http://dx.doi.org/10.1016/j.ijhcs.2005.04.018](http://dx.doi.org/10.1016/j.ijhcs.2005.04.018). [URL: http://www.sciencedirect.com/science/article/B6WGR-4G94HXR-3/2/843376623fd6974e8a047ead884d32e1](http://www.sciencedirect.com/science/article/B6WGR-4G94HXR-3/2/843376623fd6974e8a047ead884d32e1).

KEYWORD: Usability • Security

- [LBM08] Marek Lipczak, James Blustein, and Evangelos Milios, 2008. Natural search pointers – a query formulation method for structured information search. In *HSI '08: Proceedings of the Conference on Human System Interaction*, (pp. 215 – 220). IEEE Computer Society. ISBN 1-4244-1543-8.

KEYWORD: information search • System!WWW!Search

- [LBT96] Kai H. Lim, Izak Benbasat, and Peter A. Todd, March 1996. An experimental investigation of the interactive effects of interface style, instructions, and task familiarity on user performance. *ACM Transactions on Computer-Human Interaction*, 3(1):1 – 37.

ANNOTATION: direct manipulation interfaces, See Norman in Norman and Draper [Nor86]

- [LBW99] David B. Lowe, Andrew J. Bucknell, and Richard D. Webby, February 1999. Improving hypermedia development: A reference model-based process assessment method. In Tochtermann et al. [TWWL99], (pp. 139 – 146).

ANNOTATION: developmental model, prototyping (p. 145)

KEYWORD: System!SUE • System!IMPACT • System!IMPACT-A • HCI!prototyping

- [LBW00] A. Lazonder, H. Biemans, and G. Wopereis, April 2000. Differences between novice and experienced users in searching information on the World Wide Web. *Journal of the American Society for Information Science*, 51:576–581. URL [URL: http://dx.doi.org/10.1002/\(SICI\)1097-4571\(2000\)51:6<576::AID-ASI9>3.0.CO;2-7](http://dx.doi.org/10.1002/(SICI)1097-4571(2000)51:6<576::AID-ASI9>3.0.CO;2-7).

KEYWORD: spatial ability!Jason Satel

- [LC91] David D. Lewis and W. Bruce Croft, 13 – 16 October 1991. Term clustering of syntactic phrases. In Bookstein et al. [BCSR91], (pp. 385 – 404).

ANNOTATION: Syntactic phrase generator

KEYWORD: Cluster • phrase

- [LC96] Michael D. Levi and Frederick G. Conrad, July 1996. A heuristic evaluation of a World Wide Web prototype. *interactions*, III(4):50 – 61. URL [URL: http://doi.acm.org/10.1145/234813.234819](http://doi.acm.org/10.1145/234813.234819).

KEYWORD: Expertise • System!WWW • HCI!prototyping

- [LC98] Kevin Larson and Mary Czerwinski, 18 – 23 April 1998. Web page design: Implications of memory, structure, and scent for information retrieval. In Karat et al. [KLCK98], (pp. 25–32). URL [URL: http://doi.acm.org/10.1145/274644.274649](http://doi.acm.org/10.1145/274644.274649).

ANNOTATION: Confirms Kiger's [Kig84] research as applied to webpages

KEYWORD: menus • information scent • spatial ability!Jason Satel

- [LCS⁺10] Chien-Yin Lai, Pai-Hsun Chen, Sheng-Wen Shih, Yili Liu, and Jen-Shin Hong, January/February 2010. Computational models and experimental investigations of effects of balance and symmetry on the aesthetics of text-overlaid images. *International Journal of Human-Computer Studies*, 68(1–2):41 – 56. URL [URL: http://dx.doi.org/10.1016/j.ijhcs.2009.08.008](http://dx.doi.org/10.1016/j.ijhcs.2009.08.008).

- [LE92] Mark Lansdale and Ernest Edmonds, 1992. Using memory for events in the design of personal filing systems. *International Journal of Man-Machine Studies*, 36(1):97 – 126.

KEYWORD: CogPsych!LIS 861 • spatial ability(?) • System!MEMOIRS

- [Lea04] Neal Leavitt, November 2004. Are web services finally ready to deliver? *IEEE Computer*, 37:14 – 18.

KEYWORD: CS4173 (WWW) • web services

- [Leg02] California State Legislature, 12 February 2002. Personal information: Privacy sb 1386, (california disclosure law). URL [URL: \url{http://info.sen.ca.gov/pub/01-02/bill/sen/sb_13511400/sb_1386_bill_20020926_chaptered.html}](http://info.sen.ca.gov/pub/01-02/bill/sen/sb_13511400/sb_1386_bill_20020926_chaptered.html).

- [Lei92] Paul M. Leidigh, 1992. *The relationship between cognitive styles and mental maps in hypertext assisted learning*. Ph.D. thesis, Virginia Commonwealth University.

- [Lel91a] Alain Lelu, 13 – 16 October 1991. Automatic generation of 'hyper-paths' in information retrieval systems: A stochastic and an incremental algorithms[sic]. In Bookstein et al. [BCSR91], (pp. 326 – 335).

ANNOTATION: Abstract: 'A HT procedure for browsing through documentary databases is proposed, based upon a global synthetic mapping in addition to a set of local scanning axes. A method is developed for automatic generation of these relevant axes: local component analysis. It consists in tracking

the local maxima of ‘partial inertia’ landscape. First a ‘neural’ algorithm converging after several passes on the data is presented. Then a deterministic one-pass algorithm is deduced, allowing dynamic data-flow analysis.’

SEE ALSO: very hard to follow, see [Lel91b] instead

KEYWORD: HT!AutoGen!(Document Analysis) • Information Retrieval • correspondance analysis

- [Lel91b] Alain Lelu, 1991. From data analysis to neural networks: new prospects for efficient browsing through databases. *Journal of Information Science*, 17(1).

SEE ALSO: [Lel91a]

- [LER⁺93] Thomas Landauer, Dennis Egan, Joel Remde, Michael Lesk, Carol Lochbaum, and Daniel Ketchum, 1993. Enhancing the usability of text through computer delivery and formative evaluation: The SuperBook project. In McKnight et al. [MDR93], chapter 5. URL [URL <URL:http://telecaster.lboro.ac.uk/HaPP/contents.html>](http://telecaster.lboro.ac.uk/HaPP/contents.html).

CALLNo: QA76.76.H94 H95 1993

ANNOTATION: Much more about background of the design of SuperBook and issues that need to be addressed in developing such a system than about the experiments. See the TOIS paper for the experimental details and flaws. There may be some additional detail here but it only makes sense after the TOIS description.

SEE ALSO:

- Compare with Nielsen’s chapter [Nie95b] for HT background.
- See these author’s TOIS paper [ERG⁺89] for more details about their experiment

KEYWORD: System!SuperBook

- [Les89] Michael Lesk, 5 – 8 November 1989. What to do when there’s too much information. In Meyrowitz [Mey89a], (pp. 305 – 317). URL [URL <URL:http://doi.acm.org/10.1145/74224.74249>](http://doi.acm.org/10.1145/74224.74249).

CALLNo: QA76.9D6H91987

ANNOTATION: Abstract: ‘HT systems with small units of text are likely to drown the user with information in the same way that online catalogs or bibliographic retrieval systems often do. Experiments with a catalogue of 800 000 book citations have shown two useful ways of dealing with the ‘too many hits’ problem. One is a display of phrases containing the excessively frequent words; another is a display of titles by hierarchical category. The same techniques should apply to other text-based retrieval systems. In general, interactive solutions seem more promising than attempts to do detailed query analysis and get things right the first time.’

SEE ALSO: Sounds like Liwen Qiu’s work at Dalhousie [WSQ94]

KEYWORD: System Issues

- [Lev03a] Albert Levi, July 2003. How secure is secure web browsing? *Communications of the ACM*, 46:152.
- [Lev03b] Stephen C. Levinson, 2003. Spatial language. In Nadel [Nad03], (pp. 131 – 137). In four volumes.
- KEYWORD: spatial ability • CogPsych
- [Lew91] Lewis Carrol [Charles Lutwidge Dodgson], 1991. *Through the Looking Glass*. Project Gutenberg. URL [URL:ftp://mrcnext.cso.uiuc.edu/pub/etext/etext91/lglass18.zip](ftp://mrcnext.cso.uiuc.edu/pub/etext/etext91/lglass18.zip). The Millennium Fulcrum Edition 1.7.
- ANNOTATION: used for definition example
- [Lew92] David D. Lewis, 21 – 24 June 1992. An evaluation of phrasal and clustered representations on a text categorization task. In Nicholas Belkin, Peter Ingwersen, and Annelise Mark Pejtersen (eds.), *SIGIR '92 Proceedings of the Fifteenth Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, (pp. 37 – 50). Royal School of Librarianship, Copenhagen, Denmark, Copenhagen, Denmark: ACM.
- ANNOTATION: Abstract: ‘Syntactic phrase indexing and term clustering have been widely explored as text representation techniques for text retrieval. In this paper we study the properties of phrasal and clustered indexing languages on a text categorization task, enabling us to study their properties in isolation from query interpretation issues. ...’
- KEYWORD: HT!AutoGen!(IR/NLP)
- [LGMR99] Paul A. Longley, Michael F. Goodchild, David J. Maguire, and David W. Rhind (eds.), 1999. *Geographical Information Systems: Principles and applications*. Wiley & Sons, Inc., 2nd edition.
- [LH85] Margaret E. Lundy and Richard A. Harshman, 1985. *Reference Manual for the PARAFAC Analysis Package*. Scientific Software Associates, 48 Wilson Avenue, London, Ontario, N6H 1X3, Canada. PARAFAC is available via anonymous ftp from [URL:ftp://phobos.sscl.uwo.ca](ftp://phobos.sscl.uwo.ca).
- KEYWORD: LSI
- [Li93] Zhuoxon Li, 1993. *Information Retrieval for Automatic Link Creation in Hypertext Systems*. Ph.D. thesis, Southampton University.
- KEYWORD: System!Microcosm • phrase • link types!taxonomy of
- [Lin09] Greg Linden, March 2009. What is a good recommendation algorithm? *Communications of the ACM*. URL [URL:http://cacm.acm.org/blogs/blog-cacm/22925-what-is-a-good-recommendation-algorithm/fulltext](http://cacm.acm.org/blogs/blog-cacm/22925-what-is-a-good-recommendation-algorithm/fulltext).
- KEYWORD: Evaluation • Recommender systems • HCI!CS6606
- [Lit03] Mark Little, October 2003. Transactions and web services. *Communications of the ACM*, 46:49 – 54.

KEYWORD: CS4173 (WWW) • web services

- [LK83] David F. Lohman and Patrick C. Kyllonen, 1983. Individual differences in solution strategy on spatial tasks. In Dillon and Schmeck [DS83], chapter 4, (pp. 105 – 135).

CALLNO: BF 311 I5 1983 v.1

KEYWORD: spatial ability

- [LK98] Kimberly A. Lawless and Jonna M. Kulikowich, 1998. Domain knowledge, interest, and hypertext navigation: A study of individual differences. *Journal of Educational Multimedia and Hypermedia*, 7(1):51 – 69.

ANNOTATION: $n = 61$, btwn S design, suggestions: nature of domain can affect (well-structured vs. not structured), student of developmental differences among readers

SEE ALSO:

- types of HT readers:[CCM98; RAK97; KH95],
- Dee-Lucas's HT segmentation [DLL99]

KEYWORD: taxonomy • Expertise

- [LKL93] Joon Ho Lee, Myoung Ho Kim, and Yoon Joon Lee, June 1993. Information retrieval based on conceptual distance in IS-A hierarchies. *The Journal of Documentation*, 49(2):188 – 207.

SEE ALSO: [Hub79]

KEYWORD: Boolean

- [LKS93] John J. Legget, Charles J. Kacmar, and John L. Schnase, 28 February 1993. Working bibliography of hypertext. URL [URL \(URL:ftp://world.std.com:obi/Hypertext/Texas.A.M/htbib.ascii.Z\)](ftp://world.std.com:obi/Hypertext/Texas.A.M/htbib.ascii.Z).

- [LL] Thomas K. Landauer and Michael L. Littman. Fully automatic cross-language document retrieval using latent semantic indexing. Bellcore Communications, Morristown, NJ.

KEYWORD: LSI

- [LL91] Jintae Lee and Kum-Yew Lai, 1991. What's in design rationale? *Human-Computer Interaction*, 6:251 – 280.

- [LM92] Elizabeth D. Liddy and Sung H. Myaeng, Fall 1992. DR-LINK Document Retrieval using LINGuistic Knowledge: Project description. *ACM SIGIR Forum*, 26(2).

KEYWORD: System • Concept Identification

- [LM95] James A. Landay and Brad A. Myers, 7 – 11 May 1995. Interactive sketching for the early stages of user interface design. In *Conference proceedings on Human factors in computing systems*, (pp. 43 – 50). Denver, CO, USA. URL [URL \(URL:http://www.acm.org/pubs/citations/proceedings/chi/223904/p43-landay/\)](http://www.acm.org/pubs/citations/proceedings/chi/223904/p43-landay/).

KEYWORD: HCI!prototyping!paper prototypes

[LN04] Wenhong Luo and Mohammad Najdawi, 2004. Trust-building measures: a review of consumer health portals. *Communications of the ACM*, 47(1):108 – 113. URL [URL: http://doi.acm.org/10.1145/962081.962089](http://doi.acm.org/10.1145/962081.962089).

KEYWORD: System!WWW • privacy

[LNNP92] D. Lucarella, J. Nanard, M. Nanard, and P. Paolini (eds.), 30 November – 4 December 1992. *Proceedings of the Fourth ACM Conference on Hypertext*. ACM SIGLINK, SIGIR, SIGOIS, Milano, Italy: ACM Press.

[LO98] Eric Lagergren and Paul Over, 1998. Comparing interactive information retrieval systems across sites: The TREC-6 interactive track matrix experiment. In *SIGIR '98*. Melbourne, Australia.

KEYWORD: HCI • Information Retrieval

[Log95] Robert K. Logan, 1995. *The Fifth Language: Learning and Living in the Computer Age*. Stoddart. ISBN 0-7737-2907-0.

[Los07] Robert M. Losee, July 2007. Decisions in thesaurus construction and use. *Information Processing & Management*, 43(4):958 – 968. URL [URL: http://dx.doi.org/10.1016/j.ipm.2006.08.011](http://dx.doi.org/10.1016/j.ipm.2006.08.011). [URL: http://www.sciencedirect.com/science/article/B6VC8-4MC0TP0-2/2/e7032536cb72215c2b4faa6a83a34e47](http://www.sciencedirect.com/science/article/B6VC8-4MC0TP0-2/2/e7032536cb72215c2b4faa6a83a34e47).

[LP85] Marcia C. Linn and Anne C. Petersen, December 1985. Emergence and characterization of sex differences in spatial ability: A meta-analysis. *Child Development*, 56(6):1479 – 1498.

ANNOTATION: From the abstract: ‘(b) large sex differences are found only on measures of mental rotation, (c) that smaller sex differences are found on measures of spatial perception’

KEYWORD: spatial ability

[LR94a] Clayton Lewis and John Rieman, 1993, 1994. Task-centered user interface design: A practical introduction. Available at [URL: ftp://ftp.cs.colorado.edu](ftp://ftp.cs.colorado.edu).

KEYWORD: HCI

[LR94b] M. Liu and W. Reed, February 1994. The relationship between the learning strategies and learning styles in a hypermedia environment. *Computers in Human Behavior*, 10:419–434.

- ERIC #ED372727

- Paper presented at the Annual Conference of the Association for Educational Communications and Technology and Computer-Based Instructional Systems (Nashville, TN) 16–20 Feb 1994

KEYWORD: spatial ability!Jason Satel

[LS93] Daryl T. Lawton and Ian E. Smith, 14 – 18 November 1993. The knowledge weasel hypermedia annotation system. In *Hypertext 1993* [Hyp93].

KEYWORD: System!Knowledge Weasel • collaboration • annotation

- [LS00] Ziming Liu and David G. Stork, November 2000. Is paperless really more? rethinking the role of paper in the digital age. *Communications of the ACM*, 43(11). URL [URL: `http://www.acm.org/pubs/citations/journals/cacm/2000-43-11/p94-liu/`](http://www.acm.org/pubs/citations/journals/cacm/2000-43-11/p94-liu/).

KEYWORD: annotation

- [Luc65] M. Luckiesh, 1965. *Visual Illusions: Their Causes, Characteristics & Applications with a New Introduction by William H. Ittelson*. Dover Publications, Inc. ISBN 0-486-21530-X.
- [Lum05] J. Lumsden, 09 June 2005. Guidelines for the design of online-questionnaires. Technical Report NRC 48231, National Research Council (of Canada).

ANNOTATION: Abstract:

As a new medium for questionnaire delivery, the internet has the potential to revolutionise the survey process. Online (web-based) questionnaires provide several advantages over traditional survey methods in terms of cost, speed, appearance, flexibility, functionality, and usability (Bandilla et al., 2003; Dillman, 2000; Kwak and Radler, 2002). Online-questionnaires can also provide many capabilities not found in traditional paper-based questionnaires: they can include pop-up instructions and error messages; they can incorporate links; and it is possible to encode difficult skip patterns making such patterns virtually invisible to respondents. Despite this, and the introduction of numerous tools to support online-questionnaire creation, current electronic survey design typically replicates that of paper-based questionnaires, failing to harness the full power of the electronic delivery medium. Worse, a recent environmental scan of online-questionnaire design tools found that little, if any, support is incorporated within these tools to guide questionnaire designers according to best-practice (Lumsden and Morgan, 2005). This article introduces a comprehensive set of guidelines — a practical reference guide — for the design of online-questionnaires.

- [Luo93] Ari Luotonen, September 1993. Announcing Index Search Server. distributed to [URL: `www-announce@nxoc01.cern.ch`](mailto:www-announce@nxoc01.cern.ch) mailing list. I can't find this anywhere. I wrote to CERN but haven't got anything but a receipt for the mail yet.
- [Lup04] Ellen Lupton, 2004. *Thinking with Type: A Critical Guide for Designers, Writers, Editors, & Students*. New York, NY: Princeton Architectural Press. ISBN 978-1-56898-448-3.

KEYWORD: KDesign!typography

- [LZC95] Mark R. Lehto, Wenil Zhu, and Bryan Carpenter, 1995. The relative effectiveness of hypertext and text. *International Journal of Human-Computer Interaction*, 7(4):293 – 313.

ANNOTATION: Hypertext as a useful interface to an online indexed version of a textbook.

SEE ALSO: Chen & Rada [CR96] and [MLI⁺92]

KEYWORD: Evaluation

- [Mac89] Ian A. Macleod, 1989. A query language for retrieving information from hierarchic text structures. Technical Report 86-263, Department of Computing and Information Science, Queen's University at Kingston.

KEYWORD: System!MAESTRO

- [Mad03] Taddy Maddox (ed.), 2003. *Tests: A comprehensive reference for assessments in psychology, education, and business*. Austin, TX: Pro-Ed, fifth edition. ISBN 0890798974 (hardcover)/ 0890799083 (paper).

SEE ALSO: [MLH00a] and [MLH00b] include reviews of the tests

- [Mag01] Martin Maguire, October 2001. Context of use within usability activities. *International Journal of Human-Computer Studies*, 55:453 – 483. URL [URL \(http://www.sciencedirect.com/science/article/B6WGR-458NDYJ-14/1/1345da3d3831b51c134b1e185afb40be\)](http://www.sciencedirect.com/science/article/B6WGR-458NDYJ-14/1/1345da3d3831b51c134b1e185afb40be).

KEYWORD: HCI

- [Mar89] Gary Marchiono, January 1989. Information-seeking strategies of novices using a full-text electronic encyclopedia. *Journal of the American Society for Information Science*, 40(1):54 – 66.

SEE ALSO: Chen&Rada [CR96] cite for definition of open/closed tasks

KEYWORD: information seeking • Expertise

- [Mar98a] Catherine C. Marshall, 23 – 26 June 1998. Annotation: from paper books to the digital library. In Witten et al. [WAS98], (pp. 131 – 140). URL [URL \(http://doi.acm.org/10.1145/263690.263806\)](http://doi.acm.org/10.1145/263690.263806).

SEE ALSO: HT98 follow-up [Mar98b]

KEYWORD: annotation

- [Mar98b] Catherine C. Marshall, 20 – 24 June 1998. Toward an ecology of hypertext annotation. In Grønbaek et al. [GMS98], (pp. 40 – 49). URL [URL \(http://doi.acm.org/10.1145/276627.276632\)](http://doi.acm.org/10.1145/276627.276632).

SEE ALSO: follows-up DL98 paper [Mar98a]

KEYWORD: annotation

- [Mar99] D. M. Mark, 1999. *Spatial representation: a cognitive view*, chapter 7, (pp. 81 – 89). Volume 1 of Longley et al. [LGMR99], 2nd edition.

- [Mar01] David J. Marchette, 2001. *Computer Intrusion Detection and Network Monitoring: A Statistical Viewpoint*. Statistics for Engineering and Information Science. New York: Springer-Verlag. ISBN 0-387-95281-0.

- [Mar03] Aaron Marcus, September/October 2003. When is a user not a user? who are we? what do we do? *interactions*, (pp. 28 – 34).
- [MAS91] Robert M. Mulligan, Mark W. Altom, and David K. Simkin, 1991. User interface design in the trenches: Some tips on shooting from the hip. In *Human factors in computing systems conference proceedings on Reaching through technology*.
- [Mau96] Hermann Maurer (ed.), 1996. *Hyper-G now Hyperwave: The Next Generation Web Solution*. Addison-Wesley Publishing Company. ISBN 0-201-40346-3. URL [URL: http://www.iicm.tugraz.at/hgbook](http://www.iicm.tugraz.at/hgbook).
- [May97] Richard E. Mayer, 1997. From novice to expert. In Helander et al. [HLP97], chapter 33, (pp. 781 – 795).
- CALLNo: QA 76.9 H85 H36 1997
- SEE ALSO: Selected chapters: [May97; Vor97; WW97; Tul97]
- KEYWORD: Expertise
- [MB93] Elli Mylonas and Mark Bernstein, 1993. A literary apprentice. Submitted to *Computing in the Humanities*.
- SEE ALSO: [Ber90]
- KEYWORD: HT!AutoGen
- [MB97] Hannes Marais and Krishna Bharat, 1997. Supporting cooperative and personal surfing with a desktop assistant. In *Proceedings of the 10th annual ACM symposium on User interface software and technology*, (pp. 129 – 138). Banff, Alberta, Canada.
- ANNOTATION: (1) shared annotations, (2) annotations not tied to location in a document (because they found shared annotations don't work this way), (3) searching aid, on-the-fly full-text indexing
- KEYWORD: System!Browserware • annotation • System!Vistabar/Webmark • System!WWW • System!Alta Vista • Bloom Filters
- [MB98] P. Maglio and R. Barrett, 1998. On the trail of information searchers. In *Proceedings of the Nineteenth Annual Conference of the Cognitive Science Society*. LEA.
- KEYWORD: spatial ability!Jason Satel
- [MB04] Catherine C. Marshall and A. J. Bernheim Brush, 07 – 11 June 2004. Exploring the relationship between personal and public annotations. In *Proceedings of the 2004 joint ACM/IEEE conference on Digital libraries*, (pp. 349 – 357). Tucson, AZ, USA. URL [URL: http://doi.acm.org/10.1145/996350.996432](http://doi.acm.org/10.1145/996350.996432).
- KEYWORD: annotation
- [MB06] Clara Mancini and Simon J. Buckingham Shum, November 2006. Modelling discourse in contested domains: A semiotic and cognitive framework. *International Journal of Human-Computer Studies*, 64(11):1154 – 1171. URL [URL: http://dx.doi.org/10.1016/j.ijhcs.2006.07.002](http://dx.doi.org/10.1016/j.ijhcs.2006.07.002).

KEYWORD: HCI!CS6606

- [MBB90] Judi Moline, Dan Benigni, and Hean Baronas (eds.), 16 – 18 January 1990. *Proceedings of the Hypertext Standardization Workshop*. National Institute of Standards and Technology, Gaithersburg, MD: U.S. Department of Commerce. NIST Special Publication 500-178.

CALLNO: QA76.76.H94 H96 1990

- [MBB02] Joanna McGrenere, Ronald M. Baecker, and Kellogg S. Booth, 2002. An evaluation of a multiple interface design solution for bloated software. In *Proceedings of the SIGCHI conference on Human factors in computing systems: Changing our world, changing ourselves*, (pp. 164 – 170). URL [URL: http://doi.acm.org/10.1145/503376.503406](http://doi.acm.org/10.1145/503376.503406).

KEYWORD: HCI!CS6606 • HCI

- [MBD00] Enrico Motta, Simon Buckingham Shum, and Hohn Domingue, 2000. Ontology-driven document enrichment: principles, tools and applications. *International Journal of Human-Computer Studies*, 52:1071 – 1109.

SEE ALSO: Simon's poster at HT'99

- [MBGJ00] Mo Adam Mahmood, Janice M. Burn, Leopoldo A. Gemoets, and Carmen Jacquez, 2000. Variables affecting information technology end-user satisfaction: a meta-analysis of the empirical literature. *International Journal of Human-Computer Studies*, 52(4). URL [URL: http://www.sciencedirect.com/science/article/B6WGR-45FC2DD-1X/2/a8a068d8085ee7702dd14799a2184af6](http://www.sciencedirect.com/science/article/B6WGR-45FC2DD-1X/2/a8a068d8085ee7702dd14799a2184af6).

SEE ALSO:

- Chen & Rada's meta-analysis of HT [CR96] and
- Dillon & Morris's ARIST chapter about theories and models [DM96]

KEYWORD: Review • Meta-analysis • Usability • user satisfaction

- [MC83] R. E. A. Mason and T. T. Carey, 1983. Prototyping interactive information systems. *Communications of the ACM*, 26(5):347 – 354.

SEE ALSO: cites Scharer's pinpointing requirements [Sch81]

KEYWORD: CS3160 (UID)

- [MC93] Susan Michalak and Mary Coney, 14 – 18 November 1993. Hypertext and the author/reader dialogue. In *Hypertext 1993* [Hyp93], (pp. 174 – 182).

ANNOTATION: Literary theory and HT

KEYWORD: Usability • Design!Issues • Rhetoric • Literary Theory • Misc!(Other field)

- [MC00] Paul P. Maglio and Christopher S. Campbell, 2000. Tradeoffs in displaying peripheral information. In *The Future Is Here CHI 2000*. The Hague, Amsterdam.

ANNOTATION: 'We report a series of experiments on scrolling displays aimed at examining tradeoffs between distraction ... and memorability'

SEE ALSO: [CM99]

- [McA89] Ray McAleese (ed.), 1989. *HYPERTEXT: Theory Into Practice*. Oxford, UK: Blackwell Scientific. ISBN 1-871516-02-1.

CALLNo: QA76.76.H94H97 1989

- [McA90] Ray McAleese, 17 – 20 September 1990. Hypertext: The way to information; the information is. In Rowley [Row90], (pp. 28 – 37). Copyright 1991.

ANNOTATION: Brief overview of some systems and applications of hypertext to managing information. Similar to Horn's book [Hor89] in the hypertext-like presentation.

KEYWORD: HT!General!(Background) • System!QCIP • System!NoteCards • System!KIM • System!LOCKE • System!Semantic network

- [McE99] John E. McEneaney, February 1999. Visualizing and assessing navigation in hypertext. In Tochtermann et al. [TWWL99], (pp. 61 – 70).

SEE ALSO: Botafogo et al. [BRS92] and HT2K follow-up [McE00]

KEYWORD: Metric • Navigation • individual differences

- [McE00] John E. McEneaney, 30 May – 4 June 2000. Navigational correlates of comprehension in hypertext. In Anderson [And00b].

SEE ALSO: Botafogo et al. [BRS92] and preceding HT99 article [McE99]

KEYWORD: Metric • Navigation • individual differences

- [McG00] January 2000. Student success and the use of new technology in education. URL ([URL:http://www.mcgrawhill.ca/highereducation/images/student_success.pdf](http://www.mcgrawhill.ca/highereducation/images/student_success.pdf)).

ANNOTATION: pp.12–14: what people think they need & what sells e-textbooks

SEE ALSO: summary of results by R. Owston [Ows]

- [McK93] Alastair McKinnon, 1993. The multi-dimensional concordance: A new tool for literary research. *Computers and the Humanities*, 27:165 – 183.

- [MDH⁺03] Jennifer Mankoff, Anind K. Dey, Gary Hsieh, Julie Kientz, Scott Lederer, and Morgan Ames, 2003. Heuristic evaluation of ambient displays. In Victoria Bellotti, Thomas Erickson, Gilbert Cockton, and Panu Korhonen (eds.), *Proceedings of the conference on Human factors in computing systems*, (pp. 169 – 176). Fort Lauderdale, Florida, USA. URL ([URL:http://doi.acm.org/10.1145/642611.642642](http://doi.acm.org/10.1145/642611.642642)).

SEE ALSO: Maglio and Campbell's study of peripheral info [MC00]

KEYWORD: heuristic

- [MDKL93] Gary Marchiono, Sandra Dwiggins, Andrew Katz, and Xia Lin, Winter 1993. Information seeking in full-text end-user-oriented search systems: The roles of domain and search expertise. *Library & Information Science Research*, 15(1).

KEYWORD: CogPsych • Expertise • information seeking

- [MDR90] Cliff McKnight, Andrew Dillon, and John Richardson, 1990. A comparison of linear and hypertext formats in information retrieval. In Ray McAleese and Catherine Green (eds.), *Hypertext: State of the Art*, (pp. 10 – 19). Intellect.

SEE ALSO: McDonald and Stevenson (1996) [MS96]

- [MDR91a] Cliff McKnight, Andrew Dillon, and John Richardson (eds.), 1991. *Hypertext in Context*. The Cambridge Series on Electronic Publishing. Cambridge University Press. ISBN 0-521-37488-X. URL [URL \(http://telecaster.lboro.ac.uk/HiC/HiC.html\)](http://telecaster.lboro.ac.uk/HiC/HiC.html).

CALLNo: SLIS/Elborne College 51380 991 06

- [MDR91b] Cliff McKnight, Andrew Dillon, and John Richardson, 1991. Navigation through complex information spaces. In *Hypertext in Context* [MDR91a], chapter 4. URL [URL \(http://telecaster.lboro.ac.uk/HiC/HiC.html\)](http://telecaster.lboro.ac.uk/HiC/HiC.html).

CALLNo: SLIS/Elborne College 51380 991 06

ANNOTATION:

- landmarks vs. route knowledge
- explain why cloze tests don't work with HT (see Dillon's Readers' Models paper [Dil91a])
- 'memory for spatial location within in [sic] body of text is reliable even if it is generally limited.'

KEYWORD: Navigation • Survey • menus

- [MDR93] C. McKnight, A. Dillon, and J. Richardson (eds.), 1993. *Hypertext: A Psychological Perspective*. Ellis Horwood Series in Interactive Information Systems. Ellis Horwood Limited. ISBN 0-13-441643-0. URL [URL \(http://telecaster.lboro.ac.uk/HaPP/contents.html\)](http://telecaster.lboro.ac.uk/HaPP/contents.html).

CALLNo: QA76.76.H94 H95 1993

- [Mea92] Charles T. Meadow, 1992. *Text Information Retrieval Systems*. Academic Press. ISBN 0-12-487410-X.

CALLNo: Z699.M413 1992

- [Mer04] Rebecca T. Mercuri, July 2004. The HIPPA-potamus in health care data security. *Communications of the ACM*, 47:25 – 28.

- [Mes88] S. Messick, 1988. The criterion problem in the evaluation of instruction: Assessing possible, not just intended, outcomes. In Wittrock and Wiley [WW88], (pp. 183–220). Cited by Carroll [Car93b].

- [Mey89a] Norman Meyrowitz (ed.), 5 – 8 November 1989. *Hypertext 89 Proceedings*. ACM, Pittsburgh, PA: Association for Computing Machinery. ISBN 0-89791-339-6.

CALLNo: QA76.9D6H91987

SEE ALSO: R. Akscyn and F. Halasz's *Topics on Hypertext* [AH91] (updated papers)

- [Mey89b] Norman Meyrowitz, 1989. The missing link: Why we're all doing hypertext wrong. In Barrett [Bar89a].
CALLNo: QA76.76.H94 S65 1989
- [MG90] Ray McAleese and Catherine Green (eds.), 1990. *HYPERTEXT: State of the Art*. Ablex Publishing Corporation. ISBN 0-89391-672-2/1-871516-08-0.
CALLNo: QA76.76.H94.H967 1990
- [MG03] Arthur Messenger and Brian Gollsneider, March 2003. AIDE to the rescue — an open source security tool. *SysAdmin*, 12(3):16, 18 – 20.
- [MGP01] Catherine C. Marshall, Gene Golovchinsky, and Morgan N. Price, May 2001. Digital libraries and mobility. *Communications of the ACM*, 44(5):55 – 56. URL <http://www.acm.org/pubs/citations/journals/cacm/2001-44-5/p55-marshall/>.
SEE ALSO: Embodied User Interfaces for Really Direct Manipulation [FGH⁺00]
- [MGT86] Thomas W. Malone, Kenneth R. Grant, and Franklyn A. Turbak, 13 – 17 April 1986. The information lens: An intelligent system for information sharing in organizations. In Mantei and Orbeton [MO86].
CALLNo: QA76.9.H85C44 1986
ANNOTATION: Rule-based information filtering using tagged messages
SEE ALSO:
 - VISAR [CRM89],
 - TOPIC [HR88],
 - Fisheye Views [Fur86]
KEYWORD: Information Filtering • Fisheye view • System!Information Lens
- [MHB99] Alan J. Munro, Kristina Höök, and David Benyon (eds.), 1999. *Social Navigation of Information Space*. Computer supported cooperative work. Springer-Verlag London Limited. ISBN 1-85233-090-2.
CALLNo: QA76.9 C66 S625 1999
- [Mic95] Michael Bieber and Tomás Isakowitz (eds.), August 1995. Special issue about Hypermedia Design. *Communications of the ACM*, 38(8). URL <http://doi.acm.org/10.1145/208344.208345>.
SEE ALSO: e-version [Bie]
- [Mil95] George A. Miller, November 1995. WordNet: A lexical database for English. *Communications of the ACM*, 38(11):39 – 41.
SEE ALSO: Lingua::Wordnet module for perl [Bri00]
KEYWORD: System!WordNet

- [Mil04] Janes E. Miller, 2004. *The Chicago Guide to Writing about Numbers: The effective presentation of quantitative information*. The University of Chicago Press. ISBN 0-226-52631-3 (paper).
SEE ALSO: Writing about Multivariate Analysis [Mil05a]
KEYWORD: Basic skills for grad students
- [Mil05a] Janes E. Miller, 2005. *The Chicago Guide to Writing about Multivariate Analysis*. The University of Chicago Press. ISBN 0-226-52783-2 (paper).
SEE ALSO: Writing about Numbers [Mil04]
KEYWORD: Basic skills for grad students
- [Mil05b] Jim Miller, 2005. Storytelling evolves on the web: case study: EXOCOG and the future of storytelling. *interactions*, 12(1):30–47. URL [URL: http://doi.acm.org/10.1145/1041280.1041281](http://doi.acm.org/10.1145/1041280.1041281).
KEYWORD: Hypertext!literature • Narrative
- [Min68] Marvin Minsky (ed.), 1968. *Semantic Information Processing*. The MIT Press.
- [MJ77] Jean M. Mandler and Nancy S. Johnson, 1977. Remembrance of things parsed: Story structure and recall. *Cognitive Psychology*, 9:111 – 151.
SEE ALSO: Dillon’s models of readers of journals[Dil91a]
KEYWORD: CogPsych
- [MLH00a] John Maltby, Christopher Alan Lewis, and Andrew Hill (eds.), 2000. *Commissioned reviews of 250 psychological tests*, volume 1 of *Mellen studies in psychology*. Lewiston, NY: E. Mellen Press. ISBN 0773474528.
SEE ALSO: [Mad03] are un-reviewed tests
- [MLH00b] John Maltby, Christopher Alan Lewis, and Andrew Hill (eds.), 2000. *Commissioned reviews of 250 psychological tests*, volume 2 of *Mellen studies in psychology*. Lewiston, NY: E. Mellen Press. ISBN 0773474544.
SEE ALSO: [Mad03] are un-reviewed tests
- [MLI⁺92] Barbee T. Mynatt, Laura Marie Leventhal, Keith Instone, John Farhat, and Diane S. Rohlman, 3 – 7 May 1992. Hypertext or book: Which is better for answering questions? In Penny Bauersfeld, John Bennett, and Gene Lynch (eds.), *CHI ’92, conference proceedings, ACM Conference on Human Factors in Computing Systems, striking a balance*, (pp. 19 – 25).
SEE ALSO:
 - SuperBook [RGL87],
 - Lehto et al.’s The Relative Effectiveness of Hypertext and Text [LZC95], and
 - Chen & Rada’s Meta-Analysis [CR96]
KEYWORD: Evaluation • System!SuperBook

- [MM] Adrian Miles and Stuart Moulthrop. bowerbird hypermedia research engine. URL [\(URL:http://bowerbird.rmit.edu.au:8080/\)](http://bowerbird.rmit.edu.au:8080/). WWW search engine for hypertext theory.
- [MM98] Paul P. Maglio and Teenie Matlock, 1998. Metaphors we surf the web by. In *Workshop on Personalized and Social Navigation in Information Space*. Stockholm, Sweden. Downloaded from [URL:http://www.almaden.ibm.com/cs/people/pmaglio/pubs/meta4surf.ps](http://www.almaden.ibm.com/cs/people/pmaglio/pubs/meta4surf.ps).
- KEYWORD: spatial ability • spatial ability!Jason Satel
- [MM99a] Paul P. Maglio and Teenie Matlock, 1999. The conceptual structure of information space. In Alan J. Munro, Kristina Höök, and David Benyon (eds.), *Social navigation of information space*, chapter 9, (pp. 155 – 173). Springer Verlag. (1) Downloaded from [URL:http://faculty.ucmerced.edu/tmatlock/papers/maglio-matlock.pdf](http://faculty.ucmerced.edu/tmatlock/papers/maglio-matlock.pdf) (2) Reprinted (as Ch. 16) in *Designing information spaces: The social navigation approach*. Höök, Benyon, and Munro (eds.), 2003.

ANNOTATION:

- p. 156** ‘we argue that (a) the particular language people use is based on conceptual metaphor and is motivated by basic image schemata, which emerge from natural embodied experience (e.g. [8, 9]); and (b) web users’ experience is structured by conceptual integration [10–13]’.
- p. 157** ‘Sentences in which the web user was viewed as an agent, actively moving along a horizontal path, were rated as significantly more sensible than those in which the web user moved up or down, and as significantly more sensible than those in which the web user was passive.’
- p. 164–165** ‘Overall, all web users reported a similar experience while using the web. Both beginners and experts talked about their experiences as if they had been moving from place to place although in fact they had not gone anywhere. The data also revealed noticeable differences between experts and beginners. Beginners more often mixed in their experiences using the keyboard, mouse, and other elements of the physical (non-web) domain (e.g. “I clicked on . . .” or “I typed in . . .”), whereas experienced users did not.]
- p. 165 (§9.3.1)** ‘Our data suggest that web users — even those who had never used the web — view web activity as traversal along paths. In particular, participants most often see themselves as the agent, initiating and actively moving along these paths (even for beginners; see Table 9.3). According to the data, less often is the user viewed as the passive recipient of information or as a passenger being transported in some sort of web vehicle.’

KEYWORD: spatial ability

- [MM99b] Paul P. Maglio and Teenie Matlock, 1999. The conceptual structure of information space. In Munro et al. [MHB99], chapter 9, (pp. 155 – 173).
- CALLNO: QA76.9 C66 S625 1999

[MM03] Paul P. Maglio and Teenie Matlock, 2003. The conceptual structure of information space. In Höök et al. [HBM03], chapter 16, (pp. 385 – 403, 427 – 450).

[MN93] James Mayfield and Carles Nicholas, April 1993. SNITCH: Augmenting hypertext documents with a semantic net. Obtained from David Talmage (DTALMAGE@guvax.acc.georgetown.edu).

ANNOTATION: A proposed system

[MNBD06] Cameron Marlow, Mor Naaman, Danah Boyd, and Marc Davis, 2006. HT06, tagging paper, taxonomy, Flickr, academic article, to read. In ACM Hypertext [ACM06], (pp. 31 – 40). URL (URL:<http://doi.acm.org/10.1145/1149941.1149949>). General chair Uffe K. Wiil; Programme chairs Peter J. Nürnberg and Jessica Rubart.

KEYWORD: HT!CS6606

[MO86] Marilyn Mantei and Peter Orbeton (eds.), 13 – 17 April 1986. *Human factors in computing systems CHI '86 conference proceedings*. Association for Computing Machinery's Special Interest Group on Computer and Human Interaction (ACM/SIGCHI) in cooperation with the Human Factors Society and ACM/SIGGRAPH. ISBN 0897911806.

CALLNo: QA76.9.H85C44 1986

[Moh05] Bharath Kumar Mohan, October 2005. Searching association networks for nurturers. *IEEE Computer*, 38(10):54 – 60. URL (URL:http://ieeexplore.ieee.org/xpls/abs_all.jsp?isnumber=32474&arnumber=1516058&count=19&index=8).

[Mol03] Harvey Molotch, 2003. *Where Stuff Comes From: How Toasters, Toilets, Cars, Computers, and Many Other Things Come to Be As They Are*. Routledge. ISBN 0-415-94400-7. © by Taylor & Francis Books, Inc.

KEYWORD: colour (pp. 101, 102, 114 – 115?, 121, 128, 135?) • HCI!cultural factors • HCI!CS6606 • Design

[Mon98] Daniel R. Montello, 1998. A new framework for understanding the acquisition of spatial knowledge in large-scale environments. In Egenhofer and Golledge [EG98], chapter 11, (pp. 143 — 154).

SEE ALSO: Cited in 'How Spatial Is Hyperspace?' by Boechler (2001) [Boe01, pp.35,46]

[Mon05] Daniel R. Montello, 2005. Navigation. In Shah and Miyake [SM05], chapter 7, (pp. 257 – 294).

ANNOTATION:

- concepts of wayfinding and locomotion
- cognitive map = long-term knowledge representation (p. 261)

In contrast, *declarative* knowledge is ... So quite unlike the example of walking to a visible target, a wayfinding act such as giving someone verbal directions clearly requires the activation of long-term knowledge representations (the *cognitive map*) into working memory in order to access one's knowledge of place layouts (Lovelace, Hegarty, & Montello, 1999).

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SEE ALSO:

- Spence's a framework for navigation [Spe99]

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KEYWORD: spatial ability •

- [Moo99] Ross Moore, December 1999. Preparation of documents for multiple modes of delivery — notes from TUG'99. *TUGBoat: The Communications of the T_EXUsers Group*, 20(4):389 – 394. URL [URL: http://www.tug.org/TUGboat/Articles/tb20-4/tb65moore.pdf](http://www.tug.org/TUGboat/Articles/tb20-4/tb65moore.pdf).

KEYWORD: Classic

- [Moo04] James D. Mooney, July 2004. Look deeper for markup roots. *Communications of the ACM*, 47:13. Letter to the editor.

SEE ALSO: Original article [TA04]

- [MPB92] J. Monnard and J Pasquier-Boltuck, 30 November – 4 December 1992. An object-oriented scripting environment for WEBSs electronic book system. In Lucarella et al. [LNNP92].

ANNOTATION: WEBS is a hypertext system for creating and using HTs. The scripts allow 'logico-mathematical' models to perform complex manipulations and computations.

SEE ALSO: Amsterdam Model [HBv] and related

KEYWORD: System!WEBSs

- [MPGS99] Catherine C. Marshall, Morgan N. Price, Gene Golovchinsky, and Bill N. Schilit, 1999. Introducing a digital library reading appliance into a reading group. In *Proceedings of the fourth ACM conference on Digital libraries*, (pp. 77 – 83). Berkeley, California, USA. URL [URL: http://doi.acm.org/10.1145/313238.313262](http://doi.acm.org/10.1145/313238.313262).

KEYWORD: System!XLibris • Reading

- [MR92] Douglas L. Medin and Brian H. Ross, 1992. *Cognitive Psychology*. Harcourt Brace Jovanovich College Publishers.

- [MR96] Alec McHoul and Phil Roe, 1996. Hypertext and reading cognition. In Gorayska and Mey [GM96], (pp. 347 – 359).

CALLNo: BF 311 C55346 1996

ANNOTATION: Conclusion is that hypertext (not hypermedia) is not different from reading printed page except perhaps that it is faster (for following links. [I think they are dead wrong.] They cite some writings of George Landow several times as a proponent of the hypertext-is-different camp. It might be interesting to compare their view with Floridi's [Flo99] [with which I also disagree].

- [MRH95] Jean McKendree, Will Reader, and Nick Hammon, July 1995. The “homeopathic fallacy” in learning from hypertext. *interactions*, ii(3). URL [URL \(http://doi.acm.org/10.1145/208666.208687\)](http://doi.acm.org/10.1145/208666.208687).

SEE ALSO: Charney [Cha94, pp. 242 – 243, 261]

KEYWORD: CogPsych

- [MS88] William Mendenhall and Terry Sincich, 1988. *Statistics for the Engineering and Computer Sciences*. Dellen Publishing Company, 2nd edition.

- [MS92a] Michael Marmann and Gunter Schlageter, 30 November – 4 December 1992. Towards a better support for hypermedia structuring: The HYDESIGN model. In Lucarella et al. [LNNP92], (pp. 232 – 241).

KEYWORD: link types!taxonomy of • HT!model

- [MS92b] David Medyckyj-Scott, 1992. Human spatial cognition: Its relevance to the design and use of spatial information systems. *Geoforum*, 23(2):215 – 226. URL [URL \(http://dx.doi.org/10.1016/0016-7185\(92\)90018-Y\)](http://dx.doi.org/10.1016/0016-7185(92)90018-Y).

KEYWORD: GIS • spatial ability

- [MS93] Catherine C. Marshall and Frank M. Shipman, III, 14 – 18 November 1993. Searching for the missing link: Discovering implicit structure in spatial hypertext. In Hypertext 1993 [Hyp93], (pp. 217 – 230). URL [URL \(http://doi.acm.org/10.1145/168750.168826\)](http://doi.acm.org/10.1145/168750.168826).

KEYWORD: HT!AutoGen!(Document Analysis) • HT!Spatial hypertext

- [MS95] Catherine C. Marshall and Frank M. Shipman, III, August 1995. Spatial hypertext: designing for change. *Communications of the ACM*, 38(8). URL [URL \(http://doi.acm.org/10.1145/208344.208350\)](http://doi.acm.org/10.1145/208344.208350).

KEYWORD: HT!Spatial hypertext

- [MS96] Sharon McDonald and Rosemary J. Stevenson, 1996. Disorientation in hypertext: the effects of three text structures on navigation performance. *Applied Ergonomics*, 27(1):61 – 68.

ANNOTATION: 12 expert users each tried one of 2 types of hypertext or a linear doc presented with a computer. They answered questions. All answered correctly but HT users took longer, and had more trouble. Differences between the types of document were significant.

SEE ALSO:

- McKnight, Dillon, and Richardson (1990) [MDR90] for a similar experiment,
- Chen & Rada (1996) [CR96] for a different summary of hypertext evaluation experiments, and
- Piolat et al. [PRT97]

KEYWORD: Evaluation • Testing • Usability • spatial ability • CogPsych • Navigation

- [MS98a] Sharon McDonald and Rosemary J. Stevenson, March 1998. Effects of text structure and prior knowledge of the learner on navigation in hypertext. *Human Factors*, 40(1):18 – 27.

KEYWORD: CogPsych • Expertise

- [MS98b] Sharon McDonald and Rosemary J. Stevenson, May 1998. Navigation in hyperspace: An evaluation of the effects of navigational tools and subject matter expertise on browsing and information retrieval in hypertext. *Interacting with Computers*, 10(2):129 – 142.

ANNOTATION:

Abstract

This study examined the effectiveness of a map and a textual contents list on the navigation performance of subjects with and without prior knowledge of the text topic. After reading the text, subjects used the document to answer ten questions. The results showed that performance in the map condition was superior to that of the contents list condition, which in turn was superior to that of the hypertext only condition (no navigational aid). In addition, knowledgeable subjects performed better than non-knowledgeable subjects, except in the map condition where their performance was equivalent. The results also show that non-knowledgeable users tend to rely more heavily on navigational aids than knowledgeable users, and that aids were used primarily during browsing. These results are discussed in relation to the ways in which navigational aids interact with the prior knowledge of the user to enhance or impede performance.

Main results

- domain experts (McD&S call them ‘knowledgeable users’) took less time
- map users referred to it more frequently
- non-experts used aids more than experts
- disorientation effects measured in post-trial questionnaire
- maps seem to be most helpful when learning a space
- maps seem to eliminate differences between experts and non-experts
- non-experts opened more nodes (some repeatedly implies disorientation)

Problems

- Within Ss design (ignores indiv. diffs)
- Training by reading only so first use is in trial
- Answers to questions scored yes/no
- We don’t know how they were scored or by whom

Other

- text written by Stevenson, links (hypercard) made by McD&S
- links by keyword or text button

- 45 cards, 4500 word document
- $n = 36$ in 2×3 groups (experts/non- $\times 3$ treatments (links,links+ToC,links+map?) so is n really 6?)

KEYWORD: Expertise • Navigation

- [MS99] Sharon McDonald and Rosemary J. Simpson, 1999. Spatial versus conceptual maps as learning tools in hypertext. *Journal of Educational Multimedia and Hypermedia*, 8(1):43 – 64.

ANNOTATION:

- very interesting
- spatial maps reduce confusion and help navigation but reduce learning
- conceptual maps facilitate learning but are not very useful for navigation
- (p. 61) results suggest that non-map HT \rightarrow pure discovery \rightarrow favours conceptual understanding not factual understanding
- ‘The difficulty with ht may arise because learners are unable to focus on trying to integrate textual information with their prior knowledge because they need to be able to find their way around the text before the[y] can construct an overall conceptual structure of it.’ Lack of a schema for guidance?
- conceptual map is guidance which therefore reduces cognitive load.

SEE ALSO: Hofman and van Oostendorp in BJET [Hv99] (also influenced by Dee-Lucas)

KEYWORD: CogPsych • spatial ability • Navigation

- [MSC94] Catherine C. Marshall, Frank M. Shipman, III, and James H. Coombs, 19 – 23 September 1994. VIKI: Spatial hypertext supporting emergent structure. In Guimaraes [Gui94]. URL [URL <URL:http://doi.acm.org/10.1145/192757.192759>](http://doi.acm.org/10.1145/192757.192759).

KEYWORD: System!VIKI • HT!Spatial hypertext

- [MSDS90] Dennis McLeod, Ron Sacks-Davis, and Hans Schek (eds.), 13 – 16 August 1990. *Proceedings of the 16th VLDB Conference*. Brisbane, Australia: Morgan Kaufmann. ISBN 0-55860-149-X.

CALLNO: QA76.9.D3I559

- [MT99] Lance A. Miller and John C. Thomas, Jr., 1999. Behavioral issues in the use of interactive systems. *International Journal of Human-Computer Studies*, 51:169 – 196. Reprint of 1977 article, code: ijhc.1977.0305.

KEYWORD: Classic

- [Mul90] Nancy C. Mulvany, October 1990. Software tools for indexing: What we need. *The Indexer*, 17(2).

- [Mul95] Kevin Mullet, July 1995. Organizing information spatially. *interactions*.

ANNOTATION: layout, HCI:critique of a design as an example

KEYWORD: HCI

- [Mut96] Paul Muter, 1996. Interface design and optimization of reading of continuous text. In van Oostendorp and de Mul [vOdM96]. URL [URL: http://www.psych.utoronto.ca/~muter/pmuter1.htm](http://www.psych.utoronto.ca/~muter/pmuter1.htm).

SEE ALSO:

- O'Hara & Sellen in CHI97 [OS97]
- Dillon in Ergonomics 35(10) [Dil92]

KEYWORD: CogPsych • Reading

- [MW00] Aaron Marcus and Emilie West Gould, July + August 2000. Crosscurrents cultural dimensions and global web user-interface design. *interactions*, VII(4):32 – 46. URL [URL: http://doi.acm.org/10.1145/345190.345238](http://doi.acm.org/10.1145/345190.345238).

ANNOTATION: Abstract 'This paper introduces dimensions of culture, as analyzed by Geert Hofstede in his classic study of cultures in organizations, and considers how they might affect user-interfaces designs. Examples from the Web illustrate the cultural dimensions.'

KEYWORD: HCI!cultural factors

- [MW04] Donald H. McBurney and Theresa L. White, 2004. *Research Methods*. Toronto: Wadsworth, 6th edition. ISBN 0-534-52418-4.

ANNOTATION: Jack Duffy says (12 Feb 2004, e-mail) that these authors claim that a p level of .10 is acceptable for *exploratory* research

- [Mye94] Brad Myers, 1994. Challenges of HCI design and implementation. *interactions*, I(1):73 – 83.

KEYWORD: HCI!Intro

- [Mye98] Brad A. Myers, March 1998. Introduction to human-computer interaction: A brief history of human-computer interaction technology. *interactions*, V(2):44 – 54.

SEE ALSO: Queue 2006 article about future of HCI [Can06]

KEYWORD: HCI!Intro • Review

- [NA99] Peter J. Nürnberg and Helen Ashman, February 1999. What was the question? reconciling open hypermedia and World Wide Web research. In Tochtermann et al. [TWWL99], (pp. 83 – 90).

KEYWORD: System!WWW • System!OHS • HT!Definition

- [Nad03] Lynn Nadel (ed.), 2003. *Encyclopedia of cognitive science*. London: Nature Publishing Group. ISBN 0333792610. In four volumes.

- [NAG02] H. James Nelson, Deborah J. Armstrong, and Mehdi Ghods, October 2002. Old dogs and new tricks. *Communications of the ACM*, 45(10):123 – 137. URL [URL: http://doi.acm.org/10.1145/570907.570910](http://doi.acm.org/10.1145/570907.570910).

KEYWORD: Programming

- [ND86] Donald A. Norman and Stephen W. Draper (eds.), 1986. *User Centered System Design: New Perspectives on Human-Computer Interaction*. Hillsdale, NJ, USA: Lawrence Erlbaum Associates. ISBN 0-89859-781-1 (hc) / 0-89859-872-9 (paper).

CALLNO: QA76.9.I58U73

- [Neh03] Elrich Nehmzow, 2003. Navigation. In Nadel [Nad03], (pp. 200 – 206). In four volumes.

KEYWORD: Navigation • CogPsych

- [Nel90] Theodor Holm Nelson, 1990. *Literary Machines*. 702 South Michigan, South Bend IN 46618 USA: The Distributors, 90.1 edition. ISBN 0-89347-055-4.

ANNOTATION: The original definition of hypertext and a proposal for a world wide franchise called Xanadu.

KEYWORD: Classic • System!Xanadu

- [Nel99] Theodor Holm Nelson, 25 February 1999. Speech at the presentation of the 1999 Nelson award. videotape presentation. Presentation ceremony at the ACM Hypertext conference in Darmstadt, Germany.

- [Nie89] Jakob Nielsen, 5 – 8 November 1989. The matters that really matter for hypertext usability. In Meyrowitz [Mey89a], (pp. 239 – 248). URL [URL: http://doi.acm.org/10.1145/74224.74244](http://doi.acm.org/10.1145/74224.74244).

CALLNO: QA76.9D6H91987

ANNOTATION:

- Abstract: ‘We compare 92 benchmark measurements of various usability issues related to HT which have been published in the HT literature in order to find which ones have shown the largest effects’,
- p.243 – 244: individual diffs are big effects:
- biggest diff is age, second is activity level, type of task (p.244).
- dangerous to blindly transfer usability results from one medium to another.

SEE ALSO:

- User Analysis in HCI by Dillon [DW96] and
- Chen & Rada’s meta-analysis [CR96]

KEYWORD: Classic • Evaluation • Testing • Review • Usability • individual differences

- [Nie90a] Jakob Nielsen, March 1990. The art of navigating through hypertext. *Communications of the ACM*, 33(3):296 – 310.

ANNOTATION: 'A description of the design of a hypertext system using the individual user's personal interaction history to provide a greater sense of context in the navigation space and a discussion of human factors problems found in usability testing of earlier versions of the system. The article is illustrated with a large number of screen dumps forming a guided tour of the system.' — Nielsen [Nie90b, p. 234]

KEYWORD: Navigation

- [Nie90b] Jakob Nielsen, 1990. *Hypertext and Hypermedia*. Academic Press. ISBN 0-12-518410-7.

CALLNo: QA76.76 H94N54 1990

KEYWORD: General

- [Nie90c] Jakob Nielsen, 1990. *Hypertext and Hypermedia*[Nie90b], (pp. 199 – 252). Academic Press. Appendix B: Annotated Bibliography.

- [Nie93] Jakob Nielsen, November 1993. Iterative user-interface design. *Computer*, (pp. 32 – 41).

KEYWORD: HCI

- [Nie94] Jakob Nielsen, 1994. Estimating the number of subjects needed for a thinking aloud test. *International Journal of Human-Computer Studies*, 41:385 – 397. URL <http://dx.doi.org/10.1006/ijhc.1994.1065>.

SEE ALSO:

- Nielsen and Landauer's math. model for finding usability problems [NL93]
- Spool and Schroeder's Testing Web Sites: Five Users Is Nowhere Near Enough [SS01]

- [Nie95a] Jakob Nielsen, 1995. *Appendix: Annotated Bibliography*, (pp. 363 – 449). AP Professional.

- [Nie95b] Jakob Nielsen, 1995. Hypertext usability. In *Multimedia and Hypertext: The Internet and Beyond* [Nie95c], chapter 10, (pp. 279 – 307).

KEYWORD: Usability • CogPsych • Review

- [Nie95c] Jakob Nielsen, 1995. *Multimedia and Hypertext: The Internet and Beyond*. Academic Press.

KEYWORD: General

- [NL93] Jakob Nielsen and Thomas K. Landauer, 24 – 29 April 1993. A mathematical model of the finding of usability problems. In Stacey Ashlund, Kevin Mullet, Austin Henderson, Erik Hollnagel, and Ted White (eds.), *Proceedings of INTERCHI 1993*, (pp. 206 – 213). Addison-Wesley. URL <http://doi.acm.org/10.1145/169059.169166>.

SEE ALSO: Nielsen's Estimating the number of Ss needed for a thinking aloud test [Nie94] and Spool and Shroeder's re-examination of this finding [SS01]

KEYWORD: heuristic

[NL94] Jakob Nielsen and Jonathan Levy, April 1994. Measuring usability: Preference vs. performance. *Communications of the ACM*, 37(4):66 – 75. URL [URL: http://doi.acm.org/10.1145/175276.175282](http://doi.acm.org/10.1145/175276.175282).

[NL05] Nora S. Newcombe and Amy E. Learmonth, 2005. Development of spatial competence. In Shah and Miyake [SM05], chapter 6, (pp. 213 – 256).

KEYWORD: spatial ability •

[NLJS92] E. Nygren, M. Lind, M. Johnson, and B. Sandblad, 3 – 7 May 1992. The art of the obvious. In Penny Bauersfeld, John Bennett, and Gene Lynch (eds.), *CHI '92, conference proceedings, ACM Conference on Human Factors in Computing Systems, striking a balance*, (pp. 235 – 239).

[NM94] Jakob Nielsen and Robert L. Mack (eds.), 1994. *Usability Inspection Methods*. John Wiley & Sons. ISBN 0-471-01877-5.

CALLNO: QA76.9.U83N55 1994

ANNOTATION: Inspired by the workshop on usability inspection methods organized by the editors at the ACM CHI '92 conference. Papers presented at the workshop have been re-worked, not all papers from the workshop are included, and some not from the workshop appear too.

[NNK98] Marc Nanard, Jocyelyne Nanard, and Paul Kahn, 20 – 24 June 1998. Pushing reuse in hypermedia design: Golden rules, design patterns and constructive templates. In Grønbaek et al. [GMS98], (pp. 11 – 20).

[Noi93] Emanuel G. Noik, 14 – 18 November 1993. Exploring large hyperdocuments: Fisheye views of nested networks. In Hypertext 1993 [Hyp93].

KEYWORD: Fisheye view

[Nor86] Donald A. Norman, 1986. Cognitive engineering. In Norman and Draper [ND86], chapter 3, (pp. 31 – 61).

CALLNO: QA76.9.I58U73

KEYWORD: HCI

[Nor88] Donald A. Norman, 1988. *The Psychology of Everyday Things*. Basic Books. ISBN 0-465-06709-3.

SEE ALSO:

- Clarifications about affordance [Nor99] [Nor98, pp. 123 – 126, 132, 174]
- Confusion about terms 'conceptual model' and 'mental model' [BB89, pp. 74 – 5, 78, 96]

KEYWORD: Classic • HCI!models

- [Nor98] Donald A. Norman, 1998. *The Invisible Computer: Why good products can fail, the personal computer is so complex, and information appliances are the solution*. The MIT Press. ISBN 0-262-14065-9 (hc: alk. paper), 0-262-64041-1 (pb). **Lent to Nur Zincir-Heywood (12 Feb 2001).**

CALLNo: QA76.5.N665 1998

ANNOTATION: See especially Figure 12.1 (p. 251)

SEE ALSO: P.O.E.T. [Nor88]

- [Nor99] Donald A. Norman, May 1999. Affordance, conventions, and design. *interactions*, VI(3):38 – 43. URL [URL: http://doi.acm.org/10.1145/301153.301168](http://doi.acm.org/10.1145/301153.301168).

ANNOTATION: affordances (perceived and actual)

SEE ALSO:

- P.O.E.T. by Norman [Nor88],
- article in reflections column about this article [Pem00], and
- parts of *The Invisible Computer* (also by Norman) [Nor98, pp. 123 – 126, 132, 174]

KEYWORD: Classic

- [Nor05] Donald A. Norman, July 2005. Human-centered design considered harmful. *interactions*, XII(4):14 – 17, 19. URL [URL: http://doi.acm.org/10.1145/1070960.1070976](http://doi.acm.org/10.1145/1070960.1070976).

KEYWORD: task_analysis • HCI!Intro • activity theory

- [NPR⁺05] Rogri Nies, Ben Pillet, David F. Redmiles, Jennifer A. Rode Jie Ren, and Roberto Silva Filho, July 2005. In the eye of the beholder: A visualization-based approach to information system security. *International Journal of Human-Computer Studies*, 63(1 – 2):5 – 24. URL [URL: http://dx.doi.org/10.1016/j.ijhcs.2005.04.021](http://dx.doi.org/10.1016/j.ijhcs.2005.04.021). [URL: http://www.sciencedirect.com/science/article/B6WGR-4G94J0R-2/2/fa2a3f748fccf87e786d6b72f56480c5](http://www.sciencedirect.com/science/article/B6WGR-4G94J0R-2/2/fa2a3f748fccf87e786d6b72f56480c5).

KEYWORD: Usability • Security

- [NTB84] G. Th. Niedermair, G. Thurmair, and I. Büttel, 2 – 6 July 1984. Mars: A retrieval tool on the basis of morphological analysis. In van Rijsbergen [vR84]. *Proceedings of the third joint BCS and ACM symposium*.

- [NW92] Charles K. Nicholas and Lawrence A. Welsch, September 1992. In the interchangeability of SGML and ODA. *Electronic Publishing — Origination, Dissemination and Design*, 5(3):105 – 130.

KEYWORD: SGML • ODA • markup

- [OAM99] Ilia A. Ovsianikov, Michael A. Arbib, and Thomas H. McNeill, 1999. Annotation technology. *International Journal of Human-Computer Studies*, 50(4):329 – 362.

ANNOTATION: Largely about their system (for the WWW) but a review of work by others too. Supported in part by FX/PAL. See also their webpages.

KEYWORD: annotation • System!WWW • Review

- [Obe03] Hartmut Obendorf, 26 – 30 August 2003. Simplifying annotation support for real-world-settings: A comparative study of active reading. In Hypertext 2003 [Hyp03], (pp. 120 – 121). URL [URL: http://doi.acm.org/10.1145/900051.900076](http://doi.acm.org/10.1145/900051.900076).

- [O'C80] John O'Connor, July 1980. Answer-passage retrieval by text searching. *Journal of the American Society for Information Science*.

KEYWORD: Concept Identification • Classic

- [OC86] Esen Ozkarahan and Fazli Can, 8 – 10 September 1986. An automatic and tunable document indexing system. In Rabitti [Rab86], (pp. 234 – 243).

- [OC03] Christopher Olston and Ed H. Chi, September/October 2003. ScentTrails: Integrating browsing and searching on the Web. *interactions*, (pp. 9 – 10).

- [oCS] Swedish Institute of Computer Science. Towards a framework for design and evaluation of navigation in electronic spaces. URL [URL: \url{http://www.sics.se/humle/projects/persona/web/littsurvey/abstracts.html}](http://www.sics.se/humle/projects/persona/web/littsurvey/abstracts.html).

- [Oga89] Katsuhiko Ogawa, 1989. Evaluating complexity of task content in human-computer interaction. In M. J. Smith and G. Salvendy (eds.), *Work with Computers: Organizational, Management, Stress and Health Aspects*. Amsterdam: Elsevier Science Publishers, B.V.

- [OIS89] January 1989. Special issue. *ACM Transactions on OIS*, 7(1).

KEYWORD: HT

- [OJ00] M. Otter and J. Johnson, September 2000. Lost in hyperspace: metrics and mental models. *Interacting with Computers*, 13:1 – 40. URL [URL: http://dx.doi.org/10.1016/S0953-5438\(00\)00030-8](http://dx.doi.org/10.1016/S0953-5438(00)00030-8).

ANNOTATION: Newer metrics of lostness than Smith (1996) [Smi96].

SEE ALSO:

- P. Smith (1996) [Smi96] in *Interacting with Computers*
- Ahuja and Webster (2001) [AW01] in *Interacting with Computers*
- Gwizdka and Spence (2007) [GS07] in *Interacting with Computers*

KEYWORD: Metric • Evaluation • information seeking • Navigation!Lostness

- [O'K03] John O'Keefe, 2003. Hippocampus. In Nadel [Nad03]. In four volumes.

ANNOTATION: pp.342–3: episodic memory and navigation use different parts of the human brain

KEYWORD: spatial ability • CogPsych

- [OKS⁺93] Kai A. Olsen, Robert R. Korfhage, Kenneth M. Sochats, Michael B. Spring, and James G. Williams, 1993. Visualization of a document collection: The VIBE system. *Information Processing & Management*, 29(1):69 – 81.

KEYWORD: Information Retrieval • HT!Spatial hypertext • System!VIBE

- [OLB⁺92] Robert N. Oddy, Elizabeth DuRoss Liddy, Bhaskaran Balakrishnan, Ann Bishop, Joseph Elewononi, and Eileen Martin, June 1992. Towards the use of situational information in information retrieval. *The Journal of Documentation*, 48(2):123 – 171.

- [Ols94] Jan Olsen, 1994. *Electronic Journal Literature: Implications for Scholars*. Mecklermedia. ISBN 0-88736-925-1.

- [OS97] Kenton O'Hara and Abigail Sellen, 22 – 27 March 1997. A comparison of reading paper and on-line documents. In Pemberton [Pem97], (pp. 335 – 342). URL [URL: http://doi.acm.org/10.1145/258549.258787](http://doi.acm.org/10.1145/258549.258787).

SEE ALSO: O'Hara et al. in CHI'98 [OSNS98]

KEYWORD: annotation • Reading • spatial ability

- [OSNS98] Kenton O'Hara, Fiona Smith, William Newman, and Abigail Sellen, 18 – 23 April 1998. Student readers' use of library documents: Implications for library technologies. In Karat et al. [KLCK98], (pp. 233 – 240). URL [URL: http://doi.acm.org/10.1145/274644.274678](http://doi.acm.org/10.1145/274644.274678).

SEE ALSO: O'Hara and Sellen in CHI'97 [OS97]

KEYWORD: annotation • Reading

- [Ows] Ron Owston. Student success & the use of new technology in education phase 2 - highlights -. URL [URL: http://www.mcgrawhill.ca/highereducation/images/studentssuccess2000summary.pdf](http://www.mcgrawhill.ca/highereducation/images/studentssuccess2000summary.pdf). Summary of Technology and Student Success: A McGraw-Hill Ryerson Survey of Higher Education Teachers in Canada.

SEE ALSO: McGraw-Hill study [McG00]

- [Pai86] Allan Paivio, 1986. *Mental Representations: A Dual Coding Approach*. Oxford University Press. ISBN 0-195-06666-9.

- [PAN05] Blaine A. Price, Karim Adam, and Bashar Nuseibeh, July 2005. Keeping ubiquitous computing to yourself: A practical model for user control of privacy. *International Journal of Human-Computer Studies*, 63(1 – 2):228 – 253. URL [URL: http://dx.doi.org/10.1016/j.ijhcs.2005.04.008](http://dx.doi.org/10.1016/j.ijhcs.2005.04.008). [URL: http://www.sciencedirect.com/science/article/B6WGR-4G9GP0G-2/2/d8ad215e2e1e1abf9bfb4faa72855b60](http://www.sciencedirect.com/science/article/B6WGR-4G9GP0G-2/2/d8ad215e2e1e1abf9bfb4faa72855b60).

KEYWORD: Usability • Security

- [Par91a] H. Van Dyke Parunak, 15 – 18 December 1991. Don't link me in: Set base hypermedia for taxonomic reasoning. In *Hypertext '91 Proceedings* [ACM91], (pp. 233 – 242).

ANNOTATION: Nodes are grouped into sets/navigation w/in sets and at intersection of sets

SEE ALSO: [CB87]

KEYWORD: taxonomy • Cluster!(not)

- [Par91b] H. Van Dyke Parunak, 1991. Ordering the information graph. In Emily Berk and Joseph Devlin (eds.), *Hypertext/Hypermedia Handbook*, chapter 20, (pp. 299 – 325). New York, NY: Intertext Publications.
- SEE ALSO: Brockmann et al. [BHB89] in *Society of Text* by Barrett (for different ht link structures)
- KEYWORD: link structures
- [Par93a] H. Van Dyke Parunak, October 1993. Comparative review 9310-0766. *Computing Reviews*, (pp. 534 – 538). Part 1 of a two-part comparative review of books about Hypertext.
- SEE ALSO: Part 2 [Par94]
- KEYWORD: Review
- [Par93b] H. Van Dyke Parunak, 14 – 18 November 1993. Hypercubes grow on trees (and other observations from the land of hypersets). In *Hypertext 1993* [Hyp93].
- KEYWORD: System!HyperSet • tree models
- [Par94] H. Van Dyke Parunak, March 1994. Comparative review 9403-0149. *Computing Reviews*, (pp. 149 – 155). Part 2 of a two-part comparative review of books about Hypertext.
- SEE ALSO: Part 1 [Par93a]
- KEYWORD: Review
- [Par98] Seongbin Park, 20 – 24 June 1998. Structural properties of hypertext. In Grønbaek et al. [GMS98], (pp. 180 – 187).
- [PB02] Jens Palsberg and Scott J. Baxter, December 2002. Teaching reviewing to graduate students. *Communications of the ACM*, 45:22 – 24.
- [PB04] Charles A. Perfetti and Donald J. Bolger, 2004. The brain might read that way. *Scientific Studies of Reading*, 8(3):293 – 304.
- KEYWORD: spatial ability •
- [PB05] Aristidis Protopsaltis and Vassiliki Bouki, 2005. Towards a hypertext reading/comprehension model. In *SIGDOC '05: Proceedings of the 23rd annual international conference on Design of communication*, (pp. 159 – 166). New York, NY: ACM Press. ISBN 1-59593-175-9. URL [URL:http://doi.acm.org/10.1145/1085313.1085349](http://doi.acm.org/10.1145/1085313.1085349).
- [PCY02] Hsiao-Tieh Pu, Shui-Lung Chuang, and Chyan Yang, 2002. Subject categorization of query terms for exploring web users' search interests. *Journal of the American Society for Information Science and Technology*, 53(8):617 – 630. URL [URL:http://dx.doi.org/10.1002/asi.10071](http://dx.doi.org/10.1002/asi.10071).
- KEYWORD: searching

- [PD90] R. Pausch and J. Detmer, November 1990. Node popularity as a hypertext browsing aid. *Electronic Publishing — Origination, Dissemination and Design*, 3(4):227 – 234.
- ANNOTATION: The well-trodden path method of creating hypertext links. The authors do not claim that this method creates good hypertext, but it may be useful for evaluation.
- SEE ALSO: Wexelblat and Maes’s Footprints: History-rich Web browsing [WM97]
- KEYWORD: Evaluation
- [PdB00] R. Prates, C. de Souza, and S. Barbosa, January 2000. A method of evaluating the communicability of user interfaces. *interactions*, VII:31 – 38.
- KEYWORD: HCI
- [PE00] Mike Perkowitz and Oren Etzion, 2000. Towards adaptive web sites: Conceptual framework and case study. *Artificial Intelligence*, 118:245 – 275.
- ANNOTATION: Intro to cluster mining. Their experimental results however are meaningless and their assumptions highly questionable. One of the file copies has notes in many of the margins.
- SEE ALSO: [PD90; WM97]
- KEYWORD: Cluster
- [Pea90] Peter K. Pearson, June 1990. Fast hashing of variable-length text strings. *Communications of the ACM*, 33(6):677 – 680. URL ([URL:http://doi.acm.org/10.1145/78973.78978](http://doi.acm.org/10.1145/78973.78978)).
- ANNOTATION: Describes the hashing method Bernstein’s link apprentice [Ber90; MB93] uses. [Ber93]
- SEE ALSO: [Cra91]
- KEYWORD: Hashing • Bloom Filters
- [PEE⁺90] G. Perlman, D. Egan, S. Ehrlich, G. Marchionini, J. Nielsen, and B. Schneiderman, 1 – 5 April 1990. Evaluating hypermedia systems. In Chew and Whiteside [CW90]. Position statements from the participants of a panel discussion.
- ANNOTATION: ‘Several different approaches to usability evaluation are contrasted’ — Nielsen[Nie90c, p.236]
- KEYWORD: Evaluation
- [Pem97] Steve Pemberton (ed.), 22 – 27 March 1997. *Looking to the Future Proceedings of the CHI 97 Conference on Human Factors in Computing Systems*. New York, NY: ACM Press. ISBN 0-89791-802-9.
- [Pem00] Steven Pemberton, November + December 2000. Abusus non tollit usum. *interactions*, VII(6):56. Title translates as ‘potential abuse should not be used as a decisive argument against any use’.

SEE ALSO: Norman's article [Nor99] which this is about

[Per] Perception, Pion. ISSN 0301-0066 (print) / 1468-4233 (electronic). URL [URL:http://www.perceptionweb.com/](http://www.perceptionweb.com/).

[Per89] Gary Perlman, 5 – 8 November 1989. Asynchronous design/evaluation methods for hypertext technology development. In Meyrowitz [Mey89a].

CALLNo: QA76.9D6H91987

SEE ALSO: R. Akscyn and F. Halasz's *Topics on Hypertext* [AH91] (updated papers)

KEYWORD: Evaluation

[Per92] Gary Perlman, 13 September 1992. The HCI bibliography project. URL [URL:http://www.hcibib.org/](http://www.hcibib.org/). An ongoing update of: Perlman, G. (1991) 'The HCI Bibliography Project' ACM SIGCHI Bulletin, 23:3, 15–20. Author's e-mail address is perlman@cis.ohio-state.edu.

ANNOTATION: Abstract: 'The HCI Bibliography is a free-access online extended bibliography on Human-Computer Interaction. The basic goal of the project is to put an online bibliography for most of HCI on the screens of all researchers, developers, educators and students in the field through anonymous ftp access, mail servers, and Mac and DOS floppy disks. Through the efforts of volunteers, the bibliography has passed 5300 entries, consuming over 4.8 megabytes, with abstracts and/or tables of contents; eventually, citation information and hypertext access will be added.'

[Per93] Gary Perlman, 14 – 18 November 1993. Information retrieval techniques for hypertext in the semi-structured toolkit. In Hypertext 1993 [Hyp93].

KEYWORD: HT!AutoGen!Conversion

[Pet93] Jean-Francois Petit, August 1993. Definition of Hyertext[sic]. Usenet Message-ID petitjf.744937089@mistral.ERE.UMontreal.CA, posted to alt.hypertext.

ANNOTATION: Quotations, from various published sources, of hypertext

KEYWORD: Definition

[PFL⁺02] David M. Pennock, Gary W. Flake, Steve Lawrence, Eric J. Glover, and C. Lee Giles, 2002. Winners don't take all: Characterizing the competition for links on the web. *Proceedings of the National Academy of Sciences*, 99(8):5207 – 5211. URL [URL:www.pnas.org/cgi/doi/10.1073/pnas.032085699](http://www.pnas.org/cgi/doi/10.1073/pnas.032085699).

KEYWORD: CS4173 (WWW)

[PG83] James W. Pellegrino and Susan R. Goldman, 1983. Developmental and individual differences in verbal and spatial reasoning. In Dillon and Schmeck [DS83], chapter 5, (pp. 137 – 180).

CALLNo: BF 311 I5 1983 v.1

KEYWORD: spatial ability • individual differences

- [PG90] J. J. Puttress and N. M. Guimaraes, November 1990. The toolkit approach to hypermedia. In Streitz et al. [SRA90], (pp. 25 – 37). Proceedings of the First European Conference on Hypertext.
- SEE ALSO: [SHMN90]
- [PG94] Steven E. Poltrock and Jonathan Grudin, March 1994. Organizational obstacles to interface design and development: Two participant-observer studies. *ACM Transactions on Computer-Human Interaction*, 1(1):52 – 80.
- SEE ALSO: [Hol91; SDB94; PG94; JMWU91]
- KEYWORD: CogPsych!LIS 861 • Testing
- [PG02] David Pinelle and Carl Gutwin, 2002. Groupware walkthrough: adding context to groupware usability evaluation. In *Proceedings of the SIGCHI conference on Human factors in computing systems: Changing our world, changing ourselves*, (pp. 455 – 462). Minneapolis, Minnesota, USA. URL [URL: http://doi.acm.org/10.1145/503376.503458](http://doi.acm.org/10.1145/503376.503458).
- [PGG03] David Pinelle, Carl Gutwin, and Saul Greenberg, 2003. Task analysis for groupware usability evaluation: Modeling shared-workspace tasks with the mechanics of collaboration. *ACM Transactions on Computer-Human Interaction*, 10(4):281 – 311. URL [URL: http://doi.acm.org/10.1145/966930.966932](http://doi.acm.org/10.1145/966930.966932).
- SEE ALSO: Other groupware work by Gutwin/Greenberg et al. ([PG02; BGG02])
- [PGS98] Morgan N. Price, Gene Golovchinsky, and Bill N. Schilit, 20 – 24 June 1998. Linking by inking: Trailblazing in a paper-like hypertext. In Grønbaek et al. [GMS98], (pp. 30 – 39).
- KEYWORD: System!XLibris • annotation
- [PJ93] Chris D. Paice and Paul A. Jones, 27 June – 1 July 1993. The identification of important concepts in highly structured technical papers. In Robert Korfhage, Edie Rasmussen, and Peter Willett (eds.), *SIGIR '93 Proceedings of the Sixteenth Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, (pp. 69 – 78). SIGIR, Pittsburgh, PA, USA: ACM.
- KEYWORD: Concept Identification • Document Analysis
- [PK00] Ruth A. Palmquist and Kyung-Sun Kim, 22 March 2000. Cognitive style and on-line database search experience as predictors of web search performance. *Journal of the American Society for Information Science*, 51(6):558–566. URL [URL: http://dx.doi.org/10.1002/\(SICI\)1097-4571\(2000\)51:6<558::AID-ASI7>3.0.CO;2-9](http://dx.doi.org/10.1002/(SICI)1097-4571(2000)51:6<558::AID-ASI7>3.0.CO;2-9).
- [PLRW92] Peter G. Polson, Clayton Lewis, John Rieman, and Cathleen Wharton, 1992. Cognitive walkthroughs: A method for theory-based evaluation of user interfaces. *International Journal of Man-Machine Studies*, 36:741 – 773.
- SEE ALSO:
- Usability Evaluation with CogWalks [RFR95],

- chapter in Lewis and Rieman's book [LR94a],
- part of Invisible Computer [Nor98, pp. 193 – 195],
- and especially A Practioner's Guide [WRLP94]

KEYWORD: Evaluation!Cognitive walkthrough

[PMW07] Josiane Xavier Parreira, Sebastian Michel, and Gerhard Weikum, May 2007. p2pDating: Real life inspired semantic overlay networks for web search. *Information Processing & Management*, 43(3):643–664. URL [URL: http://dx.doi.org/10.1016/j.ipm.2006.09.007](http://dx.doi.org/10.1016/j.ipm.2006.09.007). [URL: http://www.sciencedirect.com/science/article/B6VC8-4M69JW6-4/2/5c6de02794cb9d3d58e2ce2bcf86ac70](http://www.sciencedirect.com/science/article/B6VC8-4M69JW6-4/2/5c6de02794cb9d3d58e2ce2bcf86ac70).

[Pol90] AS Pollitt, 1990. Intelligent interfaces to text retrieval systems. In Gillman [Gil90], (pp. 192 – 208). Proceedings of 'The User's Perspective' (1988) and 'Text Management' (1989).

CALLNo: QA76.9.T48 I59 1988-1989

[Pos88] Michael I. Posner, 1988. Introduction: What is it to be an expert? In Chi et al. [CGF88], (pp. xxix – xxxvi).

CALLNo: BF 323 E2 N37 1988

ANNOTATION:

SEE ALSO: Other chapters in the same book [GC88; Joh88; VP88]

KEYWORD: Expertise

[Pot00] Denis Potosky, 2000. Computer understanding and experience (CUE) scale, (the). In John Maltby, Christopher Alan Lewis, and Andrew Hill (eds.), *Commissioned Reviews of 250 Psychological Tests*, volume 2 of *Mellen Studies in Psychology*, chapter 7.08, (pp. 802 – 803). Queenston, Ontario: The Edwin Mellen Press. ISBN 0-7734-7454-4.

KEYWORD: Expertise • measurement

[Pow90] James E. Powell, 1990. *Designing User Interfaces*. The DATA BASED ADVISOR® Series. San Marcos, CA, 92069-1436, USA: Microtrend™ Books, Slawson Communications, Inc. ISBN 0-915391-40-6. Copyright by the author.

KEYWORD: HCI!CS4163 • HCI!CS4163!Brain Surgeon exercises • HCI!CS3160 (UID)!Brain Surgeon exercises

[PR02] Kostas Pentikousis and Robert Rothenberg, Summer 2002. Spatial Web navigation with Perl. *SysAdmin*, 11(6):57 – 62.

[PR06] Stephen J. Payne and William R. Reader, May 2006. Constructing structure maps of multiple on-line texts. *International Journal of Human-Computer Studies*, 64(6):461 – 474. URL [URL: http://dx.doi.org/10.1016/j.ijhcs.2005.09.003](http://dx.doi.org/10.1016/j.ijhcs.2005.09.003).

KEYWORD: spatial ability

[PRM09] Niels Provos, Moheeb Abu Rajab, and Panayiotis Mavrommatis, 2009. Cybercrime 2.0. *Communications of the ACM*, 52(4):42 – 47. URL [URL: http://doi.acm.org/10.1145/1498765.1498782](http://doi.acm.org/10.1145/1498765.1498782).

SEE ALSO: Randal Schwatz on avoiding SQL attacks in WWW forms
[Sch05; Sch02]

KEYWORD: System!WWW • Security

- [PRS⁺94] Jenny Preece, Yvonne Rogers, Helen Sharp, David Benyon, Simon Holland, and Tom Carey, 1994. *Human-Computer Interaction*. Prentice-Hall Europe. ISBN 0-201-62769-8.

SEE ALSO: Preece, et al.'s *Interaction Design: Beyond HCI* [PRS02]

- [PRS02] Jennifer Preece, Yvonne Rogers, and Helen Sharp, 2002. *Interaction Design: Beyond Human-Computer Interaction*. John Wiley & Sons, Inc. ISBN 0-471-49278-7.

SEE ALSO: Preece, et al.'s *Human Computer Interaction* [PRS⁺94]

- [PRT97] Annie Piolat, Jean-Yves Roussey, and Oliveier Thunin, 1997. Effects of screen presentation on text reading and revising. *International Journal of Human-Computer Studies*, 47:565 – 589.

ANNOTATION: Abstract: 'Two studies using the methods of experimental psychology assessed the effects of two types of text presentation (page-by-page vs. scrolling) on participants' performance while reading and revising texts. Greater facilitative effects of the page-by-page presentation were observed in both tasks. The participants reading task performance indicated that they built a better mental representation of the text as a whole and were better at locating relevant information and remembering the main ideas. Their revising task performance indicated a larger number of global corrections (which are most difficult to make).' Texts were in French.

SEE ALSO: McDonald and Stevenson [MS96]

KEYWORD: Reading

- [PSS95] Marios Pittas, Steve Sommerville, and Dave Saunders, 1995. Reader's document models and access strategies in hypermedia and multimedia systems. In *Proceedings of the 1995 ACM symposium on Applied computing*, (pp. 253 – 257). Nashville, TN, USA.
- [Psy71] Psykologiforlaget, 1971. *Manual till DS-batteriet (Manual for the DS-tests)*. Stockholm, Sweden: Psykologiforlaget AB. [In Swedish]. Cited by Dählback et al. [DHS96] and Dählback & Lönnqvist [DL00].

KEYWORD: spatial ability!Jason Satel

- [PT90] Xavier Pintado and Dennis Tsichritzis, November 1990. SaTellite: Hypermedia navigation by affinity. In Streitz et al. [SRA90], (pp. 274 – 287). Proceedings of the First European Conference on Hypertext.

KEYWORD: System!SaTellite

- [PvS03] Robert Pearson and Paul van Schaik, September 2003. The effect of spatial layout of and link colour in web pages on performance in a visual search task and an interactive search task. *International Journal of Human-Computer Studies*, 59(3):327 – 353. URL <http://www.sciencedirect.com/science/article/B6WGR-48DXRCC-4/2/27d011337a6b75e65b5dec844ed02ae8>.

ANNOTATION: Abstract:

This study aimed to investigate the validity of psychological experimental methods within human-computer interaction research (Carroll, 1989) and to examine design guidelines pertaining to hypertext link colour and positioning of navigation menu frames as part of web documents. The results of past research on both link colour and positioning of menus are mixed and guidelines are usually not based on empirical evidence (Tullis, 1997; Shneiderman, 1997). The study used a repeated measures experimental design. Participants carried out both a visual search task and an interactive search task. Task performance on the two tasks did not correlate ($p > 0.05$), indicating that the visual search task may lack external validity. Results of the interactive search task suggest that the design convention of blue links (Nielsen, 1999a) should be retained as responses for blue were found to be significantly quicker than red, $F(1, 117) = 14.526, p < 0.001, MS_{\text{colour}} = 89.866$. Furthermore, an effect of presentation position, $F(3, 117) = 8.410, p < 0.001, MS_{\text{position}} = 61.015$, was found, with support for menus on the left (Nielsen, 1999a; Campbell & Maglio, 1999) or right (Nielsen, 1999a). Evidence was also found to support the conjecture that experienced Internet users might have formed automatic attention responses to specific web page designs. The need for validation of behavioural and psychometric methods with task performance and the use of cognitive-perceptual-motor modelling are discussed.

KEYWORD: WWW • Design • HCI!CS6606 • HCI!colour • HT!CS6606

- [PW97] Thomas A. Phelps and Robert Wilensky, 1997. Multivalent annotations. In *Proceedings of the First European Conference on Research and Advanced Technology for Digital Libraries*. Pisa, Italy. URL <http://www.cs.berkeley.edu/~phelps/papers/mvd-ed197.ps.gz>.

KEYWORD: System!Multivalent Document • interface • annotation

- [QB67] A. Quaglino and G. Borelli, 1867. Emiplegia sinistra con amaurosi; guaragione; perdita totale della percezione dei colori e della configurazione degli oggetti. *Giornale Italiano di Oftalmologia*, 10:106–117. [In Italian]. Cited by Caplan and Romans [CR98].
- [QB99] Megan Quentin-Baxter, December 1999. Quantitative evidence for differences between learners making use of passive hypermedia learning environments. *ACM Computing Surveys*, 31(4es). URL http://www.cs.brown.edu/memex/ACM_HypertextTestbed/papers/52.html. Part of an electronic symposium [ACM99].

SEE ALSO:

- Dillon & Gabbard's survey [DG98],
- Chen&Rada's meta-analysis [CR96],
- Individual Diffs in LJHCS [DW96]

KEYWORD: Evaluation • Review

- [Qiu91] Liwen Qiu, 1991. *Probabilistic Models of Search State and Path Patterns in Hypertext Information Retrieval Systems*. Ph.D. thesis, University of Western Ontario, London, Ontario, Canada.

CALLNO: AS42.C423 no.632 1991

- [Que03] James Maurer (ed.), March 2003. Special issue. *ACM Queue*, 1(1).
[Que04] Edward Grossman (ed.), April 2004. Special issue. *ACM Queue*, 2(2).

- [Qui68] M. Ross Quillian, 1968. Semantic Memory. In Marvin Minsky (ed.), *Semantic Information Processing*, (pp. 216 – 270). The MIT Press.

KEYWORD: Classic

- [QUI94a] 1994. QUIS 5.5b: The questionnaire for user interaction satisfaction. Available for licence from University of Maryland's Office of Technology Liaison. ©University of Maryland Human-Computer Interaction Laboratory.

SEE ALSO: QUIS 7.0 [QUI94b]

- [QUI94b] 1994. QUIS 7.0: The questionnaire for user interaction satisfaction. Available for licence from University of Maryland's Office of Technology Liaison. ©University of Maryland Human-Computer Interaction Laboratory
(URL:<http://lap.umd.edu/quisfolder/quishome.html>).

SEE ALSO: Sauro and Kindlund's A method to standardize usability metrics into a single score [SK05]

- [QV92] Vincent Quint and Irène Vatton, 30 November – 4 December 1992. Combining hypertext and structured documents in Grif. In Lucarella et al. [LNNP92], (pp. 23 – 32).

KEYWORD: Review • SGML • System!Grif

- [Rab86] Fausto Rabitti (ed.), 8 – 10 September 1986. *1986 — ACM Conference on Research and Development in Information Retrieval*. ACM-SIGIR, ACM. ISBN 0-89791-187-3.
[Rad90] Roy Rada, August 1990. Hypertext writing and document reuse: The role of a semantic net. *Electronic Publishing — Origination, Dissemination and Design*, 3(3):125 – 140.

KEYWORD: Semantic net • Classification

- [Rad91a] R. Rada, 1991. Hypertext and paper: A special synergy. *International Journal of Information Management*, 11:14 – 22.
[Rad91b] Roy Rada, 1991. *Hypertext: From Text to Expertext*. McGraw Hill.

CALLNO: QA76.76.H94 R33

- [Rad91c] Roy Rada, 1991. Small, medium, and large hypertext. *Information Processing & Management*, 27(6):659 – 677.

ANNOTATION: Identifies three types of HT. An overview of the state of HT; Traces origin of word 'hypertext' to 1704.

SEE ALSO: [Rad90]

KEYWORD: Review

- [Rad92] Roy Rada, July 1992. Converting a textbook to hypertext. *ACM Transactions on Information Systems*, 10(3):294 – 315.

SEE ALSO: From Text to Expertext (the book converted) [Rad91b]

KEYWORD: HT!Conversion

- [Rag94] David Raggett, 1994. A review of the HTML+ document format. *Computer Networks and ISDN Systems*, 27:135 – 145.

- [RAK97] W. Michael Reed, David J. Ayersman, and Lee A. Kraus, 1997. The effects of learning style and task type on hypermedia-based mental models. *Journal of Educational Multimedia and Hypermedia*, 6(3/4):285 – 304.

ANNOTATION:

- 6 of 8 citations are to self
- Reed, Ayersman, & Liu (1996) proposed 4 types of information structures to cover all types of HM and how users' learning experience might be structured.
- uses Kolb's (1985) Learning Style Inventory
- The experiments don't make sense to me — the measures of student answers especially

SEE ALSO: types of HT readers:[CCM98; LK98; KH95]

KEYWORD: taxonomy

- [Ram89] M. V. Ramakrishna, October 1989. Practical performance of bloom filters and parallel free-text searching. *Communications of the ACM*, 32(10):1237 – 1239. URL [URL:http://doi.acm.org/10.1145/67933.67941](http://doi.acm.org/10.1145/67933.67941)).

KEYWORD: Bloom Filters

- [Ran04] Marcus J. Ranum, 2004. Believing in myths. *Communications of the ACM*, 47(1):144. URL [URL:http://doi.acm.org/10.1145/962081.962110](http://doi.acm.org/10.1145/962081.962110)). Appeared in the *Inside Risks* column.

KEYWORD: Usability • Security

- [Rap90] Diane Raper, 1990. Your rights to your data: Legal issues you need to consider. In Gillman [Gil90], (pp. 37 – 41). Proceedings of 'The User's Perspective' (1988) and 'Text Management' (1989).

CALLNO: QA76.9.T48 I59 1988-1989

KEYWORD: Legal Issues

- [Ras87] Jeff Raskin, 13 – 15 November 1987. The hype in hypertext: A critique. In *Hypertext '87 Papers* [ACM87], (pp. 325 – 330). URL [URL \(URL:http://doi.acm.org/10.1145/317426.317449\)](http://doi.acm.org/10.1145/317426.317449).
 ANNOTATION: A number of user interface and technical problems with HT are discussed
 KEYWORD: Design!Decisions
- [Ras94] Jef Raskin, September 1994. Intuitive equals familiar. *Communications of the ACM*, 37(9):17– 18.
 SEE ALSO: [KB89], [Tur08]
 KEYWORD: HCI!Intro!Intuitive
- [Ras97] Jef Raskin, February 1997. Looking for a humane interface: Will computers ever become easy to use? *Communications of the ACM*, 40(2):98 – 101.
 KEYWORD: HCI!Intro
- [Ray94] W. Boyd Rayward, 1994. Visions of xanadu: Paul otlet (1868 – 1944) and hypertext. *Journal of the American Society for Information Science*, 45:235 – 250. URL [URL \(URL:http://alexia.lis.uiuc.edu/~wrayward/otlet/xanadu.htm\)](http://alexia.lis.uiuc.edu/~wrayward/otlet/xanadu.htm).
- [RBS94] Rhud Rivlin, Rodrigo Botafogo, and Ben Shneiderman, February 1994. Navigating in hyperspace: Designing a structure-based toolbox. *Communications of the ACM*, 37(2):87 – 96. URL [URL \(URL:http://doi.acm.org/10.1145/175235.175242\)](http://doi.acm.org/10.1145/175235.175242).
 SEE ALSO: HT Metrics [BRS92]
 KEYWORD: Metric
- [RCC04] Pei-Luen Patrick Rau, Sho-Hsen Chen, and Yun-Ting Chin, 2004. Developing web annotation tools for learners and instructors. *Interacting with Computers*, 16(2):163 – 181. URL [URL \(URL:http://www.sciencedirect.com/science/article/B6V0D-4BRSJTK-1/2/ddefbc9a949251b89433b53e52e0364f\)](http://www.sciencedirect.com/science/article/B6V0D-4BRSJTK-1/2/ddefbc9a949251b89433b53e52e0364f).
 KEYWORD: annotation • System!WWW
- [Ret94] Marc Rettig, 1994. Prototyping for tiny fingers. *Communications of the ACM*, 37(4). URL [URL \(URL:http://www.acm.org/pubs/citations/journals/cacm/1994-37-4/p21-rettig/\)](http://www.acm.org/pubs/citations/journals/cacm/1994-37-4/p21-rettig/).
 KEYWORD: HCI!prototyping!paper prototypes
- [RFR95] John Rieman, Marita Franzke, and David Redmiles, 7 – 11 May 1995. Usability evaluation with the cognitive walkthrough. In *CHI '95 Mosaic of Creativity*, (pp. 387 – 388).
 SEE ALSO: [PLRW92; WRLP94]
 KEYWORD: Evaluation!Cognitive walkthrough
- [RGL87] Joel R. Remde, Louis M. Gomez, and Thomas K. Landauer, 13 – 15 November 1987. Superbook: An automatic tool for information exploration — hypertext? In *Hypertext '87 Papers* [ACM87], (pp. 175 – 188).

ANNOTATION: Not really HT & requires marked-up text

SEE ALSO: TOIS 7(1):30 – 57 [ERG⁺89]

KEYWORD: System!SuperBook

- [RGPQ05] Capra Robert G., III and Manuel A. Pérez-Quinones, October 2005. Using Web search engines to find and refine information. *IEEE Computer*, 38(10):36 – 42. URL http://ieeexplore.ieee.org/xpls/abs_all.jsp?isnumber=32474&arnumber=1516054&count=19&index=6.

- [RH82] Gale H. Roid and Thomas M. Haladyna, 1982. *A Technology For Test-item Writing*. Educational technology series. Academic Press. ISBN 0125932502.

CALLNo: LB3060.32.C74R64

- [RHB92] S. E. Robertson and M. M. Hancock-Beaulieu, July – August 1992. On the evaluation of IR systems. *Information Processing & Management*, 28(4):457 – 466.

KEYWORD: Evaluation • Information Retrieval

- [RI94a] James Rudd and Scott Isensee, April 1994. Origins of the vacuous prototyping problem: A response to Hal Berghel. *interactions*, I:52 – 53. Sidebar to article [Ber94b] about earlier article [RI94b].

SEE ALSO:

- original article [RI94b]
- main article [Ber94b]

KEYWORD: HCI!prototyping

- [RI94b] James Rudd and Scott Isensee, January 1994. Twenty-two tips for a happier healthier prototype. *interactions*, I:35 – 40. Reprinted from Proceedings of the Human Factors Society 35th Annual Meeting, 1991.

SEE ALSO:

- follow-up by Berghel [Ber94b]
- their reply to Berghel [RI94a]
- their follow-up to tip 3 (about high fidelity) [RSI96]

KEYWORD: HCI!prototyping

- [Rin05] Mike Rinck, 2005. Spatial situation models. In Shah and Miyake [SM05], chapter 9, (pp. 334 – 382).

ANNOTATION:

defn of SSM

- SSMs are about situations described in text (usually narratives)
- SSM \neq Dillon's info shape (p. 338)
- 'Situation Models are the level of text representation corresponding to deep understanding, and serve to integrate the information stated in a text with the reader's prior knowledge. Thus, they are an amalgamation of information given by the text and information added by the reader.' (p. 335)

- ‘Only with regard to text comprehension may mental models and situation models be considered equivalent. However, even within text comprehension, distinctions between mental models and situation models may be made, with situation models being considered mental models of specific situations rather than of general states (see Zwan, 2003).’ (p. 337)
- reasons for the emphasis on spatial information (p. 338)
- (p. 339)
- (p. 361, top)

perceptual picture \neq mental imagery (pp. 337–8) • causal dimension
pp. 353 & 373

spatial gradient

- tested with maps and narrative
- defn: p. ???
- robust p. 350

experts vs. novices pp. 361–2

- deeper perception
- schematic object
- *check original publications*

route following instructions pp. 369–370

do readers’s create SSM during reading? pp. 339–340

recommended readings p. 380

KEYWORD: spatial ability • Expertise

[Rit92] Ian Ritchie, 30 November – 4 December 1992. The future of electronic literacy: Will hypertext ever find acceptance. In Lucarella et al. [LNNP92], (p. 1). Extended Abstract only.

KEYWORD: HT!General

[RJ91] Lisa F. Rau and Paul S. Jacobs, 13 – 16 October 1991. Creating segmented databases from free text for text retrieval. In Bookstein et al. [BCSR91], (pp. 337 – 355).

ANNOTATION:

- Abstract: ‘... This paper reports on a system that uses natural language text processing to derive keywords from free text news stories, separate these keywords into segments and automatically build a segmented database. The system is used as part of a commercial news ‘clipping’ and retrieval product. Preliminary results show improved accuracy, as well as reduced cost, resulting from these automated techniques.
- Works with newsgroups

KEYWORD: Indexing • NLP

- [RL94] Ellen Riloff and Wendy Lehnert, July 1994. Information extraction as a basis for high-precision text classification. *ACM Transactions on Information Systems*, 12(3):296 – 333.

KEYWORD: Categorization • Concept Identification

- [RL96] Jean-François Rouet and Jarmo J. Levonen, 1996. Studying and learning with hypertext: Empirical studies and their implications. In Jean-François Rouet, Jarmo J. Levonen, Andrew Dillon, and Rand J. Spiro (eds.), *Hypertext and Cognition*. Lawrence Erlbaum Associates.
- [RM96] Ajaz R. Rana and Eduardo Morales, 1996. Evaluation of semantic hypermedia links for reading of scholarly writing. Distributed at poster session of *Hypertext '96* conference.
- [RMW95] Martin Röscheisen, Christina Mogensen, and Terry Winograd, 1995. Interaction design for shared world-wide web annotations. In *CHI '95 Proceedings*.
- [Rob98] J. O. Robinson, 1998. *The Psychology of Visual Illusion*. Dover Publications, Inc. ISBN 0-486-40449-8. Copyright by the author 1972, 1988.
- [Rob05] Naomi B. Robbins, 2005. *Creating More Effective Graphs*. John Wiley & Sons, Inc. ISBN 0-471-27402-X.

SEE ALSO: example in Clear and to the Point [Kos07, pp. 28–32, Figs. 2.6–2.8]

KEYWORD: Basic skills for grad students

- [ROO91] Scott P. Robertson, Gary M. Olson, and Judith S. Olson (eds.), 27 April – 2 May 1991. *Human Factors in Computing Systems Reaching Through Technology CHI '91 Conference Proceedings*. ACM SIGCHI, New Orleans, Louisiana: Association for Computing Machinery.

CALLNO: QA76.9.H85C4419912

- [Ros88] Mike Rose, October 1988. Narrowing the mind and page: Remedial writers and cognitive reductionism. *College Composition and Communication*, 39(3):267 – 302.

ANNOTATION: Cited by Charney [Cha94]

- [Ros95] Jim Rosenberg, November 1995. Navigating nowhere / hypertext infrawhere. URL <http://www.well.com/user/jer/NNHI.html>.

- [Rou92] Jean-François Rouet, 30 November – 4 December 1992. Cognitive processing of hyperdocuments: When does nonlinearity help? In Lucarella et al. [LNNP92]. URL <http://doi.acm.org/10.1145/168466.168508>.

ANNOTATION: An excellent survey of cognitive studies of the use of hypertext.

SEE ALSO: Charney's essay [Cha94], Rouet's essay in HT & Cognition [RL96]

KEYWORD: CogPsych • Review

- [Row90] Jennifer Rowley (ed.), 17 – 20 September 1990. *Information 90: Proceedings of the Third International Conference*. Aslib, the Council of Polytechnic Librarians, the Institute of Information Scientists, the Library Association and the Society of Archivists, Bournemouth International Centre, England: Aslib, The Association for Information Management. Copyright 1991.
- [Roy04] Debopriyo Roy, 2004. A self-paced approach to hypermedia design for patient education. In *SIGDOC'04*.
KEYWORD: EHR
- [RPB⁺04] Santosh K. Rangarajan, Vir V. Phoha, Kiran S. Balagani, Rastko R. Selmic, and S. S. Iyengar, April 2004. Adaptive neural network clustering of Web users. *IEEE Computer*, 37:34 – 40.
- [RR92] Lyn Richards and Tom Richards, 1992. Analyzing unstructured information: Can computers help? *Library Hi Tech*, 10:1–2:95, 98 – 109. ISSN 0737-8831.
CALLNo: Z671.L696
KEYWORD: Categorization!system • System!NUDIST
- [RR94] Mimi Recker and Ashwin Ram, August 1994. Cognitive media types as indices for hypermedia learning environments. In *Proceedings of the AAAI-94 Workshop on Indexing and Reuse in Multimedia Systems*. Seattle, Washington, USA. Obtained from an electronic source.
- [RRK99] Daniel H. Robinson, Sheri L. Robinson, and Andrew D. Katayama, 1999. When words are represented in memory like pictures: Evidence for spatial encoding of study materials. *Contemporary Educational Psychology*, 24:38 – 54. Article ID ceps.1998.0979, available online at [URL:http://www.idealibrary.com](http://www.idealibrary.com).
ANNOTATION: Paivio (1986)
SEE ALSO: Dee-Lucas [DLL95]
KEYWORD: spatial ability
- [RS99] Paul Rankin and Robert Spence, 1999. A contrast between information navigation and social navigation in virtual worlds. In Munro et al. [MHB99], chapter 10, (pp. 174 – 197).
CALLNo: QA76.9 C66 S625 1999
- [RSGF01] Hung Kai On Ravindra S. Goonetilleke, Heloisa Martins Shih and Julien Fritsch, November 2001. Effects of training and representational characteristics in icon design. *International Journal of Human-Computer Studies*, 55:741 – 760. URL [URL:http://www.sciencedirect.com/science/article/B6WGR-4582BWS-5/1/7d76ee534af7d10db7aecc4d9e93ee92](http://www.sciencedirect.com/science/article/B6WGR-4582BWS-5/1/7d76ee534af7d10db7aecc4d9e93ee92).
KEYWORD: HCI • HCI!CS6606
- [RSI96] James Rudd, Ken Stern, and Scott Isensee, January 1996. Low vs. high-fidelity prototyping debate. *interactions*, III(1):76 – 85. URL [URL:http://www.acm.org/pubs/citations/journals/interactions/1996-3-1/p76-rudd/](http://www.acm.org/pubs/citations/journals/interactions/1996-3-1/p76-rudd/).

SEE ALSO:

- 22 Tips (especially #3) [RI94b]
- Berghel's response to 22 Tips [Ber94b]
- Prototyping for tiny hands [Ret94]
- Another take on the issue [Hol05a]

KEYWORD: HCI!prototyping • HCI!prototyping!paper prototypes

- [RT87] Darrell R. Raymond and Frank Wm. Tompa, 13 – 15 November 1987. Hypertext and the New Oxford English Dictionary. In *Hypertext '87 Papers* [ACM87], (pp. 143 – 153). URL [URL \(http://doi.acm.org/10.1145/317426.317438\)](http://doi.acm.org/10.1145/317426.317438).

ANNOTATION: From the abstract: 'An alternative to manual composition of HT DBs is conversion from existing texts. Such conversion often required careful analysis of the text document in order to determine how best to represent its structure. We illustrate some of the issues of conversion with an analysis of the OED.'

SEE ALSO: Raymond & Tompa in CACM 31(7)[RT88]

KEYWORD: HT!AutoGen • OED

- [RT88] Darrell R. Raymond and Frank Wm. Tompa, July 1988. Hypertext and the Oxford English Dictionary. *Communications of the ACM*, 31(7):871 – 879. URL [URL \(http://doi.acm.org/10.1145/48511.48517\)](http://doi.acm.org/10.1145/48511.48517).

ANNOTATION: From the abstract: 'Hypertext databases can be produced by converting existing text docs to electronic form. The basic task in conversion is identification of fragments. We illustrate that this is not always a straightforward process with an analysis of the OED.'

SEE ALSO: Raymond & Tompa in HT87 [RT87]

KEYWORD: HT!AutoGen • OED

- [RTW93] Darrell R. Raymond, Frank Wm. Tompa, and Derick Wood, 1 May 1993. Markup reconsidered. TR 356, Computer Science Department, University of Western Ontario, London, Canada.

- [Rub94] Jeffrey Rubin, 1994. *Handbook of Usability Testing: How to Plan, Design, and Conduct Effective Tests*. John Wiley & Sons, Inc. ISBN 0-471-59403-2.

CALLNO: QA78.9.U83R82 1994

KEYWORD: HCI • Testing

- [RW83] Vijay V. Raghavan and S. K. M. Wong, 2 – 6 July 1983. A critical analysis of vector space model for information retrieval. In van Rijsbergen [vR84]. Proceedings of the third joint BCS and ACM symposium.

SEE ALSO: [RW86]

KEYWORD: Information Retrieval

- [RW86] Vijay V. Raghavan and S. K. M. Wong, September 1986. A critical analysis of vector space model for information retrieval. *Journal of the American Society for Information Science*, 37(5):279 – 287.
- SEE ALSO: [RW83]
- KEYWORD: Information Retrieval
- [RZY⁺91] Roy Rada, Akmal Zeb, Geeng-Neg You, Antonios Michailidis, and Mahmoud Mhashi, 1991. Collaborative hypertext and the MUCH system. *Journal of Information Science*, 17:191 – 196.
- KEYWORD: groupware • System • HT!model!Dexter • System!MUCH
- [SA93] Gerard Salton and James Allan, 14 – 18 November 1993. Selective text utilization and text traversal. In Hypertext 1993 [Hyp93].
- SEE ALSO: [SA95] in IJHCS 1995
- KEYWORD: HT!AutoGen • Concept Identification • full text
- [SA95] Gerard Salton and James Allan, 1995. Selective text utilization and text traversal. *International Journal of Human-Computer Studies*, 43:483 – 497.
- SEE ALSO: [SA93] in HT'93
- KEYWORD: HT!AutoGen • Concept Identification • full text
- [SAB92] Gerard Salton, J. Allan, and C. Buckley, August 1992. Selective use of full-text databases. TR 92-1300, Department of Computer Science, Cornell University.
- [SAB94] Gerard Salton, James Allan, and Chris Buckley, February 1994. Automatic structuring and retrieval of large text files. *Communications of the ACM*, 37(2):97 – 108.
- ANNOTATION: An update on the Funk & Wagnall's CD Encyclopædia project based wholly on information retrieval techniques, including relevance feedback. The authors used structured, edited homogenous text. They justify the use of single word based indexing by quoting that the meaning of a word depends on its usage. They use different weightings and measures for text chunks of different sizes.
- SEE ALSO: [SB90]
- KEYWORD: HT!AutoGen
- [SABS96] Gerard Salton, James Allan, Chris Buckley, and Amit Singhal, 1996. Automatic analysis, theme generation, and summarization of machine-readable texts. In Maristella Agosti and Alan F. Smeaton (eds.), *Information retrieval and hypertext*. Kluwer Academic.
- KEYWORD: System!SMART
- [Sac84] Lothar Sachs, 1984. *Applied statistics: a handbook of techniques*. Springer series in statistics. Springer-Verlag, second edition. ISBN 0-387-90976-1 (New York), 3-540-90976-1 (Berlin). Translation of: Angewandte Statistik. Translated by: Zenon Reynarowych.

- [Sac86] James R. Sackett, July 1986. Style, function, and assemblage variability: A reply to binford. *American Antiquity*, 51(3):628 – 634. URL <http://links.jstor.org/sici?sici=0002-7316%28198607%2951%3A3%3C628%3ASFAAVA%3E2.0.CO%3B2-Z>.
 ANNOTATION: Clarification of definition of ‘isochrestic’, see Molotch’s *Where Stuff Comes From*, p. 84
 KEYWORD: HCI!CS6606
- [Sal68] Gerard Salton, 1968. *Automatic Information Organization and Retrieval*. McGraw-Hill computer science. McGraw-Hill Book Company. ISBN None.
 CALLNo: Z.699.S3
- [Sal80] Gerard Salton, 1980. Automatic text analysis. In Belver C. Griffith (ed.), *Key Papers in Information Science*, (pp. 284 – 292). Knowledge Industry Publications, Inc. Reprinted from *Science* volume 168, pp.335 – 43, 17 April 1970.
- [Sal89] G. Salton, 1989. *Automatic Text Processing: The Transformation, Analysis, and Retrieval of Information by Computer*. Addison-Wesley. ISBN 0-201-12227-8.
 ANNOTATION: Good introduction to information retrieval
 SEE ALSO: [SM83]
 KEYWORD: Classic
- [Sal91] Gerard Salton, 30 August 1991. Developments in automatic text retrieval. *Science*, 253.
- [Sal92] Gerard Salton, July – August 1992. The state of retrieval system evaluation. *Information Processing & Management*, 28(4):441 – 449.
 KEYWORD: Review
- [Sal97] Gavriel Salvendy (ed.), 1997. *Handbook of human factors and ergonomics*. J. Wiley.
 CALLNo: TA 166 H275 1997
- [Sau95] John Ralston Saul, 1995. *The Doubter’s Companion: A Dictionary of Aggressive Common Sense*. Penguin Books. ISBN 0-14-023707-0.
 KEYWORD: annotation!glossary
- [Sav93] Jacques Savoy, 1993. Effectiveness of information retrieval systems used in a hypertext environment. *Hypermedia*, 5(1):23 – 46.
 ANNOTATION: Does not evaluate hypertext links but rather evaluates IR methods applied to a network of documents connected by hypertext links.
 KEYWORD: Information Retrieval • Evaluation
- [Sav94] Jacques Savoy, 1994. A learning scheme for information retrieval in hypertext. *Information Processing & Management*, 30(4):515 – 533.

ANNOTATION: An IR system using p -norm (fuzzy boolean?) matching of keyword terms. Relevance feedback seems to be provided by a hypertext-like mechanism. Assumes that notes that are relevant to a given query will contain similar concepts. Contains a lot of background.

SEE ALSO: [Sav93]

KEYWORD: Information Retrieval

[SB89] G. Salton and C. Buckley, April 1989. On the automatic generation of content links in hypertext. TR 89-993, Department of Computer Science, Cornell University.

[SB90] Gerard Salton and Chris Buckley, 4 – 8 November 1990. Approaches to global text analysis. In Henderson [Hen90], (pp. 228 – 233).

SEE ALSO: [SAB94]

[SB91] Gerard Salton and Chris Buckley, 13 – 16 October 1991. Automatic text structuring and retrieval — experiments in automatic encyclopedia searching. In Bookstein et al. [BCSR91], (pp. 21 – 30).

SEE ALSO: [SAB94]

[SB92] Susan Stone and Michael Buckland (eds.), April 1992. *Studies in Multimedia State-of-the-Art Solutions in Multimedia and Hypertext*, ASIS Monograph Series. American Society for Information Science, Learned Information, Inc. ISBN 0-938734-59-1.

CALLNO: Z 678.93.H94 S78 1992

[SBE⁺93] Philip N. Smith, David F. Brailsford, David R. Evans, Leon Harrison, Steve G. Proberts, and Peter E. Sutton, December 1993. Journal publishing with Acrobat: the CAJUN project. *Electronic Publishing — Origination, Dissemination and Design*, 6(4):481 – 493.

KEYWORD: e-pubs • System!Acrobat/PDF

[SBM96] Amit Singhal, Chris Buckley, and Mandar Mitra, 18 – 22 August 1996. Pivoted document length normalization. In Hans-Peter Frei, Donna Harman, Peter Schäuble, and Ross Wilkinson (eds.), *Proceedings of the 19th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, (pp. 21 – 29). ISBN 0-89791-792-8.

[Sca98] Tara Scanlon, May/June 1998. Paper prototypes: Still our favorite. *Eye For Design*, 5(3):2 – 4. URL ([URL:http://world.std.com/~uieweb/prototyp.htm](http://world.std.com/~uieweb/prototyp.htm)).

SEE ALSO:

- Five Paper Prototyping Tips [Kle00]
- Using Paper Prototypes to Manage Risk [Use96]

KEYWORD: HCI!prototyping!paper prototypes

[Sch81] Laura Scharer, April 1981. Pinpointing requirements. *Datamation*, (pp. 139 – 151 (139, 140, 142, 144, 146, 150, 151)).

KEYWORD: CS3160 (UID)

- [Sch00a] Howard Schwartz, September 2000. Going global. *Web Techniques*, 5:54 – 57.

KEYWORD: HCI!cultural factors • CS4173 (WWW)

- [Sch00b] Randal L. Schwartz, September 2000. Getting image colors to text. *Web Techniques*, 5:68, 70 – 71.

- [Sch01] Randal L. Schwartz, December 2001. Ravaged by robots. *Web Techniques*, 6:42 – 43.

- [Sch02] Randal Schwartz, September 2002. Processing Web forms carefully. *Linux Magazine*. URL [URL \(http://www.stonehenge.com/merlyn/LinuxMag/col140.html\)](http://www.stonehenge.com/merlyn/LinuxMag/col140.html).

KEYWORD: System!WWW • Security

- [Sch05] Randal Schwartz, May 2005. Avoiding SQL injection attacks. *Unix Review*. URL [URL \(http://www.stonehenge.com/merlyn/UnixReview/col58.html\)](http://www.stonehenge.com/merlyn/UnixReview/col58.html).

KEYWORD: System!WWW • Security

- [SD91] Jacques Savoy and Daniel Desbois, June 1991. Information retrieval in hypertext systems: An approach using Bayesian networks. *Electronic Publishing — Origination, Dissemination and Design*, 4(2):87 – 108.

SEE ALSO: Savoy's Hypermedia paper [Sav93]

KEYWORD: Bayesian (probability) • HT!AutoGen

- [SDB94] Elissa D. Smilowitz, Michael J. Darnell, and Alan E. Benson, 1994. Are we overlooking some usability testing methods? a comparison of lab, beta, and forum tests. *Behaviour & Information Technology*, 13(1 and 2):183 – 190.

SEE ALSO: [Hol91; JMWU91; PG94]

KEYWORD: CogPsych!LIS 861 • Testing

- [See05] Sonn Seeley, December/January 2004–2005. How not to write FORTRAN in any language. *ACM Queue*, 2(9):58 – 65.

- [Seg94] Carol Augart Seger, 1994. Implicit learning. *Psychological Bulletin*, 115(2):163 – 196. ISSN 0033-2909. URL [URL \(http://ezproxy.library.dal.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=pdh&AN=bul-115-2-163&site=ehost-live\)](http://ezproxy.library.dal.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=pdh&AN=bul-115-2-163&site=ehost-live).

- [Sel95] Stuart A. Selber, June 1995. Metaphorical perspectives on hypertext. *IEEE Transactions on Professional Communication*, 38(2):59 – 67.

- [Ser] BUBL Information Service. BUBL journals. [URL \(http://bubl.ac.uk/journals/\)](http://bubl.ac.uk/journals/). Contents, abstracts or full texts of many current journals and newsletters.

- [Ses05] Roger Sessions, December/January 2004–2005. Fuzzy boundaries: Objects, components and web services. *ACM Queue*, 2(9):40 – 47.

SEE ALSO: Part of a disparate series about web services as distributed objects (in CACM, some IEEE pub, and now Queue)

KEYWORD: CS4173 (WWW) • web services

- [SF90] P. David Stotts and Richard Furuta, November 1990. Hierarchy, composition, scripting languages, and translators for structured hypertext. In Streitz et al. [SRA90]. Proceedings of the First European Conference on Hypertext.
- [SFJ96] Hal Shubin, Deborah Falck, and Ati Gropius Johansen, 1996. Exploring color in interface design. *interactions*, 3(4):36 – 48. URL [URL: http://doi.acm.org/10.1145/234813.234818](http://doi.acm.org/10.1145/234813.234818).

KEYWORD: HCI!colour

- [SFK90] Daniel Schwabe, Bruno Feijo, and Werther G. Krause, November 1990. Intelligent hypertext for normative knowledge in engineering. In Streitz et al. [SRA90], (pp. 123 – 136). Proceedings of the First European Conference on Hypertext.
- [SFS88] Elliot Soloway, Douglas Frye, and Sylvia B. Sheppard (eds.), 15 – 19 May 1988. *Human factors in computing systems CHI '88 conference Proceedings*. ACM SIGCHI, Addison-Wesley. ISBN 0201142376.

CALLNO: QA76.9.H85C44 1988

- [SH94] Cynthia L. Selfe and Susan Hilligoss (eds.), 1994. *Literacy and Computers: The Complications of Teaching and Learning with Technology*. 10 Astor Place, New York, New York 10003-6981, USA: The Modern Language Association of America. ISBN 0-87352-579-5 (cloth), 0-87352-580-9 (pbk.).
- [SHA70] Eileen E. Sargent, Helen Huus, and Oliver Andresen, 1970. *How to Read a Book*. Reading Aids. Newark, Delaware, USA: International Reading Association. An IRA Service Bulletin, Second printing (March 1971).
- [Sha86] W. M. Shaw, Jr., September 1986. The foundation of evaluation. *Journal of the American Society for Information Science*, 37(5):346 – 348.

KEYWORD: Information Retrieval • theory

- [Sha92] Debora Shaw (ed.), 26 – 29 October 1992. *Celebrating Change Information on the Move Proceedings of the 55th ASIS Annual Meeting*, volume 29. Pittsburgh, PA: Learned Information, Inc. ISBN 0-938734-69-5. ISSN 0044-7870.
- [She01] Andrew Shepherd, 2001. *Hierarchical Task Analysis*. New York, NY: Taylor & Francis. ISBN 0-7484-0387-1(hc) / 0-7484-0838-X(p).

KEYWORD: task_analysis

- [SHG03] Bill Schilit, Jason Hong, and Marco Grutser, December 2003. Wireless location privacy protection. *IEEE Computer*, 36:135 – 137.

SEE ALSO: PIKII [EBT04]

- [SHMN90] Mark Sherman, Wilfred J. Hansen, Michael McNerny, and Tom Neuendorffer, November 1990. Building hypertext on a multimedia toolkit: An overview of Andrew Toolkit Hypermedia Facilities. In Streitz et al. [SRA90], (pp. 13 – 24). Proceedings of the First European Conference on Hypertext.

KEYWORD: System!Andrew

- [Shn89] Ben Shneiderman, 1989. Reflections on authoring, editing, and managing hypertext. In Barrett [Bar89a], chapter 8, (pp. 115 – 131).

CALLNo: QA76.76.H94 S65 1989

- [Shn92] Ben Shneiderman, 1992. *Designing the User Interface: Strategies for Effective Human-Computer Interaction*. Addison-Wesley, 2nd edition.

- [Shn98] Ben Shneiderman, 1998. *Designing the User Interface: Strategies for Effective Human-Computer Interaction*. Addison-Wesley, third edition. ISBN 0-201-69497-2.

- [Shu90] Simon Shum, 1990. Real and virtual spaces: mapping from spatial cognition to hypertext. *Hypermedia*, 2(2):133 – 158. URL ([URL:http://kmi.open.ac.uk/people/sbs/spatial/hypermedia90.html](http://kmi.open.ac.uk/people/sbs/spatial/hypermedia90.html)). The author's surname is given incorrectly. It should be 'Buckingham Shum'.

ANNOTATION:

- Abstract: 'Parallels are frequently drawn between navigating through everyday spatial environments and information systems, hypertexts being a particular case in point. This paper examines the cognitive mapping theory often borrowed implicitly from spatial cognition research, which has a bearing on the appropriateness of using spatial imagery in hypertext. Conceptual differences between euclidean and virtual spaces are identified, and ways considered in which to make information spaces more coherent. A demonstration hypertext browser is described, incorporating some of the cognitive principles discussed.'
- survey about cognitive maps and spatial knowledge, 3D interfaces/environments

KEYWORD: Survey • Navigation

- [Sjö96a] Marie Sjölander, 1996. Individual differences in spatial cognition and hypermedia navigation. In *Towards a Framework for Design and Evaluation of Navigation in Electronic Spaces*, (pp. 61–72). Swedish Institute of Computer Science. URL ([URL:http://www.sics.se/humle/projects/persona/web/littsurvey/ch5.pdf](http://www.sics.se/humle/projects/persona/web/littsurvey/ch5.pdf)).

KEYWORD: spatial ability!Jason Satel

- [Sjö96b] Marie Sjölander, 1996. Individual differences in spatial cognition and hypermedia navigation. In *Towards a Framework for Design and Evaluation of Navigation in Electronic Spaces*, (pp. 61–72). Swedish Institute of Computer Science. URL ([URL:http://www.sics.se/humle/projects/persona/web/littsurvey/ch5.pdf](http://www.sics.se/humle/projects/persona/web/littsurvey/ch5.pdf)).

KEYWORD: spatial ability!Jason Satel

- [SJWM05] Debbie Stone, Caroline Jarrett, Mark Woodroffe, and Shailey Minocha, 2005. *User Interface Design and Evaluation*. Morgan Kaufmann Series in Interactive Technologies. Elsevier, Inc. ISBN 978-0-12-088436-0. © The Open University 2005.

KEYWORD: HCI!Intro!textbook • HCI!CS3160 (UID) • CS3160 (UID)

- [SK05] Jeff Sauro and Erika Kindlund, 2005. A method to standardize usability metrics into a single score. In *CHI '05: Proceedings of the SIGCHI conference on Human factors in computing systems*, (pp. 401 – 409). URL [URL: http://doi.acm.org/10.1145/1054972.1055028](http://doi.acm.org/10.1145/1054972.1055028).
- [SL88] Lynn A. Streeter and Karen E. Lochbaum, 14 – 18 March 1988. An expert/expert-locating system based on automatic representation of semantic structure. In *Proceedings of the Fourth Conference on Artificial Intelligence Applications*. San Diego, CA.
- [Sla94] A. F. Slater, 1994. Controlled by the web. *Computer Networks and ISDN Systems*, 27:289 – 295.
- [Slo02] Debra J. Slone, 2002. The influence of mental models and goals on search patterns during Web interaction. *Journal of the American Society for Information Science and Technology*, 53(13):1152 – 1169. URL [URL: http://dx.doi.org/10.1002/asi.10141](http://dx.doi.org/10.1002/asi.10141).

ANNOTATION: Abstract:

This article reports on a study that uses a new analysis and display tool to examine the influences of understanding the system and goals on end-user Internet searching. Thirty-one public library users were observed searching the Web and/or a Web-based on-line catalog. The study identified four user categories, distinguished by the number of search approaches employed. These included linking, use of search engines, URL use, on-line catalog searching, and searching within a specific Web-site domain. Results conclude that experience and motivation, elements of situational goals and mental models, work in tandem to determine search approaches, Web sites visited, and sources used. People who sought information for job-related or educational purposes were highly motivated. Thus, they were persistent. Those who had a great deal of Internet experience used an array of tools; while those with immature mental models of the Internet relied more heavily on the Web on-line catalog or off-line sources. People seeking information for recreational or personal use were not highly motivated. Whether experienced or not, they relied on serendipity, linking, and other tasks that were not cognitively overbearing. When searching became too difficult, they abandoned the Internet as an information source.

Could it be that naïve users are that way because of spatial ability barriers?

KEYWORD: spatial ability

- [SM83] Gerard Salton and Michael J. McGill, 1983. *Introduction to Modern Information Retrieval*. McGraw-Hill Book Company. ISBN 0-07-054484-0.

CALLNO: SLIS/Elborne College 51350 983 01 (Z699.S313)

- [SM93] Louise L. Soe and M. Lynne Markus, 1993. Technological or social utility? unraveling explanations of email, vmail and fax use. *The Information Society*, 9:213 – 236.

SEE ALSO: Kinnucan JASIS 43(1) [Kin92]

KEYWORD: CogPsych!LIS 861

- [SM95] Alan F. Smeaton and Patrick J. Morrissey, 1995. Experiments of the automatic construction of hypertext from texts. *The New Review of Hypermedia and Multimedia*.

ANNOTATION: Based on Morrissey's MSc thesis. Break documents into chunks of about the same size, link them based on IR similarity and limit by dynamically computing compactness [BRS92]. Intended as part of a semi-automated link making program.

SEE ALSO: my MSc thesis [Blu94], Botafogo *et al.*'s metrics paper [BRS92]

KEYWORD: Information Retrieval

- [SM05] Priti Shah and Akira Miyake (eds.), 2005. *The Cambridge Handbook of Visuospatial Thinking*. NY, NY: Cambridge University Press. ISBN 0-521-00173-0.

- [Sma93] Frank Smadja, March 1993. Retrieving collocations from text: Xtract. *Computational Linguistics*, 19(1):143 – 177.

KEYWORD: System!Xtract

- [SMte] Frank M. Shipman, III and Catherine C. Marshall, (no date). Formality considered harmful: Experiences, emerging themes, and directions. Technical report, Xerox Palo Alto Research Center. A revised version seems to have been published in Computer Supported Cooperative Work (CSCW), v.8, n.4 (Fall 1999), pp. 333 – 352.

SEE ALSO: CSCW paper [URL:http://bush.cs.tamu.edu/~shipman/](http://bush.cs.tamu.edu/~shipman/) and what might be the original in HTML [URL:http://bush.cs.tamu.edu/~shipman/formality-paper/harmful.html](http://bush.cs.tamu.edu/~shipman/formality-paper/harmful.html)

KEYWORD: HT!Spatial hypertext

- [Smi93] Janan Al-Awar Smither, 1993. Short term memory demands in processing synthetic speech by old and young adults. *Behaviour & Information Technology*, 12(6):330 – 335. ISSN 0144-929X.

KEYWORD: CogPsych!LIS 861

- [Smi96] Pauline A. Smith, 1996. Towards a practical measure of hypertext usability. *Interacting with Computers*, 8(4):365 – 381. URL [URL:http://dx.doi.org/10.1016/S0953-5438\(97\)83779-4](http://dx.doi.org/10.1016/S0953-5438(97)83779-4).

ANNOTATION: An interesting formalization of methods for evaluating hypertext usability for information seeking in node/chunk-link hypertext. Measures for the effectiveness, lostness, and confidence. Criticism of the user of 'error' concept in link following. Measures based on paths created by readers' link following.

SEE ALSO:

- Nielsen & Levy in CACM 37(4) on preference vs. performance [NL94]
- Blackmon et al. in CHI'05 [BKP05b]

- A hypertext model based on Huffman coding (by Coulston and Vitolo) in HT'01 [CV01]
- Lost in hyperspace by Otter & Johnson in *Interacting with Computers* [OJ00]
- Ahuja and Webster (2001) [AW01] in *Interacting with Computers*
- Gwizdka and Spence (2007) [GS07] in *Interacting with Computers*

KEYWORD: Metric • Evaluation • information seeking • Navigation!Lostness

[Smi08] Gene Smith, 2008. *Tagging: People-Powered Metadata for the Social Web*. Berkeley, CA: New Riders. ISBN 978-0-321-52917-6.

[SML99] Frank M. Shipman, Catherine C. Marshall, and Mark LeMere, February 1999. Beyond location: hypertext workspaces and non-linear views. In Tochtermann et al. [TWWL99], (pp. 121 – 130). URL [URL: http://doi.acm.org/10.1145/294469.294498](http://doi.acm.org/10.1145/294469.294498).

KEYWORD: HT!Spatial hypertext

[SN90] Abigail Sellen and Anne Nicol, 1990. Building user-centered on-line help. In Brenda Laurel (ed.), *The Art of Human-Computer Interface Design*, (pp. 143 – 153). Addison-Wesley Publishing Company, Inc.

[SP93] Henry K. Simpson and James W. Pellegrino, 1993. Descriptive models in learning command languages. *Journal of Educational Psychology*, 85(3):539 – 550.

KEYWORD: CogPsych!LIS 861

[SP05] Ben Shneiderman and Catherine Plaisant, 2005. *Designing the User Interface: Strategies for Effective Human-Computer Interaction*. Addison-Wesley, fourth edition. ISBN 978-0-321-19786-3.

KEYWORD: HCI!Intro!textbook • HCI!CS3160 (UID) • HCI!CS4163 • CS3160 (UID)

[Spa72] Karen Sparck Jones, March 1972. A statistical interpretation of term specificity and its application in retrieval. *The Journal of Documentation*, 28(1):11 – 21.

ANNOTATION: Apparently the first attempt at weighting terms by anything but term frequency

KEYWORD: Information Retrieval!weighting • Classic

[Spa81] Karen Sparck Jones (ed.), 1981. *Information Retrieval Experiment*. Butterworth & Co. ISBN 0-408-10648-4.

ANNOTATION: Papers about testing IR systems

SEE ALSO: J. Tague-Sutcliffe published a revised version of her 'Information Retrieval Pragmatics' paper in 1993 [TS92]

[Spe99] Robert Spence, 1999. A framework for navigation. *International Journal of Human-Computer Studies*, 51(5):919 – 945. URL [URL: http://dx.doi.org/10.1006/ijhc.1999.0265](http://dx.doi.org/10.1006/ijhc.1999.0265).

ANNOTATION: navigation=learning a space, searching=using a space

SEE ALSO: Browsing chapter in ARIST [CR93], Look out for Paul Maglio stuff too

KEYWORD: Navigation • mental/cognitive model • HCI!interface • HCI!CS6606

[Spe01] Robert Spence, 2001. *Information Visualization*. ACM Press. ISBN 0-201-59626-1.

[Spe03] Robert Spence, 2003. Information space navigation: A framework. In Höök et al. [HBM03], chapter 17, (pp. 405 – 426, 427 – 450).

[SPG98] Bill N. Schilit, Morgan N. Price, and Gene Golovchinsky, 23 – 26 June 1998. Digital library information appliances. In Witten et al. [WAS98].

KEYWORD: System!XLibris • annotation

[SPW00] Dirk Schlender, Olaf H. Peters, and Magnus Wienhöfer, December 2000. The effects of maps and textual information on navigation in a desktop virtual environment. *Spatial Cognition and Computation*, 2(4):421 – 433. URL [URL <http://dx.doi.org/10.1023/A:1015544021492>](http://dx.doi.org/10.1023/A:1015544021492).

KEYWORD: spatial ability

[SR04] Ruth Bolotin Schwartz and Michele C. Russo, February 2004. How to quickly find articles in the top IS journals. *Communications of the ACM*, 47:98 – 101.

[SRA90] N. Streitz, A. Rizk, and J. André (eds.), November 1990. *Hypertext: Concepts, Systems and Applications*, The Cambridge Series on Electronic Publishing. INRIA, France, Cambridge University Press. Proceedings of the First European Conference on Hypertext.

[SRD06] David A. Siegel, Bill Reid, and Susan M. Dray, May + June 2006. IT security: protecting organizations in spite of themselves. *interactions*, 13(3):20 – 27. URL [URL <http://doi.acm.org/10.1145/1125864.1125885>](http://doi.acm.org/10.1145/1125864.1125885).

[SRDS00] Alistair Sutcliffe, Michele Ryan, Ann Doubleday, and Mark Springnett, 2000. Model mismatch analysis: towards a deeper explanation of users' usability problems. *Behaviour & Information Technology*, 19(1):43 – 55.

[SRSO10] P. Schmutz, S.P. Roth, M. Seckler, and K. Opwis, July 2010. Designing product listing pages—effects on sales and users' cognitive workload. *International Journal of Human-Computer Studies*, 68(7):423 – 431. URL [URL <http://dx.doi.org/10.1016/j.ijhcs.2010.02.001>](http://dx.doi.org/10.1016/j.ijhcs.2010.02.001).

[SS91] John B. Smith and F. Donelson Smith, 15 – 18 December 1991. ABC: A hypermedia system for artifact-based collaboration. In *Hypertext '91 Proceedings* [ACM91].

KEYWORD: collaboration!(group) • System • groupware

[SS95] K. M. Stanney and G. Salvendy, 1995. Information visualization: Assisting low spatial individuals with information access tasks through the use of visual mediators. *Ergonomics*, 38(6):1184–1198. ISSN 0014-0139.

[SS01] Jared Spool and Will Schroeder, 2001. Testing web sites: Five users is nowhere near enough. In *Proceedings of the SIGCHI Conference on Human factors in Computing Systems*. URL [URL \(http://doi.acm.org/10.1145/634067.634236\)](http://doi.acm.org/10.1145/634067.634236).

SEE ALSO: Nielsen's Estimating the number of Ss ... [Nie94]

KEYWORD: heuristic

[SS04] Bill N. Schillit and Uttam Sengupta, December 2004. Device ensembles. *IEEE Computer*, 37:56 – 64.

[SSBM96] Gerald Salton, Amit Singhal, Chris Buckley, and Mandar Mitra, 16 – 20 March 1996. Automatic text decomposition using text segments and text themes. In *Hypertext '96 The Seventh ACM Conference on Hypertext* [ACM96], (pp. 53 – 65). The first author was misidentified in the proceedings as Gerard Salton.

KEYWORD: System!SMART

[ST09] Kristen Shinohara and Josh Tenenber, 2009. A blind person's interactions with technology. *Communications of the ACM*, 52(8):58 – 66. URL [URL \(http://doi.acm.org/10.1145/1536616.1536636\)](http://doi.acm.org/10.1145/1536616.1536636).

KEYWORD: Navigation • HCI!cultural factors!blind users

[Sta90] David A. Statt, 1990. *The Concise Dictionary of Psychology*. New York, London: Routledge.

CALLNO: BF31.S62 1990

[Sta99] Mark S Staveley, 18 February 1999. Hypertext linking. E-mail message.

[Sta02] Michael Stahl, October 2002. Web services: Beyond component-based computing. *Communications of the ACM*, 45:71 – 76.

KEYWORD: CS4173 (WWW) • web services

[STB98] Michail Salampasis, John Tait, and Chris Bloor, 1998. Evaluation of information-seeking performance in hypermedia digital libraries. *Interacting with Computers*, 10(3). ISSN 0-53-5438.

ANNOTATION: selecting related docs from a collection

SEE ALSO:

- Similar work and major citations:
 - Botafogo's measures [BRS92],
 - Jean's book [TS95],
 - Browsing chapter in ARIST 1993 [CR93]
 - Bernard's PhD thesis [Ber02]
- Related work
 - Nick Belkin's ASK model (from 1980?)
 - McE [McE99; McE00]

KEYWORD: Information Retrieval • Information Retrieval!evaluation •
Browsing, Evaluation!Information Retrieval • information seeking

- [Ste95] Constantine Stephanidis (ed.), 30 – 31 October 1995. *Proceedings of the 1st ERCIM Workshop on 'User Interfaces for All'*. Heraklion, Crete, Greece. URL [URL: http://ui4all.ics.forth.gr/UI4ALL-95/proceedings.html](http://ui4all.ics.forth.gr/UI4ALL-95/proceedings.html). Downloaded 18 March 2001.

- [Str09] Kath Straub, February/March 2009. Kindle2: Crack for readers... until you start reading. Human Factors International User Interface Design Newsletter. URL [URL: http://www.humanfactors.com/downloads/FebMar09nNewsletter.pdf](http://www.humanfactors.com/downloads/FebMar09nNewsletter.pdf).

KEYWORD: Reading

- [STSM95] Airi Salminen, Jean Tague-Sutcliffe, and Charles McClellan, January 1995. From text to hypertext by indexing. *ACM Transactions on Information Systems*, 13(1):69 – 99.

- [Sut96] Norman Stuart Sutherland, 1996. *The International Dictionary of Psychology*. The Crossroad Publishing Company, 2nd edition. ISBN 0-8245-2509-4. Copyright 1995 The Macmillan Press Ltd.

- [Sut97] Alistair Sutcliffe, 1997. Task-related information analysis. *International Journal of Human-Computer Studies*, 47:223 – 257.

KEYWORD: Testing

- [SW88] John B. Smith and Stephen F. Weiss, July 1988. Hypertext. *Communications of the ACM*, 31(7):816 – 819.

SEE ALSO: CACM:Jul88

- [SW90] Jean Scholtz and Susan Wiedenbeck, 1990. Learning second and subsequent programming languages: A problem of transfer. *International Journal of Human-Computer Interaction*, 2(1):51 – 71.

KEYWORD: Expertise

- [SW93a] Jean Scholtz and Susan Wiedenbeck, 3 – 5 December 1993. An analysis of novice programmers learning a second language. In Curtis R. Cook, Jean C. Scholtz, and James C. Spohrer (eds.), *Empirical Studies of Programmers: Fifth Workshop*, (pp. 187 – 205). Palo Alto, CA, USA: Ablex Publishing Corporation. ISBN 1-56750-088-9(cl.) / 1-56750-089-7(ppb.).

CALLNO: QA76.6.W688 1993

SEE ALSO: IJHCCI 2(1):51 – 71 (1990)[SW90]

- [SW93b] John Simpson and Edmund Weiner (eds.), 1993. *Oxford English Dictionary Additions Series*, volume 2. Clarendon Press.

ANNOTATION: Definition of *hypertext* on pages 152 – 3: ‘Text which does not form a single sequence and which may be read in various orders; specially text and graphics ... which are interconnected in such a way that a reader of the material (as displayed at a computer terminal, etc.) can discontinue

reading one document at certain points in order to consult other related matter.’

SEE ALSO: Oxford Computing Dictionary [Ill91] and Toyanne Lauritson’s thesis [Lau90]

KEYWORD: Definition

- [SW04] Tina Sutton and Bride M. Whelan, 2004. *The Complete Color Harmony: Expert Color Information for Professional Color Results*. Rockport Publishers. ISBN 1-592-53031-1.

KEYWORD: colour

- [Swe80] John A. Swets, 1980. Effectiveness of information retrieval methods. In Belver C. Griffith (ed.), *Key Papers in Information Science*, (pp. 349 – 367). White Plains, New York: Knowledge Industry Publications, Inc.

KEYWORD: Information Retrieval • Evaluation

- [SWF00] Victoria Squire, Hans Peter Willberg, and Friedrich Forssman, 2000. *Getting it Right with Type: The dos and don’ts of typography*. London (UK): Laurence King Publishing Ltd. ISBN 978-1-85669-474-2.

KEYWORD: KDesign!typography

- [Sys] Eastgate Systems. Hypertext resources compendia. URL [URL: http://www.eastgate.com/hypertext/Compendia.html](http://www.eastgate.com/hypertext/Compendia.html). A list of links and descriptions of WWW sites related to hypertext.

- [Sys02] Amber Ankerholz (ed.), August 2002. Special issue. *SysAdmin*, 11(8).

- [Sys03] Amber Ankerholz (ed.), March 2003. Special issue. *SysAdmin*, 12(3).

- [SYY74] G. Salton, C. S. Yang, and C. T. Yu, July 1974. A theory of term importance in automatic text analysis. TR 74-208, Department of Computer Science, Cornell University.

SEE ALSO: Salton’s 1989 book [Sal89]

KEYWORD: Classic

- [SZG⁺96] Doug Schaffer, Zhengping Zuo, Saul Greenberg, Lyn Bartram, John Dill, Shelli Dubs, and Mark Roseman, June 1996. Navigating hierarchically clustered networks through fisheye and full-zoom methods. *ACM Transactions on Computer-Human Interaction*, 3(2):162 – 188.

ANNOTATION: Abstract: ‘Many information structures are represented as two-dimensional networks (connected graphs) of links and nodes. Because these network tend to be large and quite complex, people often prefer to view part or all of the network at varying levels of detail. Hierarchical clustering provides a framework for viewing the network at different levels of detail by superimposing a hierarchy on it. Nodes are grouped into clusters, and clusters are themselves place into other clusters. Users can then navigate these clusters until an appropriate level of detail is reached. This article describes an experiment comparing two methods for viewing hierarchically clustered

networks. Traditional full-zoom techniques provide details of only the current level of the hierarchy.

In contrast, fisheye views, generated by the “variable-zoom” algorithm described in this article, provide information about higher levels as well. Subjects using both viewing methods were given problem-solving tasks requiring them to navigate a network, in this case, a simulated telephone system, and to reroute links in it. Results suggest that the greater context provided by fisheye views significantly improved user performance. Users were quicker to complete their task and made fewer unnecessary navigational steps through the hierarchy. This validation of fisheye views is important for designers of interfaces to complicated monitoring systems, such as control rooms for supervisory control and data acquisition systems, where efficient human performance is often critical. However, control room operators remained concerned about the size and visibility tradeoffs between the fine detail provided by full-zoom techniques and the global context supplied by fisheye views. Specific interface features are required to reconcile the differences.’

SEE ALSO: TCHI 1994 Review [LA94]

KEYWORD: Fisheye view

- [TA04] Rishi Toshniwal and Dharma P. Agrawal, May 2004. Tracing the roots of markup languages. *Communications of the ACM*, 47:95 – 98.

SEE ALSO: Letter to the editor [Moo04]

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CALLNO: TK5105.5.T36 1988

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CALLNO: AS42.L8 T24333 1989

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ANNOTATION:

- p. 327 Newcombe (1985) & Kulhavy et al. (1996)
-

KEYWORD: spatial ability •

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ANNOTATION: Introduction to section of special issue [Byt88]

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KEYWORD: CS4173 (WWW) • web services
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KEYWORD: System!OEDP
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SEE ALSO: Generalized Fisheye Views by Furnas [Fur86] and Schaffer et al. (TCHI 1996) for some validity testing [SZG⁺96]
KEYWORD: Fisheye view
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- [TH87] David W. Tank and John J. Hopfield, December 1987. Collective computation in neuronlike circuits. *Scientific American*, (pp. 104 – 114).
KEYWORD: Neural net
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KEYWORD: System!SEPIA
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KEYWORD: Project!Pastime • Authoring/Conversion

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KEYWORD: colour

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- [Tom96a] Elaine Toms, 29 May 1996. GSLIS colloquium: Facilitating the browsing of electronic text. Toms was then a Ph.D. student at the University of Western Ontario. She presented aspects of her doctoral thesis proposal.
- [Tom96b] Elaine Toms, 30 May 1996. Personal communication. Toms was a Ph.D. student in the Graduate School of Library and Information Science at the University of Western Ontario and a Professor in the School of Library and Information Studies at Dalhousie University. Her research is largely about user interface issues in hypertext-like computerized information systems.
- [Tom97] Elaine G. Toms, 1997. *Browsing digital information: examining the 'affordances' in the interaction of user and text*. Ph.D. thesis, University of Western Ontario, London, Ontario, Canada.

SEE ALSO: IJHCS 2K article [Tom00]

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SEE ALSO: Browsing in ARIST 28 [CR93]

KEYWORD: Testing • Evaluation

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KEYWORD: spatial ability •

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KEYWORD: HCI!cultural factors!blind users

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SEE ALSO: Dillon's 1992 survey of reading from computer screens [Dil92] and Travis's book [Tra91]

- [Tra91] David Travis, 1991. *Effective Color Displays*. Computer and People. Academic Press. ISBN 0-12-697690-2.

KEYWORD: colour • HCI!CS6606

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- [Tru98] Jean Trumbo, July – August 1998. Spatial memory and design: A conceptual approach to the creation of navigable space in multimedia design. *interactions*, V(4):26 – 34. URL [URL <http://doi.acm.org/10.1145/278465.278470>](http://doi.acm.org/10.1145/278465.278470).
 ANNOTATION: recall requires that recognized elements be moved to LTM, memory & attention, new media leads to new forms of literacy
 KEYWORD: spatial ability • CogPsych
- [TS92] Jean Tague-Sutcliffe, July – August 1992. The pragmatics of information retrieval experimentation, revisited. *Information Processing & Management*, 28(4):467 – 490.
 KEYWORD: Information Retrieval • Evaluation • Classic
- [TS95] Jean Tague-Sutcliffe, 1995. *Measuring Information: An Information Services Perspective*. Library and Information Science Series. Academic Press. ISBN 0-12682660-9.
- [TSB94] Jean Tague-Sutcliffe and James Blustein, November 1994. A statistical analysis of the TREC-3 data. In *Text Retrieval Conference*, (pp. 385 – 398). Gaithersburg, MD, USA: National Institute of Standards and Technology.
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- [TSFA07] Hironobu Takagi, Shin Saito, Kentarou Fukuda, and Chieko Asakawa, September 2007. Analysis of navigability of web applications for improving blind usability. *ACM Transactions on Computer-Human Interaction*, 14(3). URL [URL <http://doi.acm.org/10.1145/1279703>](http://doi.acm.org/10.1145/1279703).
 ANNOTATION:
 • study of blind users Web surfing with voice browsers
 • found no overall time difference for enhanced pages *but* more time using content and less using navigation/scanning for content (pp. 26–27)
 • proposal of landmark-oriented navigation model
 – landmark model is to find main content (avoiding top of webpage and navigation menus) before really engaging the content
 – landmarks defined as ‘fragments with strong information scent’ (p.31)
 • found that users rely on ‘scanning navigation’ rather than ‘logical navigation’
 • application of Cognitive Walkthrough For the WWW

- application of Information Scent
- application of Nonvisual Visualization Method

KEYWORD: Navigation • information scent • Evaluation!Cognitive walk-through • HCI!cultural factors!blind users

- [Tul81] Thomas S. Tullis, 1981. An evaluation of alphanumeric, graphics, and color information displays. *Human Factors*, 23(5):541 – 550.

KEYWORD: HCI!CS6606 • Evaluation • interface • HCI!colour

- [Tul97] Thomas S. Tullis, 1997. Screen design. In Helander et al. [HLP97], chapter 18, (pp. 377 – 411).

CALLNo: QA 76.9 H85 H36 1997

ANNOTATION: refs to speed up of telephone line fault detection by experts using non-intuitive interface (I use these words to help me find the reference). Also ‘illustrations of popular graphical techniques for representing numerical data and some notes on their popular usage’ that Laura Leventhal hands out.

SEE ALSO: Selected chapters: [May97; Vor97; WW97; Tul97]

KEYWORD: HCI!CS6606 • evaluation • interface

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- [Tur02] Carl W. Turner, September 2002. The online experience and consumers; perceptions of e-commerce security. In *Proceedings of the Human Factors and Ergonomics Society 46th Annual Meeting*. Copy from author (e-mail <carl.turner.hxyf@statefarm.com>).

- [Tur03] Carl W. Turner, 6 April 2003. How do consumers form their judgements of the security of e-commerce web sites? In *Workshop on HCI and Security Systems at CHI 2003*. Fort Lauderdale, FL. Copy from author (e-mail <carl.turner.hxyf@statefarm.com>).

- [Tur08] Phil Turner, 2008. Towards an account of intuitiveness. *Behaviour & Information Technology*, 27(6):475 – 482. URL <URL:http://www.informaworld.com/10.1080/01449290701292330>.

SEE ALSO: [KB89], [Ras94]

KEYWORD: HCI!Intro!Intuitive

- [Tve03a] Barbara Tversky, 2003. Spatial cognition, psychology of. In Nadel [Nad03], (pp. 120 – 125). In four volumes.

KEYWORD: spatial ability • CogPsych

- [Tve03b] Barbara Tversky, January 2003. Structures of mental spaces: How people think about space. *Environment and Behavior*, 35(1):66 – 80. URL <URL:http://dx.doi.org/10.1177/0013916502238865>.

KEYWORD: spatial ability •

- [Tve05] Barbara Tversky, 2005. Visuospatial reasoning. In Holyoak and Morrison [HM05], chapter 10, (pp. 209 – 240).

SEE ALSO: Holyoak on Analogy in the same volume [Hol05b, §Knowledge Representation on pp. 121–122]

KEYWORD: spatial ability • CogPsych

- [TW86] Randall H. Trigg and Mark Weisner, January 1986. TEXTNET: A network-based approach to text handling. *ACM Transactions on Office Information Systems*, 4(1):1 – 23.

CALLNo: HF 5548.125.A25

ANNOTATION:

- Abstract: ‘Textnet is a new system for structuring text. The TN approach approach uses 1 uniform data structure to capture graphlike pools of text, as well as embedded hierarchical structures. By using a semantic network formalism of nodes connected by typed links, the relationships between neighbouring pieces of text are made explicit. Also described is our partical implementation of the TN approach, which makes use of an OO window/menu-driven interface. Users peruse the network by moving among objects menus or by reading text along a path through the network. In addition, critiquing, reader linking, searching and jumping are easily accessible operations. Finally, the results of a short trial with users are presented.’
- Designed for pools of e-text

KEYWORD: System • link types!taxonomy of • System!TEXTNET • Classic

- [TW92] Michael Thompson and Nina Wishbow, 3 – 11 October 1992. Prototyping: tools and techniques: improving software and documentation quality through rapid prototyping. In *Proceedings of the 10th annual international conference on Systems documentation*, (pp. 191 – 199). Ottawa, Canada. URL [URL:http://www.acm.org/pubs/citations/proceedings/doc/147001/p191-thompson/](http://www.acm.org/pubs/citations/proceedings/doc/147001/p191-thompson/).

KEYWORD: HCI!prototyping!paper prototypes

- [TWWL99] Klaus Tochtermann, Jörg Westbomke, Uffe K. Wiil, and John J. Leggett (eds.), February 1999. *Hypertext '99 Returning to Our Diverse Roots The 10th ACM Conference on Hypertext and Hypermedia*. Darmstadt, Germany: ACM Press.

- [UDI⁺94] Rena Upitis, Richard Dearden, Kori Inkpen, Maria Klawe Joan Lawry, Kelly Davidson, David Hsu, Nicholas Thorne, Kamran Sedighian, Rob Sharein, and Ann Anderson, 1994. Weird-a-gons and other folded objects: The influence of computer animation, paper models, and cooperative mediation on spatial understanding. Technical Report TR-94-30, University of British Columbia. URL [URL:https://www.cs.ubc.ca/nest/egems/reports/3dpaper.ps](https://www.cs.ubc.ca/nest/egems/reports/3dpaper.ps).

- [Use] Eye for design, 800 Turnpike St., Ste. 101, North Andover, MA 01845, USA: User Interface Engineering, Inc. ISSN 1095-2594. URL [URL: http://world.std.com/%7Euieweb/moreart.htm](http://world.std.com/%7Euieweb/moreart.htm).
- [Use96] 1996. Using paper prototypes to manage risk. URL [URL: http://world.std.com/~uieweb/paper.htm](http://world.std.com/~uieweb/paper.htm). Note in webpage ‘This article originally appeared in Software Design and Publisher Magazine in October 1996.’
- SEE ALSO:
- Paper Prototypes: Still Our Favorite [Sca98]
 - Five Paper Prototyping Tips [Kle00]
- KEYWORD: HCI!prototyping!paper prototypes
- [Use01] February 2001. Special issue. *Web Techniques [Web]*, 6(2).
- [van92] Mary-Claire van Leunen, 1992. *A Handbook for Scholars*. Oxford University Press, revised edition. ISBN 0-19-506953-5 (cloth) / 0-19-506954-4 (paper).
- KEYWORD: Basic skills for grad students
- [vBK91] Gerrit C. van der Veer, Sebastiano Bagnara, and Gerard A. M. Kempen (eds.), 1991. *Cognitive Ergonomics: Contributions from Experimental Psychology*. European Association of Cognitive Ergonomics. ISSN 001-6918. Selected papers published in revised form in *Acta Psychologica* volume 78.
- SEE ALSO: Citation for book version [vBK92]
- [vBK92] Gerrit C. van der Veer, Sebastiano Bagnara, and Gerard A. M. Kempen (eds.), 1992. *Cognitive Ergonomics: Contributions from Experimental Psychology*. 14. North-Holland, Elsevier Science Publishers. ISBN 0-444-89504-3, 337 pp. Based on papers presented at the Fifth European Conference on Cognitive Ergonomics, Urbino, Italy, September, 1991. Reprinted in the journal, *Acta Psychologica*, Volume 78, Numbers 1-3.
- CALLNo: QA 76.9 H85C643 1992
- ANNOTATION: Record from HCIBIB [URL: http://hcibib.org/gs.cgi?terms=E.vanderVeer.92&file=book](http://hcibib.org/gs.cgi?terms=E.vanderVeer.92&file=book)
- SEE ALSO: Citation for journal version [vBK91]
- [VC94] Adrian J Vanzyl and Branko Cesnik, 1994. Open hypertext systems: An examination of requirements, and analysis of implementation strategies, comparing Microcosm, HyperTED and the World Wide Web. URL [URL: http://www.inf-wiss.uni-konstanz.de/Res/openhypermedia.html](http://www.inf-wiss.uni-konstanz.de/Res/openhypermedia.html). Copyright by the Association for Computing Machinery.
- [VD88] Andries Van Dam, July 1988. Hypertext ’87 keynote address. *Communications of the ACM*, 31(7):887 – 894.
- [VD06] Misha W. Vaughan and Andrew Dillon, June 2006. Why structure and genre matter for users of digital information: A longitudinal experiment with readers of a web-based newspaper. *International Journal of Human-Computer Studies*, 64(6):502 – 526. URL [URL: http://dx.doi.org/10.1016/j.ijhcs.2005.11.002](http://dx.doi.org/10.1016/j.ijhcs.2005.11.002).

- [VHSP00] Kim-Phuong L. Vu, Gerard L. Hanley, Thomas Z. Strybel, and Robert W. Proctor, 2000. Metacognitive processes in human-computer interaction: Self-assessments of knowledge as predictors of computer expertise. *International Journal Of Human-Computer Interaction*, 12(1):43 – 71.

ANNOTATION: Abstract:

Metacognition, a person's knowledge of her or his own cognitive processes, is a concept that can be applied to many areas of human-computer interaction. This article reviews the state of contemporary knowledge regarding metacognition and describes implications for the domain of human-computer interaction. A conceptual framework is presented that distinguishes monitoring and regulation processes of metacognition. One aspect of metacognition, self-evaluation of knowledge, was investigated for a word processing application as an illustration. An experiment was conducted to evaluate which of four methods of self-assessment of expertise was the best predictor of declarative knowledge (accuracy and completeness of descriptions on how to perform a task). In addition, the experiment examined whether classifying users based on self-reported estimates of expertise would produce differences in their declarative descriptions. Results showed that individuals' ratings of their overall knowledge were better predictors than were estimations of frequency of use, as would be expected from the literature on metacognitive monitoring. In addition, classifying users based on their self-ratings of expertise showed differences in accuracy of declarative knowledge and strategy chosen to perform a task. Experts were more accurate in their descriptions of how to complete a task compared to novices and used more complex strategies to complete hard tasks.

Link to record in EBSCO database [URL:http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=3322925&site=ehost-live](http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=3322925&site=ehost-live)

KEYWORD: Expertise

- [Vid90] Jean-Luc Vidick (ed.), 5 – 7 September 1990. *SIGIR '90 13th International Conference On Research and Development in Information Retrieval*. SIGIR, The Association for Computing Machinery.

CALLNo: Z699.A1.I 56 1990

- [VKAA07] Markel Vigo, Alfred Kobsa, Myriam Arrue, and Julio Abascal, 2007. User-tailored web accessibility evaluations. In *HT'07: Proceedings of the 18th conference on Hypertext and hypermedia* [ACM07], (pp. 95 – 104). General Chair-Simon Harper and Program Chairs Helen Ashman, Mark Bernstein, Alexandra Cristea, Hugh C. Davis, Paul De Bra, Vicki Hanson, and Dave Millard.

ANNOTATION: machine-readable rules (CC/PP), provides info to user agent to alter webpage. Figure 8 and accompanying text shows model.

- [vKC94] Paul J. A. van Vliet, Marilyn G. Kletke, and Goutam Chakraborty, May 1994. The measurement of computer literacy: A comparison of self-appraisal and objective tests. *International Journal of Human-Computer Studies*, 40(5):835 – 857. URL [URL: http://dx.doi.org/10.1006/ijhc.1994.1040](http://dx.doi.org/10.1006/ijhc.1994.1040).

KEYWORD: Expertise

- [vM03] Willen-Jan van den Heuvel and Zakaria Maamar, October 2003. Moving toward a framework to compose intelligent web services. *Communications of the ACM*, 46:103 – 109.

KEYWORD: CS4173 (WWW) • web services

- [vMU06] Charlotte van Hooijdonk, Alfons Maes, and Nicole Ummelen, 2006. ‘I have been here before’: An investigation into spatial verbalizations in hypertext navigation. *Information Design Journal*, 14(1):8 – 21.

ANNOTATION: Results of a talk-aloud study of navigating through two websites to find answers to questions. Similar tasks to [BAI05]. Experts vs. non-experts for WWW surfing, but evaluation method not described. Good background section.

- ‘Space is one of the most powerful tools for humans to conceptualize abstract thought (e.g. Gibbs, 2005; Lakoff & Johnson, 1980)’ [p. 9] *justification for interest*
- ‘Boechler (2001) makes clear that space in hypertext can never be conceived of in purely literal or “Euclidean” terms... But in her survey, Boechler makes clear that we have hardly any evidence on the working of spatial notions and metaphorical extensions in the minds of computer users.’ [p. 9] (See notes about Boechler (2001) [Boe01])
- ‘After exploring the website, participants were asked to draw the website’s information structure. The analysis of these drawings indicated that the participants did not draw the spatial information structure of the websites, but they drew conceptual relations between the information items instead. Therefore, Farris et al. (2002) concluded that the users’ representation of hypertext is non-spatial’ [p. 10]
- Breakdown of levels (contrast with Dillon’s TIME, Blustein’s reasons for reading, and Browsing chapter in ARIST): ‘Hypertext users can be said to be mentally engaged in surface (i.e., executing physical/motional, perceptual actions), propositional (e.g. understanding the content and structure of hypertext) and mental/situational (e.g. planning and monitoring) actions’ [p. 12] This partition into three categories is not intended as a description of users’ mental state but can still be used as a classification scheme. [p. 13 (paraphrase)]
- All stats (except inter-rater reliability) used χ^2 tests
- Results: ‘users predominantly used spatial expressions to conceptualize executions and low-level syntactic actions’ although more experienced users used spatial descriptions more. [p. 18]

- ‘Thinking aloud users have to conceptualize their thoughts immediately on the fly, which may incite them to verbalize the here and now of each and every screen, instead of stepping back and talk [sic] about global structure or task progress.’ [p. 18]
- ‘This explorative analysis showed that users indeed use spatial expressions to talk about their task, and this is the outcome of the thinking aloud method.’ [p. 19]
- S. Buckingham Shum is referred to as B. Shum in the article proper and references list.
- Reference to Magilio and Matlock is squeezed into space after Maes et al. instead of starting new line.

SEE ALSO: Maglio & Matlock’s Metaphors We Surf The Web By [MM98]

KEYWORD: spatial ability • HCI!CS6606!perhaps

[vOdM96] Herre van Oostendorp and Sjaak de Mul (eds.), 1996. *Cognitive Aspects of Electronic Text Processing*, volume LVIII of *Advances in Discourse Processes*. 355 Chestnut Street, Norwood, New Jersey, 07648, USA: Ablex Publishing Corporation. ISBN 1-56750-235-0 (cloth) / 1-56750-236-9 (paper).

[Vog02] Reinhard Voglmaier, February 2002. Web publishing with Perl objects. *SysAdmin*, 11(2):8, 10, 12, 14 – 15.

[vOJ07] Herre van Oostendorp and Ion Juvina, October 2007. Using a cognitive model to generate web navigation support. *International Journal of Human-Computer Studies*, 65(10):887 – 897. URL <http://dx.doi.org/10.1016/j.ijhcs.2007.06.004>.

SEE ALSO: Juvina’ PhD thesis [Juv06]

KEYWORD: HCI!CS6606 • Navigation!Lostness • CogPsych • spatial ability • HT!System!WWW

[Voo85] Ellen M. Voorhees, 5 – 7 June 1985. The cluster hypothesis revisited. In *SIGIR ’85* [ACM85], (pp. 188 – 196).

KEYWORD: Cluster

[Vor97] Pawan R. Vora, 1997. Hypertext and its implications for the internet. In Helander et al. [HLP97], chapter 38, (pp. 877 – 914).

CALLNO: QA 76.9 H85 H36 1997

SEE ALSO: Selected chapters: [May97; Vor97; WW97; Tul97]

[VP88] James F. Voss and Timothy A. Post, 1988. On the solving of ill-structured problems. In Chi et al. [CGF88], chapter 9, (pp. 261 – 285).

CALLNO: BF 323 E2 N37 1988

ANNOTATION:

SEE ALSO: Other chapters in the same book [GC88; Pos88; Joh88]

KEYWORD: Expertise

- [vR84] C. J. van Rijsbergen (ed.), 2 – 6 July 1984. *Research and Development in Information Retrieval*, British Computer Society Workshop. King's College, Cambridge. ISBN 0 521 26865 6. Proceedings of the third joint BCS and ACM symposium.
- [VRM03] Viswanath Venkatesh, V. Ramesh, and Anne P. Massey, December 2003. Understanding usability in mobile commerce. *Communications of the ACM*, 46:53 – 56.
- [vSL09] Paul van Schaik and Jonathan Ling, January 2009. The role of context in perceptions of the aesthetics of web pages over time. *International Journal of Human-Computer Studies*, 67(1):79 – 89. URL ([URL:http://dx.doi.org/10.1016/j.ijhcs.2008.09.012](http://dx.doi.org/10.1016/j.ijhcs.2008.09.012)).

SEE ALSO: Aesthetics and Usability [BP03] and What makes a website popular [KLRH04]

KEYWORD: HCI!website reputation / value assessment

- [VV87] Brian Vickery and Alina Vickery, 1987. *Information Science in theory and Practice*. Butterworths & Co. ISBN 0-408-10684-0.
- [VW88] Kim J. Vicente and Robert C. Williges, December 1988. Accommodating individual differences in searching a hierarchical file system. *International Journal of Man-Machine Studies*, 29(6):647 – 668.

ANNOTATION: Abstract: 'Individual differences among users of a hierarchical file system were investigated. The results of a previous experiment revealed that subjects with low spatial ability were getting lost in the hierarchical file structure. Based on the concept of visual momentum, two changes to the old interface were proposed in an attempt to accommodate the individual differences in task performance. The changes consisted of a partial map of the hierarchy and an analogue indicator of current file position. This experiment compared the performance of users with high and low spatial abilities on the old verbal interface and the new graphical interface. The graphical interface resulted in changes in command usage that were consistent with the predictions of the visual momentum analysis. Although these changes in strategy resulted in a performance advantage for the graphical interface, the relative performance difference between high and low spatial groups remained constant across interfaces. However, the new interface did result in a decrease in the within-group variability in performance.' (Record from HCIBIB ([URL:http://hcibib.org/gs.cgi?word=checked&terms=J.IJMMS.29.6.647](http://hcibib.org/gs.cgi?word=checked&terms=J.IJMMS.29.6.647)))

SEE ALSO:

- Adapting Systems to Differences between Individuals [JBM91]

KEYWORD: individual differences • menus • spatial ability

- [WA90] M. C. Wittrock and Kathryn Alesandrini, Autumn 1990. Generation of summaries and analogies and analytic and holistic abilities. *American Educational Research Journal*, 27(3):489 – 502.

ANNOTATION: Abstract:

This study investigates predictions from Wittrock's model of generative teaching regarding the effects of reader generation of summaries and analogies upon the learning of a block of 50 paragraphs of text. In this study, 59 students were individually assigned at random to three treatments that were predicted and found to rank in the following high to low order on the reading test: (a) Generate Summaries ($\bar{x} = 29.8$), (b) Generate Analogies ($\bar{x} = 27.2$), and (c) Read Text ($\bar{x} = 22.4$). We also hypothesized and found that the generation of analogies or summaries during reading differentially stimulates learners' analytic and holistic (i.e., imagery) abilities. In the Read Text treatment, only holistic ability correlated with learning the high imagery text. In the Generate Analogies treatment, only analytic ability correlated with learning the text. In the Generate Summaries treatment, both holistic and analytic ability correlated with learning.

KEYWORD: spatial ability

- [WA06] Jane Webster and Jaspreet S. Ahuja, September 2006. Enhancing the design of web navigation systems: The influence of user disorientation on engagement and performance. *MIS Quarterly*, 30(3):661 – 678.

KEYWORD: Navigation

- [Wan92] Joseph Wang, August 1992. ANNOUNCING: tkWWW 0.3 Alpha. Usenet Message-ID (1992Aug30.232318.13727@athena.mit.edu), cross-posted to comp.lang.tcl, alt.hypertext, comp.windows.x and comp.lang.sgml.

- [War04] Colin Ware, 2004. *Information Visualization: Perception for Design*. Elsevier Inc., second edition. ISBN 1-55860-819-2.

KEYWORD: HCI!colour • HCI!CS3160 (UID) • CS3160 (UID)

- [WAS98] Ian H. Witten, Robert M. Akscyn, and Frank M. Shipman, III (eds.), 23 – 26 June 1998. *Proceedings of the Third ACM Conference on Digital Libraries*. Pittsburgh, PA, USA: ACM Press.

- [WD91] Edgar B. Wendlandt and James R. Driscoll, 13 – 16 October 1991. Incorporating a semantic analysis into a document retrieval strategy. In Bookstein et al. [BCSR91], (pp. 270 – 279).

ANNOTATION: An approach based on database concept of semantic modeling (particularly entities and relationships between entities). They assign thematic rôles and entity relationships as document identifiers. Documents are classified by the keyword they contain and retrieval shows the ranked list of clusters. The system automatically converts natural language queries to keywords, e.g. 'how long' → 'duration'.

KEYWORD: Concept Identification • AI

- [Web] Web techniques, 600 Harrison Street, San Francisco, CA, USA: CMP Media Inc. ISSN 1086-556X. URL [URL:http://www.webtechniques.com/](http://www.webtechniques.com/).
- [Wei88] Bella Hass Weinberg, 23 – 27 October 1988. Why indexing fails the researcher. In Borgman and Pai [BP88], (pp. 241 – 244).
- [Wei97] Scott Weiss, 1997. Glossary for information retrieval. URL [URL:http://www.cs.jhu.edu/%7eweiss/glossary.html](http://www.cs.jhu.edu/%7eweiss/glossary.html). 'Last update: 1/21/97'.
- [Wei92] Erwin K. Welsch, Spring 1992. Hypertext, hypermedia, and the humanities. *Library Trends*, 40(4):614 – 646.

ANNOTATION: Abstract: 'HT/HM systems in the humanities have evolved significantly in the last decade and particularly since 1985. The writings of humanist scholars are important in understanding the use of this comparatively new medium for information access and use. HT/HM applications in the humanities show significant promise for the future but may also present libraries with special problems. This article provides historical background on HT/HM; focuses on their use in the humanities; describes humanities projects that illustrate trends and techniques; discusses libraries roles in HT/HM humanities computing; and concludes with a description of challenges and opportunities as librarians implement such systems.'

KEYWORD: HT!General!(Background) • Definition

- [Wes97] S. J. Westerman, 1997. Individual differences in the use of command line and menu computer interfaces. *International Journal of Human-Computer Interaction*, 9(2):183 – 198.

ANNOTATION: Abstract: 'This article presents an experimental investigation of the process of computer-based command generation. The comparative cognitive demands imposed by menu and command line interfaces are examined in relation to individual differences in expertise and cognitive ability. Three-way interactions between associative memory, expertise, and command generation method indicated similarities in the performance of expert participants with low associative memory and that of novices. Spatial memory also interacted with expertise, with novices with low spatial memory performing more poorly than any other group. Implications for interface design are considered.' (Record from HCIBIB [URL:http://hcibib.org/gs.cgi?word=checked&terms=J.IJHCI.9.2.183](http://hcibib.org/gs.cgi?word=checked&terms=J.IJHCI.9.2.183))

SEE ALSO:

- An experimental investigation of interface design alternatives by Benbasat & Todd [BT93]
- The effects of maps and textual information on navigation in a desktop virtual environment by Schlender et al. [SPW00]

KEYWORD: menus • individual differences • spatial ability

- [Wes98] S. J. Westerman, February 1998. A comparison of the cognitive demands of navigating two-versus three-dimensional spatial database layouts. *Ergonomics*, 41(2):207 – 212. ISSN 0014-0139. URL <http://www.ingentaconnect.com/content/tandf/terg/1998/00000041/00000002/art00015>.
- [Wey82] Stephen A. Weyer, 1982. The design of a dynamic book for information search. *International Journal of Man-Machine Studies*, 17:87 – 107.
- [WFD98] Barbara M. Wildemuth, Charles P. Friedman, and Stephen M. Downs, June 1998. Hypertext versus boolean access to biomedical information: A comparison of effectiveness, efficiency, and user preferences. *ACM Transactions on Computer-Human Interaction*, 5(2):156 – 183.
- ANNOTATION: See the background section
- KEYWORD: Evaluation • Testing • Information Retrieval
- [WFSV03] Irving B. Weiner, Donald K. Freedheim, John A. Schinka, and Wayne F. Velicer (eds.), 2003. *Handbook of Psychology*. New York: Wiley. ISBN 0471176699 (12 vol. set: alk. paper) / 0471666750 (12 vol. set: pbk).
- [WH00] Uffe K. Wiil and David L. Hicks, 19 – 21 March 2000. Requirements for development of hypermedia technology for a digital library supporting scholarly work. In *Proceedings of the 2000 ACM Symposium on Applied Computing*, volume 2, (pp. 607 – 609). Como, Italy.
- KEYWORD: HyNIC • System!HyTech • DL
- [Wha90] Peter Whalley, 1990. Models of hypertext structure and learning. In David H. Jonassen and Heinz Mandl (eds.), *Designing Hypermedia for Learning*, NATO Advanced Science Institutes Series, F: Computer and Systems Sciences, Vol. 67, chapter 4. Springer-Verlag.
- [Wha93] Peter Whalley, 1993. An alternative rhetoric for hypertext. In McKnight et al. [MDR93], chapter 2, (pp. 2 – 17). URL <http://telecaster.lboro.ac.uk/HaPP/contents.html>.
- CALLNO: QA76.76.H94 H95 1993
- KEYWORD: CogPsych
- [Wid90] Barbara M. Widemuth, 4 – 8 November 1990. Measures of success in searching a full-text fact base. In Henderson [Hen90], (pp. 104 – 109).
- [Wie87] Earl L. Wiener, 1987. Application of vigilance research: Rare, medium, or well done? *Human Factors*, 29(6):725 – 736.
- KEYWORD: CogPsych!LIS 861
- [Wie91] Eric N. Wiebe, November 1991. A review of dynamic and static visual display techniques. In *Engineering Design Graphics Division of the American Society for Engineering Education, Mid-Year Meeting*.

- [Wii98] Uffe Kock Wiil, January 1998. Open hypermedia: System, interoperability and standards. *Journal of Digital Information (JoDI)*, 1(2). URL [URL: http://jodi.ecs.soton.ac.uk/](http://jodi.ecs.soton.ac.uk/).
- [Wil88] Peter Willett (ed.), 1988. *Document Retrieval Systems*, volume 3 of *The Foundations of Information Science*. Taylor Graham and the Institute of Information Scientists. ISBN 0-947568-21-2.
CALLNo: SLIS/Elborne College 51350 988 00
- [Wil89] Martha E. Williams (ed.), 1989. *Annual Review of Information Science and Technology*, volume 24. Elsevier Science Publishers.
CALLNo: Z699.A1.A65 v.24 1989
- [Wil90a] Martha E. Williams (ed.), 1990. *Annual Review of Information Science and Technology*, volume 25. Elsevier Science Publishers. ISBN 0-444-88531-5.
CALLNo: Z699.A1.A65 v.25 1990
- [Wil90b] Eve Wilson, November 1990. Links and structures in hypertext databases for law. In Streitz et al. [SRA90], (pp. 194 – 211). Proceedings of the First European Conference on Hypertext.
SEE ALSO: Agostini et al.'s Two-level [ACG91]
- [Wil91] Martha E. Williams (ed.), 1991. *Annual Review of Information Science and Technology*, volume 26. Learned Information, Inc.
- [Wil93] Martha E. Williams (ed.), 1993. *Annual Review of Information Science and Technology*, volume 28. Learned Information, Inc. ISBN 0-938734-75-X.
CALLNo: Z699.A1.A65 v.28 1993
- [Wil94a] Ross Wilkinson, 3 – 6 July 1994. Effective retrieval of structured documents. In Croft and van Rijsbergen [Cv94].
CALLNo: QA76.9.D3I552 1994
ANNOTATION: Considers formulas for retrieving relevant parts of documents in response to queries. Not much.
KEYWORD: Categorization
- [Wil94b] Robin Williams, 1994. *The Non-Designer's Design Book: Design and Typographic Principles for the Visual Novice*. 1249 Eight Street, Berkeley, CA, 94710: Peachpit Press. ISBN 1-56609-159-4. Copyright by the author.
KEYWORD: colour • HCI!CS6606 • System!WWW!CS4173 • HCI!CS4163 • CS4173 (WWW)
- [Wil95] Daniel Wildman, July 1995. Getting the most from paired-user testing. *interactions*, (pp. 21 – 27).
KEYWORD: HCI • Testing

[Wil02] Al Williams, April 2002. A cookie by any other name. *New Architect*, 7(4):16 – 17.

ANNOTATION: About session tracking (aka maintaining state) on the WWW and the P3P (platform for privacy preferences) XML-based W3C-supported standard. Compare P3P to PICS-based rules. Also discusses pros and cons of other methods of maintaining state.

KEYWORD: System!WWW • privacy • state • P3P

[Wil08] Robin Williams, 2008. *The Non-Designer's Design Book: Design and Typographic Principles for the Visual Novice*. 1249 Eight Street, Berkeley, CA, 94710: Peachpit Press, third edition. ISBN 978-0-321-5304-0. Copyright by the author.

KEYWORD: colour • HCI!CS6606 • System!WWW!CS4173 • HCI!CS4163 • CS4173 (WWW)

[WJZ01] Hongbin Wang, Todd R. Johnson, and Jiajie Zhang, 2001. The mind' views of space. In *Proceedings of the Third International Conference on Cognitive Science*, (pp. 191 – 198). URL [URL: http://acad88.sahs.uth.tmc.edu/research/publications/iccs2001spatial.pdf](http://acad88.sahs.uth.tmc.edu/research/publications/iccs2001spatial.pdf). Citation information NOT confirmed. URL used.

ANNOTATION:

- (first page) 'It is the purpose of this paper to review some of the relevant findings about spatial information processing in the brain.' called spatial tasks are generally not purely spatial but extensively involve perception, attention, general cognition, and motor components.' (first page) 'A large body of evidence has shown that, regardless of how it is acquired — either through direct explorations or by means of spatial artifacts (e.g., maps, virtual reality, and language description) — psychological space is often distorted, relative, asymmetric, hierarchical, and segmented. How and why this is so remains elusive (for reviews, see McDonald & Pellegrino, 1993; Hunt and Waller, 1999; Tversky, 2000).'

KEYWORD: spatial ability

[WL88] P. Wright and A. Lickorish, 1988. Colour cues as location aids in lengthy texts on screen and paper. *Behaviour and Information Technology*, 7(1):11 – 30.

SEE ALSO: Facilitating navigation in information spaces: Road-signs on the World Wide Web by Campbell and Maglio [CM99]

KEYWORD: HCI!colour

[WL90a] Nicholas Wilde and Clayton Lewis, 1 – 5 April 1990. Spreadsheet-based interactive graphics: from prototype to tool. In Chew and Whiteside [CW90], (pp. 153 – 159).

[WL90b] Patricia Wright and Ann Lickorish, 1990. An empirical comparison of two navigation systems for two hypertexts. In McAleese and Green [MG90], chapter 9, (pp. 84 – 93).

CALLNO: QA76.76.H94.H967 1990

[WM97] A. Wexelblat and P. Maes, 1997. Footprints: History-rich web browsing. In *Proceedings of Conference Computer-Assisted Information Retrieval (RIA0)*, (pp. 75 – 84).

ANNOTATION: Citation from Perkowitz and Etzioni [PE00] — NOT READ
YET

SEE ALSO: Pausch and Detmer's Node Popularity as a Hypertext Browsing
Aid [PD90]

- [WM98] Leon A. Watts and Andrew F. Monk, 1998. Reasoning about tasks, activities and technology to support collaboration. *Ergonomics*, 41(11):1583 – 1606.

KEYWORD: task_analysis

- [Wol92] Catherine G. Wolf, 1992. A comparative study of gestural, keyboard, and mouse interfaces. *Behaviour & Information Technology*, 11(1):13 – 23.

KEYWORD: HCI

- [Wol00] Joanna L. Wolfe, 2000. Effects of annotations on student readers and writers. In *Proceedings of the fifth ACM conference on Digital libraries*, (pp. 19 – 26). New York, NY: ACM Press. ISBN 1-58113-231-X. URL [URL \(http://doi.acm.org/10.1145/336597.336620\)](http://doi.acm.org/10.1145/336597.336620).

KEYWORD: annotation

- [Woo90] Nigel Woodhead, 1990. *Hypertext and Hypermedia Theory and Applications*. Addison-Wesley Publishing Company. ISBN 0-201-54442-3.

- [Wora] World Wide Web Consortium. *HTML 4.0 Specification*, W3C recommendation 18-dec-1997 edition. URL [URL \(http://www.w3.org/TR/REC-html40-971218/html40.ps\)](http://www.w3.org/TR/REC-html40-971218/html40.ps).

- [Worb] The world wide web project. WWW address [URL \(http://info.cern.ch/hypertext/WWW/TheProject.html\)](http://info.cern.ch/hypertext/WWW/TheProject.html).

- [WORK71] H. Witkin, P. Oltman, E. Raskin, and S. Karp, 1971. *A manual for the Embedded Figure Tests*. Palo Alto, CA. Cited by Castelli et al. [CCM98].

- [WP89] Thoma Whalen and Andrew Patrick, 30 April – 4 May 1989. Conversational hypertext: Information access through natural language dialogues with computers. In Bice and Lewis [BL89a], (pp. 289 – 342).

CALLNO: QA76.9.H85C44 1989

ANNOTATION: Abstract: 'One need not create a natural language understanding system in order to create a hypertext dataase that can be traversed with unconstrained natural language. The task is simplified because the computer creates a constrained context, imposes a non-negotiable topic and elicits simple questions...'

KEYWORD: MSc!Justification

- [WP96] Michael J. Wenger and David G. Payne, Spring 1996. Comprehension and retention of nonlinear text: Considerations of working memory and material-appropriate processing. *American Journal of Psychology*, 109(1):93 – 130.

KEYWORD: CogPsych • Reading

[WR83] Yvonne Waern and Carl Rollenhagen, 1983. Reading text from visual display units (VDUs). *International Journal of Man-Machine Studies*, 18:441 – 465.

KEYWORD: Reading

[Wri90] Patricia Wright, 1990. Hypertexts as an interface for learners: Some human factors issues. In David H. Jonassen and Heinz Mandl (eds.), *Designing Hypermedia for Learning*, NATO Advanced Science Institutes Series, F: Computer and Systems Sciences, Vol. 67, chapter 10. Springer-Verlag.

KEYWORD: CogPsych

[Wri91] Patricia Wright, 15 – 18 December 1991. Cognitive overheads and prostheses: Some issues in evaluating hypertexts. In *Hypertext '91 Proceedings* [ACM91], (pp. 1 – 12). URL [URL <URL:http://doi.acm.org/10.1145/122974.122975>](http://doi.acm.org/10.1145/122974.122975).

ANNOTATION: HT'91 opening keynote

SEE ALSO: [Wri93] for more about Black et al.'s experiment with glossaries/dictionaries

KEYWORD: CogPsych • Classic!perhaps?

[Wri93] Patricia Wright, 1993. To jump or not to jump: Strategy selection while reading electronic texts. In McKnight et al. [MDR93], chapter 6. URL [URL <URL:http://telecaster.lboro.ac.uk/HaPP/contents.html>](http://telecaster.lboro.ac.uk/HaPP/contents.html).

CALLNo: QA76.76.H94 H95 1993

KEYWORD: CogPsych • Reading

[WRLP94] Cathleen Wharton, John Rieman, Clayton Lewis, and Peter Polson, 1994. The cognitive walkthrough method: A practitioner's guide. In Jakob Nielsen and Robert L. Mack (eds.), *Usability Inspection Methods*, (pp. 105 – 140, 385 – 400). John Wiley & Sons. ISBN 0-471-01877-5.

CALLNo: QA76.9.U83N55 1994

KEYWORD: HCI • Evaluation!Cognitive walkthrough

[WRM⁺98] Hazel Woodward, Fytton Rowland, Cliff McKnight, Carolyn Pritchett, and Jack Meadows, October 1998. Café jus: an electronic journal user survey. *Journal of Digital Information (JoDI)*, 1(3). URL [URL <URL:http://jodi.ecs.soton.ac.uk/>](http://jodi.ecs.soton.ac.uk/).

[WS90] Carolyn Watters and Michael A. Shepherd, April 1990. A transient hypergraph-based model for data access. *ACM Transactions on Information Systems*, 8(2):77 – 102.

KEYWORD: Browsing • HT!AutoGen

[WS94] Carolyn Watters and Michael A. Shepherd, July – August 1994. Shifting the information paradigm from data-centered to user-centered. *Information Processing & Management*, 30(4):455 – 471.

SEE ALSO: [WSQ94]

KEYWORD: System!DalText

- [WS03] David J. Weiss and James Shanteau, Spring 2003. Empirical assessment of expertise. *Human Factors*, 45(1):104 – 114.
- KEYWORD: Expertise
- [WSQ93] Carolyn Watters, Michael A. Shepherd, and Liwen Qiu, 1993. Task-oriented access to data files: An evaluation. Submitted to the Journal of the American Society for Information Science[WSQ94].
- SEE ALSO: [WSQ94]
- KEYWORD: System!DalText
- [WSQ94] Carolyn Watters, Michael A. Shepherd, and Liwen Qiu, May 1994. Task-oriented access to data files: An evaluation. *Journal of the American Society for Information Science*, 45(4):251 – 262.
- SEE ALSO: [WS94]
- KEYWORD: System!DalText
- [WT06] Robin Williams and John Tollett, 2006. *The Non-Designer's Web Book: An easy guide to creating, designing and posting your own web site*. 1249 Eight Street, Berkeley, CA, 94710: Peachpit Press, third edition. ISBN 978-0-321-30337-0. Copyright by the authors.
- KEYWORD: colour • HCI!CS6606 • System!WWW!CS4173 • HCI!CS4163 • CS4173 (WWW)
- [WW88] M. Wittrock and D. Wiley (eds.), 1988. *The Evaluation of Instruction: Issues and Problems*. Holt, Rinehart and Winston. Cited by Carroll [Car93b].
- [WW97] David D. Woods and Jennifer C. Watts, 1997. How not to have to navigate through too many displays. In Helander et al. [HLP97], chapter 26, (pp. 617 – 650).
- CALLNO: QA 76.9 H85 H36 1997
- SEE ALSO: Selected chapters: [May97; Vor97; WW97; Tul97]
- KEYWORD: Navigation
- [WY92] S. K. M. Wong and Y. Y. Yao, January 1992. An information-theoretic measure of term specificity. *Journal of the American Society for Information Science*, 43(1):54 – 61.
- ANNOTATION: A derivation of Idf
- SEE ALSO: [Sal89]
- [WZW85] S. K. M. Wong, Wojciech Ziarki, and Patrick C. N. Wong, 5 – 7 June 1985. Generalized vector space model in information retrieval. In *SIGIR '85* [ACM85].
- [XC05] Jennifer Xu and Hsinchun Chen, 2005. Criminal network analysis and visualization. *Communications of the ACM*, 48(6):100 – 107. URL <http://doi.acm.org/10.1145/1064830.1064834>.
- KEYWORD: network visualization

- [Yan91] Nicole Yankelovich, 1991. From electronic books to electronic libraries: Revisiting 'reading and writing the electronic book'. In Paul Delany and George P. Landow (eds.), *Hypermedia and Literary Studies*, (pp. 133 – 141). The MIT Press.

CALLNo: PN98.E4 H97 1991

ANNOTATION: Reviewed in Computing Reviews[Par94]

SEE ALSO: Reading and Writing the Electronic Book [YMvD91]

- [Yan03] Jian Yang, October 2003. Web service componentization. *Communications of the ACM*, 46:35 – 40.

KEYWORD: CS4173 (WWW) • web services

- [YHS95] Shoji Yamada, Jung-Kook Hong, and Shigeharu Sugita, December 1995. Development and evaluation of hypermedia for museum education: Validation of metrics. *ACM Transactions on Computer-Human Interaction*, 2(4):284 – 307. See Corrigendum of formula for downward compactness in vol. 3, no. 2, (Sept. 1996) p. 285. (The equation for DC_p should be

$$DC_p = \frac{(n-1)^3}{n(n-1) - \sum_i Dp_i},$$

$$Dp_i = \text{Depth from root to node } i.$$

).

ANNOTATION: strong relationship between enjoyability and usability (§4.3.1, pp. 302 – 303)

SEE ALSO: Botafogo et al. [BRS92]

KEYWORD: Evaluation • Metric • Usability

- [YMvD91] Nicole Yankelovich, Norman Meyrowitz, and Andries van Dam, 1991. Reading and writing the electronic book. In Paul Delany and George P. Landow (eds.), *Hypermedia and Literary Studies*, (pp. 53 – 79). The MIT Press.

CALLNo: PN98.E4 H97 1991

ANNOTATION: Reviewed in Computing Reviews [Par94]

SEE ALSO: From Electronic Books to Electronic Libraries: Revisiting 'Reading and Writing the Electronic Book' [Yan91]

- [You90] Laura De Young, November 1990. Linking considered harmful. In Streitz et al. [SRA90], (pp. 238 – 249). Proceedings of the First European Conference on Hypertext.

ANNOTATION: Abstract: 'Arbitrary linking of data in HT allows for great flexibility, but the result is often HT in which users readily become disoriented. Where possible, it is desirable to provide support for structuring HT in a way that makes it easier to organize and understand. This can be done by identifying the underlying structure of the ways specific sets of data are related.

Providing support for use of such structures in a HT system may yield benefits similar to those found in using higher-level programming constructs in programs.'

KEYWORD: Design • HT!General • Info Shape

- [YR87] C.T. Yu and C.J. Van Rijsbergen (eds.), 3 – 5 June 1987. *SIGIR '87 Proceedings of the Tenth Annual International ACM SIGIR Conference on Research & Development in Information Retrieval*. ACM-SIGIR, ACM. ISBN 0-89791-232-2.

- [Yun00] John Yunker, September 2000. Speaking in charsets. *Web Techniques*, 5:59 – 63.

KEYWORD: HCI!cultural factors • CS4173 (WWW)

- [YWC85] C. T. Yu, Y. T. Wang, and C. H. Chen, 5 – 7 June 1985. Adaptive document clustering. In *SIGIR '85* [ACM85], (pp. 197 – 203).

KEYWORD: Cluster

- [ZBZH03] Andrew T. Zhou, James Blustein, and Nur Zincir-Heywood, 20 May 2003. The state of network security management: Issues and directions. Technical Report CS-2003-06, Dalhousie University Faculty of Computer Science. URL <http://www.cs.dal.ca/research/techreports/2003/CS-2003-06.shtml>.

- [ZC01] Ziangmin Zhang and Mark Chignell, 2001. Assessment of the effects of user characteristics on mental models of information retrieval systems. *Journal of the American Society for Information Science and Technology*, 52(6):445 – 459.

ANNOTATION: good bibliography

SEE ALSO: Ch. 6 of Web Work [CDT00c]

- [ZCM98] Polle T. Zellweger, Bay-Wei Chang, and Jock D. Mackinlay, 20 – 24 June 1998. Fluid links for informed and incremental link transitions. In Grønbaek et al. [GMS98], (pp. 50 – 57).

KEYWORD: HCI!interface

- [Zha06] Yuejiao Zhang, 2006. Wiki means more: hyperreading in Wikipedia. In ACM Hypertext [ACM06], (pp. 23 – 26). URL <http://doi.acm.org/10.1145/1149941.1149946>. General chair Uffe K. Wiil; Programme chairs Peter J. Nürnberg and Jessica Rubart.

KEYWORD: HT!CS6606

- [Zho05] Andrew Ting Zhou, 2005. *Improving intrusion detection systems through an HCI approach*. Master's thesis, Dalhousie University Faculty of Computer Science.

SEE ALSO: Kuo et al.'s 'Designing an evaluation method for security user interface' in interactions 13(3):28–31 [KPW06]

- [Zhu99] Erping Zhu, 1999. Hypermedia interface design: The effects of number of links and granularity of nodes. *Journal of Educational Multimedia and Hypermedia*, 8(3):331 – 358.

ANNOTATION:

- (p. 335) Jonassen & Wang (1993): concluded that the student ability rather than structure of HT influences students' knowledge acquisition
- (p. 348) # of links & size of nodes had no effect on searching,
- (p. 348) few links led to better learning (more like familiar interface of paper) reference to cognitive load theory,
- (p. 351) few links led to more positive attitude towards HT doc and positive correlation with learning,
- Suggestions for learning: few links and/or link filtering

SEE ALSO: Dee-Lucas and Larkin in same J. re HT segmentation [DLL99]

- [ZM90] Stanley B. Zdonik and David Maier, 1990. *Fundamentals of Object-Oriented Databases*, (pp. 1 – 32). San Mateo, California, USA: Morgan Kaufmann Publishers, Inc. ISBN 0-55860-000-0.

KEYWORD: Programming

- [ZM98] Justin Zobel and Alistair Moffat, Spring 1998. Exploring the similarity space. *ACM SIGIR Forum*, 32(1):18 – 34.

SEE ALSO: Jones&Furnas [JF87]

KEYWORD: Information Retrieval!weighting

- [ZTG06] Moshe Zviran, Dov Te'eni, and Yuval Gross, 2006. Does color in email make a difference? *Communications of the ACM*, 49(4):94 – 99. URL <http://doi.acm.org/10.1145/1121949.1121954>.

KEYWORD: HCI!colour

- [Zus87] Leonard Zusne, 1987. *Eponyms in Psychology: A Dictionary and Biographical Sourcebook*. Greenwood Press. ISBN 0-313-25750-7.

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