



HUMAN INFORMATION PROCESSING LAB

Douglas J. K. Mewhort, PhD Professor
Department of Psychology, Queen's University
62 Arch Street, Kingston, ON K7L 3N6 Canada

Welcome to the HIP Lab

The Human Information Processing Lab is located in the Department of Psychology at Queen's University in Kingston, Ontario (Canada). The lab is directed by Dr. D. J. K. Mewhort.

The primary research focus in the lab is on human performance and how to model it. Current work centers on computational models for perception and memory with emphasis on decision and choice in speeded-performance tasks.

Specific topics of interest include:

- Semantic acquisition and representation
- Recognition memory
- Reading and lexical access
- Categorization
- Pattern recognition
- Attention
- Language

The HIP lab is especially well equipped to deal with computationally expensive models. We are supported by the Natural Sciences and Engineering Research Council of Canada (NSERC), and by Sun Microsystems of Canada.





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Douglas J. K. Mewhort, PhD Professor **Department of Psychology**

B.A. (Hon.), University of Toronto, 1964
M.A., University of Waterloo, 1965
Ph.D., University of Waterloo, 1968

Research

My research concerns human performance and how to model it. Current work centres on computational models for perception and memory with emphasis on decision and choice in speeded-performance tasks.

Other interests

I am actively involved in the development of the [High Performance Computing Lab](#), a supercomputer centre established by a consortium of four Eastern Ontario universities: Queen's, Carleton, RMC and Ottawa.

I am the Editor of the Canadian Journal of Experimental Psychology.

Recent HIP Lab Alumni

2000 – present

Michael N. Jones (2005). Professor (Psychology, Cognitive Science and Informatics) at the University of Indiana

Randall K. Jamieson (2005). Associate Professor (Psychology), University of Manitoba

Vlad Zotov (2006). Defence Research and Development Canada



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Donal Franklin (2013).

1990 – 2000

Andrew Heathcote (1990). Professor, University of Newcastle, NSW, Australia

Deb. Feldman-Stewart (1992). Department of Oncology, Queen's

Jackie Braun (1996). Department of Psychology, Ramapo College of New Jersey

Irene T. Armstrong (1998). Queen's Regional Assessment and Resource Centre

The late **David G. Smith** (1999).

Peter Kwantes (1999). Defence Research and Development Canada

Post Doc

Dr. Sam Hannah (PhD. McMaster)

Dr. Brendan Johns (Ph.D. Indiana)

Dr. Donald Franklin (Ph.D. Queen's)



Recent Publications

Kelly, M. A., **Mewhort, D. J. K.**, & West, R. L. (2014). The Memory Tesseract: Distributed MINERVA and the unification of memory. In P. Bello, M. Gurrarini, M. McShane, & B. Scassellayi (Eds.), *Proceedings of the 38th annual Cognitive Science Conference* (pp. 2483-2488). Austin, TX: Cognitive Science Society.

Johns, B., Jones, M., & **Mewhort, D. J. K.** (2014). A continuous source reinstatement model of true and illusory recollection. In P. Bello, M. Gurrarini, M. McShane, & B. Scassellayi (Eds.), *Proceedings of the 38th annual Cognitive Science Conference* (pp. 248-253). Austin, TX: Cognitive Science Society.

Franklin, D. R. J., & **Mewhort, D. J. K.** (2015). Memory as a hologram: An analysis of learning and recall. *Canadian Journal of Experimental Psychology*, 69, 115-135.

Jamieson, R. K., Nevzorova, U., Lee, G., & **Mewhort, D. J. K.** (2015). Inferring Grammaticality from Redundancy: Attribute Substitution in the Artificial Grammar Task. *Psychological Research*. In press.

Kelly, M. A. Blostein, D., & **Mewhort, D. J. K.** (2013). Encoding Structure in Holographic Reduced Representations. *Canadian Journal of Experimental Psychology*, 67, 79-93

Franklin, D. R. J., & **Mewhort, D. J. K.** (2013). Control processes in free recall. In R. West & T. Stewart (Eds.), *Proceedings of the 12th International Conference on Cognitive Modelling*, Ottawa: Carleton University.

Johns, B. T., Jones, M. N., & **Mewhort, D. J. K.** (2012) A synchronization account of false recognition. *Cognitive Psychology*, 65, 486-518.

Mewhort, D. J. K., Cann, N. M., Slater, G. W., & Naughton, T. J. (2010). High Performance Computing Systems and Applications. Heidelberg: Springer-Verlag. (LNCS 5976).

Jamieson, R.K. & **Mewhort, D.J.K.** (2011). Grammaticality is inferred from global similarity: A reply to Kinder (2010). *Quarterly Journal of Experimental Psychology*, 64, 209-216

Zotov, V., Jones, M.N., & **Mewhort, D.J.K.** (2011). Contrast and assimilation in classification and exemplar production. *Attention, Perception, & Performance*, 73, 621-639.



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Weisman, R., **Mewhort, D. J. K.**, Hoeschele, M., Bloomfield, L. L., & Sturdy, C. B. (2012). New Perspectives on Absolute Pitch in Birds and Mammals. In T. R. Zentall, & E. A. Wasserman (Eds.), *The Oxford handbook of comparative cognition* (pp. 67-79). Oxford: Oxford University Press.

Johns, E. E., & **Mewhort, D. J. K.** (2011). Serial-position effects for lures in short-term recognition memory. *Psychonomic Bulletin & Review*, 18, 1126-1132.

Jamieson, R.K., & Holmes, S., & **Mewhort, D.J.K.** (2010). Global similarity predicts dissociation of classification and recognition: Evidence questioning the implicit /explicit learning distinction in amnesia. *Journal of Experimental Psychology: Learning Memory & Cognition*, 36, 1529-1535.

Jamieson, R.K., & **Mewhort, D.J.K.** (2010). Holographic stimulus representation and judgement of grammaticality in an exemplar model: Combining item and serial-order information. In S. Ohlsson & R. Catrambone (Eds.), *Proceedings of the 32nd Annual Meeting of the Cognitive Science Society* (pp. 1541- 1546). Austin, TX, Cognitive Science Society.

Mewhort, D. J. K., Cann, N., Naughton, T., & Slater, G. (2010). *HPCS2009 High Performance Computing Systems and Applications*. Heidelberg: Springer Verlag.

Weisman, R., Hoeschele, M., Bloomfield, L. L., **Mewhort, D. J. K.**, & Sturdy, C. B. (2010). Using Network Models of Absolute Pitch to Compare Frequency-Range Discriminations across Avian Species. *Behavioural Processes*, 84, 421-427.

Mewhort, D.J.K., Johns, B.T., & Kelly, M. (2010). Applying the permutation test to factorial designs. *Behavior Research Methods*. 42, 366-372.

Jamieson, R. K., & **Mewhort, D. J. K.** (2010). Applying an exemplar model to the artificial-grammar task: String-completion and performance on individual items. *Quarterly Journal of Experimental Psychology*.

Johns, E. E., & **Mewhort, D. J. K.** (2009). Test sequence priming in recognition memory. *Journal of Experimental Psychology: Learning Memory & Cognition*, 35, 1162-1174.

Mewhort, D. J. K., Kelly, M., & Johns, B. T. (2009). [Randomization tests and the unequal-N/unequal-variance problem](#). (PDF, 103 KB) *Behavior Research Methods*, 41, 664-667.



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Jamieson, R. K., & **Mewhort, D. J. K.** (2009b). [Applying an exemplar model to the serial reaction-time task: Anticipating from experience.](#) (PDF, 548 KB) *Quarterly Journal of Experimental Psychology*, 62, 1757-1783

Jamieson, R.K., & **Mewhort, D. J. K.** (2009a). [Applying an exemplar model to the artificial-grammar task: Inferring grammaticality from similarity.](#) (PDF, 362 KB) *QJEP*, 62, 550-575.

Jones, M. N., & **Mewhort, D. J. K.** (2007). [Representing word meaning and Order information in a composite Holographic Lexicon.](#) (PDF, 1.4 MB) *Psychological Review*.

Jones, M. N., Kintsch, W., & **Mewhort, D. J. K.** (2006). [High dimensional semantic space accounts of priming.](#) (PDF, 256 KB) *Journal of memory & Language*, 55, 534-552.

Zotov, V., & **Mewhort, D. J. K.** (2006). [A representation shift model of classification and absolute identification.](#) (PDF, 1.6 MB) In D. E. Kornbrot, R. M. Msetfi, & A. W. MacRae (Eds.), *Fechner Day 2006* (pp. 99-104). International Society for Psychophysics.

Jamieson, R. K. & **Mewhort, D. J. K.** (2005). [The influences of grammatical, local, and organizational redundancy on implicit learning: An analysis using information theory.](#) (PDF, 215 KB) *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 31.

Mewhort, D. J. K. (2005). [A comparison of the randomization test with the F test when error is skewed.](#) (PDF, 191 KB) *Behavioral Research Methods*, 37, 426-435.

Mewhort, D. J. K. & Johns, E. E. (2005). [Sharpening the echo: An iterative-resonance model for short-term recognition memory.](#) (PDF, 152 KB) *Memory*, 13, 300-307.

Jones, M. N. & **Mewhort, D. J. K.** (2004). [Case-sensitive letter and bigram frequency counts from large-scale English corpora.](#) (PDF, 191 KB) *Behavior Research Methods, Instruments, & Computers*.

Jones, M. N. & **Mewhort, D. J. K.** (2004). [Tracking attention with the focus-window technique: The information filter must be calibrated.](#) (PDF, 668 KB) *Behavior Research Methods, Instruments, & Computers*, 36, 270-276.

Johns, E. E. & **Mewhort, D. J. K.** (2003). [The effect of feature frequency on short-term recognition memory.](#) (PDF, 251 KB) *Memory & Cognition*, 31, 285-296.



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Jamieson, R. K., Thompson, W. F., Cuddy, L. L., & **Mewhort, D. J. K.** (2003). [Do conjunction errors in auditory recognition imply feature migration?](#) (PDF, 477 KB) *Canadian Journal of Experimental Psychology*, 57, 125-130.

Heathcote, A., Brown, S., & **Mewhort, D. J. K.** (2002) [Quantile-based estimates of response-time distribution parameters.](#) (PDF, 257 KB) *Psychonomic Bulletin & Review*, 9, 394-401.

Johns, E. E. & **Mewhort, D. J. K.** (2002). [What information underlies correct rejections in recognition from episodic memory?](#) (PDF, 414 KB) *Memory & Cognition*, 30, 46-59.

Kwantes, P. J. & **Mewhort, D. J. K.** (2002). [Letter encoding in visual word identification: Evidence for a word-integration explanation for parafoveal preview effects in reading.](#) (PDF, 1 MB) *Canadian Journal of Experimental Psychology*, 56, 30-40.

Franklin, D. R. J. & **Mewhort, D. J. K.** (2002). [An analysis of immediate memory: The free-recall task.](#) (PDF, 97 KB) In N. J. Dimpoloulos & K. F. Li (Eds.), *High Performance Computing Systems and Applications 2000*, New York: Kluwer.

Heathcote, A., Brown, S., & **Mewhort, D. J. K.** (2000). The power law repealed: The case for an exponential law of practice. *Psychonomic Bulletin & Review*, 7, 185-207.

Recent Conference Presentations

Kelly, M. A., **Mewhort, D. J. K.**, & West, R. L. (2014). The Memory Tesseract: Distributed MINERVA and the unification of memory. Society for Mathematical Psychology, July, 18-21, 2014, Quebec, PQ

Evans, N; **Mewhort, D.**, Heathcote, A., & Brown, S. (2015). Re-assessing the evidence for exponential and power laws of practice through updated methods of model selection. Society for Mathematical Psychology, Newport Beach, California

Mewhort, D, J. K., & Johns, E. E (2015) Canadian Society for Brain Behaviour & Cognitive Science, Carleton university, June 2015

Chubala, C., Johns, B. T., Jamieson, R. & **Mewhort, D. J. K.** (2015) Applying an exemplar model to implicit learning of conjunctive rule sets: Structure emerges from encoding representations. Canadian Society for Brain Behaviour & Cognitive Science, Carleton University, June 2015



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Johns, B. T., Jones, M. N., & **Mewhort, D. J. K.** (2015) Canadian Society for Brain Behaviour & Cognitive Science, Carleton university, June 2015

Matthew A. Kelly, **Douglas J. K. Mewhort**, Robert L. West (2014) The Memory Tesseract: Distributed MINERVA and the Unification of Memory, *Cognitive Science Society*, Quebec, July 2014.

Matthew A. Kelly, **Douglas J. K. Mewhort**, Robert L. West (2014) The Memory Tesseract: Distributed MINERVA and the Unification of Memory, *Society for Mathematical Psychology*, Quebec, July 2014.

Johns, E. E., & **Mewhort, D. J. K.** (2013). Forced-choice recognition: Processes and strategies. *Canadian Society for Brain, Behaviour, & Cognitive Science*, Calgary, June 7-9.

Hannah, S., & **Mewhort, D. J. K.** (2013). Modelling non-analytic similarity judgments in a multiple-trace framework. *Canadian Society for Brain, Behaviour, & Cognitive Science*, Calgary, June 7-9.

Franklin, D., & **Mewhort, D. J. K.** (2013). Control processes in free-recall. *International Conference on Cognitive Modeling*, July 12-14, Carleton University, Ottawa.

Mewhort, D. J. K. (2013). Holographic memories. In a symposium on Vector symbolic architectures, *International Conference on Cognitive Modeling*, July 12-14, Carleton University, Ottawa.

Mewhort, D. J. K., & Johns, E. E., (2013). Familiarity both helps and hurts responding to targets. *Psychonomic Society*, November 2013, Toronto, Nov. 14-17.

Mewhort, D. J. K., & Johns, E. E. (2012). Retrieval in recognition memory. *Canadian Society for Brain, Behaviour & Cognitive Science*, Kingston, June, 7-9.

Mewhort, D. J. K. (2012). Symposium: Computational understanding of Cognition. Canadian Society for *Brain, Behaviour & Cognitive Science*, Kingston, June, 7-9.

Hannah, S. & **Mewhort, D. J. K.** (2011). The variability of feature form guides processing in categorization. *Canadian Society for Brain, Behaviour & Cognitive Science*, Winnipeg, June 24-26.

Kelly, M. A., Blostein, D., & **Mewhort, D. J. K.** (2011). Encoding structure in holographic reduced representations. *Canadian Society for Brain, Behaviour & Cognitive Science*, Winnipeg, June 24-26.



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Mewhort, D. J. K., Johns, E. E., Gerriettes, L. & Gabler, K. (2011). Tulving's centrefold phenomenon: Broader than we thought. *Psychonomic Society, Seattle*, November 3-6, 2011.

Jamieson, R. K., & **Mewhort, D. J. K.** (2010). Holographic stimulus representation and judgement of grammaticality in an exemplar model. *Psychonomic Society, St. Louis*, November 18-21.

Johns, B. T., Jones, M. N., & **Mewhort, D. J. K.** (2010). A synchronization account of false memory. *Society for Computers in Psychology, St. Louis*, November 18.

Jamieson, R. K., & **Mewhort, D. J. K.** (2010). Holographic stimulus representation and judgement of grammaticality in an exemplar model: Combining item and serial-order information. *Cognitive Science Society, Portland, Oregon*, August 11-14.

Hannah, S., & **Mewhort, D. J. K.** (2010). Modelling the episodic basis of feature representation in categorization. *Canadian Society for Brain, Behaviour & Cognitive Science, Dalhousie University*, June 19-21. Halifax, June 11-13.

Jamieson, R. K., Holmes, S., & **Mewhort, D. J. K.** (2010). Understanding anterograde amnesia: A general rather than selective impairment in memory. In D. J. K. Mewhort (Organizer), *Aspects of human memory*. Canadian Psychological Association, Winnipeg, Manitoba, June 4-6.

Jamieson, R. K. & **Mewhort, D. J. K.** (2009). An exemplar-based account of performance in the artificial grammar tasks. *Psychonomic Society, Boston*, November 19-22.

Mewhort, D. J. K., Johns, B. T., & Kelly, M. (2009). Applying permutation tests to factorial designs. *Society for Computers in Psychology, Boston*, November 19.

Weisman, R., **Mewhort, D. J. K.**, Bloomfield, L., Hoeschele, M, Moscicky, M, & Sturdy, C. (2009). Quantitative analysis of absolute pitch in birds. *Society for Quantitative Analyses of Behavior, Phoenix*, May 13-23.

Mewhort, D. J. K. (2009). Reflections on memory & Learning. Past-President's Symposium presented at the joint meeting of the *Canadian Society for Brain, Behaviour & Cognitive Science and The Experimental Psychology Society, York, UK*, July 8-10.

Mewhort, D. J. K., & Johns, E. E. (2008). Serial-position curves for lures in recognition memory. *Psychonomic Society, Chicago* November 13-16.



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Mewhort, D. J. K., & Johns, B. T. (2008). Randomization tests and the unequal-N/unequalvariance problem. *Society for Computers in Psychology, Chicago*, November 13.

Mewhort, D. J. K., Franklin, D. R. J., Sklair, N. (2008). How one idea leads to another. *Canadian Society for Brain, Behaviour & Cognitive Science, University of Western Ontario*, June 19-21.

Johns, B., Jones, M. N., Johns, E. E., & **Mewhort, D. J. K.** (2008). Using a contextual cooccurrence learning model to predict item-specific retrieval and recognition effects. *Canadian Society for Brain, Behaviour & Cognitive Science, University of Western Ontario*, June 19-21.

Mewhort, D. J. K., & Johns, E. E. (2007). Serial position curves in recognition memory. *Canadian Society for Brain, Behaviour & Cognitive Science, University of Victoria*, June 15-17.

Mewhort, D. J. K. (2007). What to do about skew? Sometimes it helps to throw out information. *Canadian Society for Brain, Behaviour & Cognitive Science, University of Victoria*, June 15-17.

Jones, M. N., Oliver, W. L., Kintsch, W., & **Mewhort, D. J. K.** (2006). Exploring the role of context and algorithm in co-occurrence learning. Paper read at the *Society for Computers in Psychology, Houston*, Nov. 16, 2006.

Sklair, N., & **Mewhort, D. J. K.** (2006). An analysis of Hebb's repeating-list effect. *Canadian Society for Brain Behaviour, and Cognitive Science, University of Saskatchewan*.

Jamieson, R. K., Sklair, N., & **Mewhort, D. J. K.** (2006). The relation between learning and structure is predicted by a multiple-trace theory of memory. *Canadian Society for Brain Behaviour, and Cognitive Science, University of Saskatchewan*.

Mewhort, D. J. K. (2006). A new model for retrieval from memory: Iterative resonance applied to recognition memory and serial reaction-time tasks. *Banff Annual Seminar in Cognitive Science (BASICS)*

Jones, M. N., Kintsch, W., & **Mewhort, D. J. K.** (2005). Incorporating syntax into a high-dimensional semantic space model using holographic reduced representation. Paper presented at the *Society for Mathematical Psychology*.

Jamieson, R. & **Mewhort, D. J. K.** (2005). An Instance Based Account of Hick's Law. Paper presented at the *Society for Mathematical Psychology*.



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Zotov, V., Jones, M. N., & **Mewhort, D. J. K.** (2005). Trial-to-trial representation shifts in categorization. Paper presented at the *Canadian Society for Brain, Behaviour, and Cognitive Science*.

Franklin, D., & **Mewhort, D. J. K.** (2005). Insights into the behaviour of holographic storage systems. Paper presented at the *Canadian Society for Brain, Behaviour, and Cognitive Science*

Jamieson, R., & **Mewhort, D. J. K.** (2005) A memory-based explanation for Hick's law. Paper presented at the *Canadian Society for Brain, Behaviour, and Cognitive Science*.

Jones, M. N., **Mewhort, D. J. K.**, & Kintsch, W. (2005). Modelling grammatical word class from unsupervised learning of natural language. Paper presented at the *Canadian Society for Brain, Behavior, and Cognitive Science*.

Johns, E. E., & **Mewhort, D. J. K.** (2004). Memory retrieval involves differential processing of study items. Paper presented at the meeting of the *Psychonomic Society*.

Jamieson, R. K., & **Mewhort, D. J. K.** (2004) An information-theoretic analysis of implicit learning. Poster presented at the meeting of the *Psychonomic Society*.

Jones, M., & **Mewhort, D. J. K.** (2004). Learning syntax and semantics from redundancies in text. Poster presented at the meeting of the *Psychonomic Society*.

Jones, M. N., Jamieson, R. K., & **Mewhort, D. J. K.** (2004). Quantifying word transitions in sentences by coding statistical properties of text corpora. Paper presented at the meeting of the *Society for Computers in Psychology*.

Jones, M. N., & Buchan, J. (2004). Comparing methods of tracking visual attention. Paper presented at the meeting of the *Society for Computers in Psychology*.

Jones, M. N. & **Mewhort, D. J. K.** (2004). Semantic and syntactic coding in a hyper-space model. Paper presented at the meeting of the *Canadian Society for Brain, Behaviour, and Cognitive Science*.

Jamieson, R. K. & **Mewhort, D. J. K.** (2004). Indirect access to global structure through organisation of local structure. Paper presented at the meeting of the *Canadian Society for Brain, Behaviour, and Cognitive Science*.



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Jamieson, R. K. & **Mewhort, D. J. K.** (2004). An instance theory of structural learning. Poster presented at the meeting of the *Canadian Society for Brain, Behaviour, and Cognitive Science*. Winner of Donald O. Hebb Award for best student poster.

Zotov, V. & **Mewhort, D. J. K.** (2004). Judging the relative magnitude of digits and lines: Why you can't use a mental line metaphor for numeric comparison. Poster presented at the meeting of the *Canadian Society for Brain, Behaviour, and Cognitive Science*.

Jones, M. N. & **Mewhort, D. J. K.** (2003). Calibration of information filter in the focus-window tracking paradigm. Paper presented at the meeting of the *Society for Computers in Psychology*. Winner of the Castellan Award for best student paper.

Jones, M. N. & **Mewhort, D. J. K.** (2003). Sequential contrast and assimilation effects in categorization of perceptual stimuli. Poster presented at the meeting of the *Psychonomic Society*.

Mewhort, D. J. K. & Johns, E. E. (2003). Extra-list information controls correct rejections in STM for words. Paper presented at the meeting of the *Psychonomic Society*.

Zotov, V., Jones, M. N., & **Mewhort, D. J. K.** (2003). Can exemplar-based models predict contrast effects in classification tasks? Paper presented at the meeting of the *Canadian Society for Brain, Behaviour, and Cognitive Science*.

Jones, M. N., Zotov, V., & **Mewhort, D. J. K.** (2003). Follow the floating representation: Sequence effects in an exemplar-production category learning task. Paper presented at the meeting of the *Canadian Society for Brain, Behaviour, and Cognitive Science*.

Mewhort, D. J. K. & Johns, E. E. (2003). Sharpening the echo: An iterative resonance model for recognition memory. Paper presented at the meeting of the *Canadian Society for Brain, Behaviour, and Cognitive Science*.

Jamieson, R. K. & **Mewhort, D. J. K.** (2003). Benefits of redundancy on artificial grammar learning. Paper presented at the meeting of the *Canadian Society for Brain, Behaviour, and Cognitive Science*.

Jones, M. N., & **Mewhort, D. J. K.** (2003). A simple context co-occurrence hyper-space model of semantic memory. Poster presented at the meeting of the *Canadian Society for Brain, Behaviour, and Cognitive Science*. Hebb Award for best student poster.



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Mewhort, D. J. K., Franklin, D. R. J., & Kwantes, P. J. (2002). Computational Psychology. *Sun Microsystems High Performance Computing Consortium, Baltimore, MD.*

Johns, E. E. & **Mewhort, D. J. K.** (2002). The evidence underlying correct rejections in short-term recognition memory. Paper presented at the Quebec Conference on Short-Term/Working Memory.

Jamieson, R. K. & **Mewhort, D. J. K.** (2002). An information processing account of artificial grammar learning. Paper presented at the *Canadian Society for Brain, Behaviour, and Cognitive Science.*

DiClemente, M. R., Jones, M. N., Franklin, D. R. J., Zotov, V., & Butler, B. E. (2002). Limiting the flexibility of attention: Location selectivity in non-contiguous regions. Poster presented at the *Canadian Society for Brain, Behaviour, and Cognitive Science.*

Mewhort, D. J. K. & Johns, E. E. (2002). The effect of feature frequency in short-term recognition memory. Paper presented at the *Canadian Society for Brain, Behaviour, and Cognitive Science.*

Mewhort, D. J. K. & Franklin, D. R. J. (2002). Control processes in free recall. Paper presented at the meeting of the *Australian Society for Cognitive Science.*

Mewhort, D. J. K. (2002). Human memory and the supercomputer: Control in recall reflects the complexity of our vocabulary, not a special control mechanism. Colloquium presented at the *University of Newcastle.*

Franklin, D. R. J. & **Mewhort, D. J. K.** (2001). A new model for immediate free recall. Paper presented at the meeting of the *Society for Mathematical Psychology.*

Jones, M. N., & **Mewhort, D. J. K.** (2001). Resurrecting template theory: Modeling single-letter recognition with template deblurring. Paper presented at the meeting of the *Society for Mathematical Psychology.*

Mewhort, D. J. K. & Johns, E. E. (2001). The ELF in the looking glass. Paper presented at the meeting of the *Canadian Society for Brain, Behaviour, and Cognitive Science.*

Franklin, D. R. J. & **Mewhort, D. J. K.** (2001). A new model for immediate free recall. Paper presented at the meeting of the *Canadian Society for Brain, Behaviour, and Cognitive Science.*



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Jones, M. N. & **Mewhort D. J. K.** (2001). A new approach to letter identification: Learning and deblurring dynamic templates. Paper presented at the meeting of the *Canadian Society for Brain, Behaviour, and Cognitive Science*.

Zotov, V. & **Mewhort, D. J. K.** (2000). Three-category classification task with EBRW simulation. Poster presented at the meeting of the *Society for Mathematical Psychology*.