Jose Quesada

CONTACT INFORMATION

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Adaptive Behavior and Cognition (ABC)
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RESEARCH INTERESTS

Human judgment, statistical semantics, Semantic Web, cognitive heuristics, human problem solving machine learning and pattern recognition.

EDUCATION

M.A. Psychology, University of Granada. **1992 - 1997**

PhD. Psychology, **2003**

- University of Granada and Institute of Cognitive Science, University of Colorado, Boulder. Latent Problem Solving Analysis (LPSA): A computational theory of representation in complex, dynamic problem solving tasks.
- Advisors: Walter Kintsch and Emilio Gomez.

I studied Fine Arts and Psychology simultaneously, which led to two solo exhibitions. I have interrupted my Fine Arts education, but samples of my painting are online. I have also completed a variety of courses on neighboring fields that interested me, such as genetics and lineal algebra. **1992-2005**

PROFESSIONAL EXPERIENCE

University of Colorado, Boulder, Research associate, working with Professors Thomas Landauer and Walter Kintsch. **2000-2004**

Pearson Knowledge Technologies (PKT), Consultant **Summer, 2001**

PKT provides industry-leading automated text analysis technologies and products evaluate the meaning of whole passages to measure written content in context.

Carnegie Mellon, dept. of Social and decision sciences, Postdoctoral fellow. I worked with Professor Coty Gonzalez at The Dynamic Decision Making Laboratory. **2004 – 2005**

Warwick University, dept. of Psychology, Postdoctoral fellow. I worked with Professor Nick Chater on Judgement and Decision Making. **2005 – 2006**

Sussex University, dept. of Psychology, Postdoctoral fellow. I worked with Professor Jane Oakhill on word problem solving. **2006 – 2007**

WorkingCogs, Cofounder. A startup using semantic models to improve writing for the Web and make real-time content recommendations as-you-type. **2007 – 2008**

Max Planck Institute, Adaptive Behavior and Cognition, Postdoctoral fellow. Working with Dr. Lael Schooler, on Web-scale semantics, i. e., techniques to exploit the semantics in the Web of Data, focusing on simplicity and scalability. **2008 – present**

PROGRAMMING

R, Python, C, C++, Matlab, Linux shell scripting, Perl, LaTeX 2_ε, SPARQL, SQL, Java, .NET, SPSS.

TEACHING

Applied cognitive Science (PS347), Department of psychology, Warwick University. **2005**

SERVICE

Ad hoc reviewer for: Cognitive Science, Memory and cognition. Professional Associations membership: Cognitive Science society, Society for mathematical psychology, Judgment and Decision Making society.

REFEREES

Professor Walter Kintsch
Professor Emeritus
University of Colorado, Boulder

Professor Nick Chater
Professor
University College, London

Professor Coty Gonzalez
Research Associate
Carnegie Mellon

Dr. Lael Schooler
Senior Research Scientist, Max Planck
Adaptive Behavior and cognition

Publications

[1] J. Quesada, R. B. Vidal, and R. J. Schooler. Random indexing spaces for bridging the human and data webs. In C. d'Amato, N. Fanizzi, M. Grobelnik, A. Ławrynowicz, and V. Svatek, editors, *IRMLeS 2010: The 2nd ESWC Workshop on Inductive Reasoning and Machine Learning for the Semantic Web*, 2010.

[2] J. Quesada, N. Chater, P. Otto, and C. Gonzalez. Decoy effects with no predetermined dimensions. *submitted*, 2010.

[3] J Quesada, Y Zeng, R Vidal, L Schooler, Y Wang, Z Huang, Y Zhong, and D Damljanovic. D2.3.2 cognitive memories components (v2). In *LarKC deliverables*. 2010.

[4] E. Simperl, u Keller, F Fisher, E Oren, B Bishop, Z Huang, G Tagni, J. Quesada, B Fortuna, J Hu, and Y. Qin. D1.1.1 an overview of relevant work in other areas. In *LarKC deliverables*. 2009.

[5] J Quesada, Y Zeng, Y. Qin, S. Lu, Y. Yao, and Y. Gao. D2. 3.1 cognitive memories components (v1). *LarKC deliverables*, 2009.

[6] J. Quesada. Similarity theories for the semantic web. In Christophe Guéret, Pascal Hitzler, and Stefan Schlobach, editors, *Nature inspired Reasoning for the Semantic Web, in 7th International semantic web conference (ISWC2008)*, Karlsruhe, Germany, 2008. Springer.

[7] J. Quesada. creating your own LSA space. In T. K. Landauer, D. S. McNamara, S. Dennis, and W. Kintsch, editors, *Handbook of Latent Semantic Analysis*, pages 71–85. Lawrence Erlbaum associates, Mahwah, New Jersey, 2007.

[8] J. Quesada, T. K. Landauer, D. S. McNamara, S. Dennis, and W. Kintsch. Spaces for problem solving. In *Handbook of Latent Semantic Analysis*, pages 185–203. Lawrence Erlbaum associates, Mahwah, New Jersey, 2007.

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[10] E. G. Milan, F. J. Tornay, J. Quesada, and M Hochel. Response repetition in task shift. *Cognitiva*, 18(2):123–134, 2006.

[11] J. S. Adelman, G. D. A Brown, and J. Quesada. Contextual diversity not word frequency determines word naming and lexical decision times. *Psychological Science*, 17(9):814–824, 2006.

[12] J. Quesada, W. Kintsch, and E. Gomez. Complex problem solving: A field in search of a definition? *Theoretical Issues in Ergonomic Science*, 6(1):5–33, 2005.

[13] J. Quesada, N. Chater, P. Otto, and C. Gonzalez. An explanation of decoy effects without assuming numerical attributes. In *Proceedings of the 27th Annual Meeting of the Cognitive Science Society. Chicago Lawrence Erlbaum Associates*. 2005.

[14] P. Mangalath, J. Quesada, and W. Kintsch. Analogy-making as predication using relational information and LSA vectors. In Kenneth D Forbus, Dedre Gentner, and Terry Regier, editors, *Proceedings of the 26th Annual Meeting of the Cognitive Science Society*. Lawrence Erlbaum Associates, Chicago, 2004.

[15] J. Quesada, W. Kintsch, and E. Gomez. Automatic landing technique assessment using latent problem solving analysis. In R. Alterman and D. Kirsh, editors, *25th Annual Conference of the Cognitive Science Society*. Lawrence Erlbaum Associates, Chicago, 2003.

[16] J. Quesada, W. Kintsch, and E. Gomez. Latent problem solving analysis as an explanation of expertise effects in a complex, dynamic task. In R. Alterman and D. Kirsh, editors, *Proceedings of the 25th Annual Conference of the Cognitive Science Society*. Lawrence Erlbaum Associates, Chicago, 2003.

[17] C. Gonzalez and J. Quesada. Learning in a dynamic decision making task: The recognition process. *Computational and Mathematical Organization Theory*, 9(4):287–304, 2003.

[18] J.J. Canas, J. Quesada, A. Antoli, and I. Fajardo. Cognitive flexibility and adaptability to environmental changes in dynamic complex problem solving tasks. *Ergonomics*, 46(5):482–501, 2003.

[19] J. Quesada, W. Kintsch, and E. Gomez. A theory of complex problem solving using latent semantic analysis. In W. D. Gray and C. D. Schunn, editors, *24th Annual Conference of the Cognitive Science Society*, pages 750–755. Lawrence Erlbaum Associates, Mahwah, NJ., Fairfax, VA., 2002.

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[21] J. Quesada, W. Kintsch, E. Gomez, and J. J. Canas. A computational theory of complex problem solving using the vector space model (part i): Latent semantic analysis, through the path of thousands of ants. In *Cognitive research with Microworlds*, pages 117–131. Granada (Spain), 2001.

[22] J. Quesada, J.J. Canas, A. Antoli, and C.P. Warren. An explanation of human errors based on environmental changes and problem solving strategies. In *ECCE-10: Confronting Reality*. EACE, Sweden, 2000.

[23] J. J. Canas, J. Quesada, and A. Antoli. Flexibilidad del conocimiento implícito. *Psicothema*, 2(4):910–915, 1999.