

CURRICULUM VITA
FRANCES JOHNSTON FRIEDRICH

Department of Psychology, University of Utah
380 South 1530 East, Room 502
Salt Lake City, Utah 84112
Phone: (801) 581-5068 Fax: (801) 581-5841
e-mail: friedrich@psych.utah.edu

Education

Ph.D.	Cognitive Psychology, University of Kansas	1980
M.A.	Cognitive Psychology, University of Kansas	1977
A.B.	Wellesley College	1973

Professional Experience

Associate Chair, Department of Psychology, University of Utah	2014-present
Utah Asia Campus Leadership Team, Executive Committee	2015-present
Director, Department of Psychology, Utah Asia Campus	2013-present
Area Head, Cognition and Neural Sciences Program	2011-2014
	1993-1997
Chair, Department of Psychology, University of Utah	2002-2008
Interim Chair, Department of Psychology, University of Utah	1999-2000
Associate Professor, Department of Psychology, University of Utah	1991-present
Director of Graduate Studies, Department of Psychology	1990-1992
Assistant Professor, Department of Psychology, University of Utah	1985-1991
Co- Director, Cognitive Neuroscience Laboratory	1984-1985
UC-San Francisco School of Medicine	
Fresno Medical Education Program	
VA Medical Center, Fresno, CA	
Instructor, Portland State University	1983
Research Associate, University of Oregon/Good Samaritan Hospital	1980-1983
Portland, Oregon	

Awards and Fellowships

Dean's Research and Development Award, University of Utah	1987
Dean's Summer Stipend Award, University of Utah	1986
Postdoctoral Fellowship, National Science Foundation	1980-1981
Predoctoral Training Fellowship, National Institute of Mental Health	1978-1980

Research grants

Principal Investigator. Attentional demands in semantic priming. University of Utah Research Committee Grant. \$4500, 1991.

Principal Investigator. (Co-P.I.: Marina Worsley). Spatial attention in schizophrenic patients. Biomedical Research Grant. \$4,000, 1990.

- Co-Principal Investigator (Co-P.I.: Charles Shimp). Computational processing model for animal and human spatial attention. Bio-Medical Research Grant. \$3,650, 1989.
- Co-Principal Investigator (Co-P.I.: Charles Shimp). Spatial Attention in Infrahumans. University of Utah Research Committee Grant. \$4,350, 1989.
- U. S. Principal Investigator (Israeli P.I.s: Avishai Henik and Joseph Tzelgov). Shared and Specific Attentional Mechanisms in Spatial and Linguistic Functions. Bi-National Science Foundation. \$90,000, 1987-90.
- Co-Principal Investigator (P.I.: David Margolin, M.D.). Cognitive Dysfunction in Aging and Dementia. VA Merit Review Grant. \$171,400, 1986-89.
- U. S. Principal Investigator (Israeli P.I.'s: Avishai Henik Joseph Tzelgov). Semantic Activation during Word and Picture Recognition. Bi-National Science Foundation Grant. \$49,000, 1985-87.
- Principal Investigator. Neuropsychology of Picture and Word Recognition. Bio-Medical Research Grant. \$5,925, 1986.
- Principal Investigator. Isolating the Phonological Code in Speech Processing. University of Utah Research Committee Grant. \$4,545, 1986.
- Principal Investigator. (Co-P.I.: David Margolin, M.D.). Information Processing Analysis of Progressive Dementia. NIA Small Grant. \$14,531, 1985-86.
- Principal Investigator. Effects of Parietal Injury on Spatial Skills. University of California, San Francisco Academic Senate Grant. \$5,000, 1985.

Publications (*student co-author)

- Friedrich, F. J., Schadler, M., & Juola, J. (1979). Developmental changes in units of processing in reading. Journal of Experimental Child Psychology, 28 (2), 344-358.
- Henik, A., Friedrich, F. J., Kellogg, W. (1983). The dependence of semantic relatedness effects upon prime processing. Memory and Cognition, 11 (4), 336-373.
- Friedrich, F. J. (1983). Bridging a conceptual gap. Review of Friedman, Das & O'Connor (Eds.), Intelligence and Learning. In Contemporary Psychology, 28 (3).
- Friedrich, F. J., Glenn, C. G., & Marin, O. S. M. (1984). Interruption of phonological coding in conduction aphasia. Brain and Language, 22, 266-291.
- Posner, M. I., Walker, J. A., Friedrich, F. J., & Rafal, R. D. (1984). Effects of parietal injury on covert orienting of visual attention. Journal of Neuroscience, 4, (7), 1863-1874.

- Rafal, R. D., Posner, M. I., Walker, J. A., & Friedrich, F. J. (1984). Cognition and the Basal Ganglia: Separating mental and motor components of performance in Parkinson's Disease. Brain, 107, 1083-1094.
- Friedrich, F. J., Walker, J. A., & Posner, M. I. (1985). Effects of parietal lesions on visual matching: Implications for reading errors. Cognitive Neuropsychology, 2, (3), 253-264.
- Friedrich, F. J., Martin, R., & Kemper, S. (1985). Consequences of a phonological coding deficit on sentence processing. Cognitive Neuropsychology, 2, (4), 385-412.
- Posner, M. I. & Friedrich, F. J. (1986). Attention and control of cognition. In S. L. Friedman, K. A. Klivington, & R. W. Peterson (Eds.), Brain, Cognition and Education. Orlando, FL: Academic Press.
- Friedrich, F. J. (1986). Cognition as consciousness. Review of Oakley, D. (Ed.), Brain and Mind. In Contemporary Psychology, 31, (10).
- Posner, M. I., Inhoff, A., Friedrich, F. J. & Cohen, A. (1987). Isolating attentional components: A cognitive-anatomical analysis. Psychobiology, 15 (2), 107-121.
- Ayers, M., Abrams, D. Newell, T. & Friedrich, F. J. (1987). Performance of individuals with AIDS in the Luria-Nebraska Neuropsychological Battery. International Journal of Clinical Neuropsychology, 9, 101-105.
- Friedrich, F. J. (1989). Neural Dynamics: Toward a Unified Theory of Mind. Review of Grossberg, S. (Ed.) The Adaptive Brain I and The Adaptive Brain II. In Contemporary Psychology, 34 (6), 542-543.
- Friedrich, F. J. (1990). Multiple phonological representations and verbal short-term memory. In G. Vallar & T. Shallice (Eds.), Neuropsychological Impairments of Short-Term Memory. Cambridge, UK: Cambridge University Press.
- Friedrich, F. J. (1990). Frameworks for the study of human spatial impairments. In R. Kesner & D. Olton (Eds.), Neurobiology of Comparative Cognition. Hillsdale, NJ: Lawrence Erlbaum.
- Margolin, D. I., Pate, D. S., Friedrich, F. J. & Elia, E. (1990). Dysnomia in dementia and in stroke patients: Different underlying cognitive deficits. Journal of Clinical and Experimental Neuropsychology, 12 (4), 597-612.
- Benjamin, L. S. & Friedrich, F. J. (1991). Contributions of Structural Analysis of Social Behavior (SASB) to the Bridge between Cognitive Science and a Science of Object Relations. In M. Horowitz (Ed.), Person Schemas. Chicago, IL: University of Chicago Press.

- Friedrich, F. J., Henik, A. & Tzelgov, J. (1991). Automatic processes in lexical access and spreading activation. Journal of Experimental Psychology: Human Perception & Performance, 17(3), 792-806.
- Friedrich, F. J. & Margolin, D. I. (1993). Response time measures of hemi-inattention: A longitudinal case report. Neuropsychiatry, Neuropsychology, and Behavioral Neurology, 6(2), 54-59.
- Henik, A., Tzelgov, Y., Friedrich, F.J. (1993). Dissociation of lexical and semantic aspects in word processing. Israel Journal of Medical Sciences, 29, 597-603.
- Shimp, C.P. & Friedrich, F.J. (1993). Behavioral and computational models of spatial attention. Journal of Experimental Psychology: Animal Behavior Processes, 19(1), 26-37.
- Pate, D.S., Margolin, D.S., Friedrich, F.J. & Bentley, E.E. (1994). Decision-making and attentional processes in aging and in dementia of the Alzheimer's type. Cognitive Neuropsychology, 11, 321-339.
- Henik, A., Friedrich, F. J., Tzelgov, J. & Tramer, S. (1994). Capacity demands of automatic processes in semantic priming. Memory & Cognition, 22(2), 157-168.
- Margolin, DI, Pate, DS and Friedrich, FJ. (1996). Lexical priming by pictures and words in aging and dementia. Brain and Language, 54, 275-301.
- Friedrich, F.J. & *Rader, S.D. (1997). Component process analysis in experimental and clinical neuropsychology. In M. Mariush & J. Moses (Eds.), Theoretical Foundations of Clinical Neuropsychology for Practitioners. Hillsdale, NJ: Lawrence Erlbaum.
- Friedrich, FJ, Egly, R, Rafal, RD & Beck, D. (1998). Spatial attention deficits in humans: A comparison of superior parietal and temporal-parietal junction lesions. Neuropsychology, 12(2), 193-207.
- Filoteo, J.V., Friedrich, F.J. & *Stricker, J.L. (2001) Shifting attention to different levels within global-local stimuli: A study of normal participants and a patient with temporal-parietal lobe damage. Cognitive Neuropsychology, 18, 193-226.
- Filoteo, J.V., Friedrich, F.J. & Rabbel, C. (2002) Visual perception without awareness in a patient with progressive posterior cortical atrophy: Impaired explicit but not implicit processing of global information. Journal of the International Neuropsychology Society, 8, 461-472.
- Filoteo, J.V., Friedrich, F.J., Rilling, L.M., Davis, J.D., Stricker, J.L. & *Prenovitz, M. (2003). Semantic and Cross-Case Identity Priming in Patients with Parkinson's Disease. Journal of Clinical and Experimental Neuropsychology, 25(4), 441-456.
- Cagigas, X.E , Filoteo, J.V., Stricker, J.L., Rilling, L.M. & Friedrich, F.J. (2007). Flanker

Compatibility Effects in Patients with Parkinson's Disease: Impact of Target Onset Delay and Trial-by-Trial Stimulus Variation. Brain and Cognition, 63(3), 247-259.

*Costa, R. & Friedrich, F. (2012) Inhibition, interference and conflict in task switching. Psychonomic Bulletin and Review. 19:1193-1201.

Friedrich, F. J. (2013). Attention. In R. Biswas-Diener & E. Diener (Eds), Noba textbook series: Psychology. Champaign, IL: DEF Publishers. DOI: www.nobaproject.com

Invited Talks

Spatial attention and visual matching: Evidence from parietal lobe patients. Meeting of the International Association for the Study of Attention and Performance. Windsor, England: July, 1986.

Isolating the phonological code. Conference on the Neuropsychology of Short Term Memory Impairments. Como, Italy: September, 1987.

Spatial Attention Processes: Neuropsychological evidence. Psi Chi Visiting Lecturer. University of Kansas: Lawrence, KS, April, 1995.

Conference Presentations

Friedrich, F. J., Schadler, M., & Juola, J.: The development of word recognition processes in reading comprehension. Presented at the annual meeting of the Rocky Mountain Psychological Association, April 1978.

Friedrich, F. J.: Antecedent identification in sentence integration. Presented at the annual meeting of the Psychonomic Society, November, 1980.

Friedrich, F. J., Kellogg, W., & Henik, A.: Effects of mode of processing on semantic activation. Presented at the annual meeting of the Psychonomic Society, November, 1982.

Walker, J. A., Henik, A., Posner, M. I., & Friedrich, F. J.: Visual orienting deficits in humans following parietal lobe lesions. Presented at the annual meeting for the Society for Neuroscience, November, 1982.

Friedrich, F. J. & Glenn, C. G.: The auditory-articulatory loop: Evidence from conduction aphasia. Presented at the annual meeting of the Western Psychological Association, April, 1983.

Martin, R. & Friedrich, F.: Syntactic deficits in fluent aphasics. Presented at the annual meeting of the Academy of Aphasia, October, 1983.

Posner, M., Friedrich, F. J., Walker, J., & Rafal, R.: Neural control of covert visual orienting. Presented at the annual meeting of the Psychonomic Society, November, 1983.

- Walker, J. A., Friedrich, F. J., Posner, M. I., & Rafal, R. D.: Biases in selective attention in patients with parietal lobe lesions. Presented at the annual meeting of the International Neuropsychological Society, February, 1984.
- Friedrich, F. J., Walker, J. A., & Posner, M. I.: Effects of parietal injury on spatial attention and reading-related tasks. Presented at the 5th Annual Central California Research Symposium, April, 1984.
- Margolin, D. I. & Friedrich, F. J.: Cognitive components of anomia. Presented at the 5th Annual Central California Research Symposium, April, 1984.
- Friedrich, F. J.: Consequences of a phonological coding deficit on sentence processing. Presented at the annual meeting of the Cognitive Science Society, June, 1984. (Abstract published in the Proceedings of the Sixth Annual conference of the Cognitive Science Society, 1984.)
- Friedrich, F. J., Walker, J. A., & Posner, M. I.: Inattention to the right side of space: Implication for reading errors. Presented at the annual meeting of the Academy of Aphasia, October, 1984.
- Friedrich, F. J., Kellogg, W. A. & Henik, A. Constraints on semantic priming. Presented at the annual meeting of the Psychonomic Society, November, 1984.
- Margolin, D. I., Friedrich, F. J. & Carlson, N. R. Visual agnosia - optic aphasia: Continuum or dichotomy? Presented at the annual meeting of the International Neuropsychological Society, February, 1985. (Abstract published in the Journal of Clinical and Experimental Neuropsychology, 1984, 6.)
- Friedrich, F. J. & Margolin, D. I. Picture Priming in Anomia. Presented at the annual meeting of the Academy of Aphasia, October, 1985.
- Pollatsek, S., Walker, J., Friedrich, F. & Posner, M. Spatial attention in reading words. Presented at the annual meeting of the Psychonomic Society, November, 1985.
- Friedrich, F. J. Using response time techniques to study parietal lobe lesions. Presented at the annual meeting of the International Neuropsychological Society, February, 1986. (Abstract published in Journal of Clinical and Experimental Neuropsychology, 1985, 7, (6), p. 614.).
- Ayers, M., Abrams, D., Newell, T. & Friedrich, F. Performance of individuals with AIDS on the Luria-Nebraska Neuropsychological Battery. Presented at the annual meeting of the American Psychological Association, August, 1986.
- Margolin, D., Friedrich, F. J. Elia, E. & Keller, W. J. Arousal and decision making in aging and dementia. Presented at the annual meeting of the International Neuropsychological Society, February, 1987. (Abstract published in Journal of

- Clinical Experimental Neuropsychology, 1987, 9, p. 78).
- Margolin, D. & Friedrich, F. J. Lexical priming by pictures and words in aging, anomia & dementia. Presented at the annual meeting of the International Neuropsychological Society, February, 1988. (Abstract published in Journal of Clinical and Experimental Neuropsychology, 1988, 10, (1), p.61).
- Margolin, D., Pate, D., Friedrich, F. J. & Elia, E. Differential Patterns of Dysnomia: Dementia Compared to Stroke. Presented at the Annual meeting of American Academy of Neurology, April, 1988.
- Friedrich, F. J. On the automaticity of lexical access and spreading activation. Presented in an invited symposium on "Current Issues in Cognitive Psychology" at the annual meeting of the Rocky Mountain Psychological Association, April, 1988.
- Friedrich, F. J. & Rader, S. Reflexive and voluntary orienting of visual attention: Effects of cue type and cue validity. Poster presented at the Conference on Recent Advances in the Analysis of Attention, April, 1990.
- Friedrich, F. J. Henik, A. & Osimani, A. Effects of parietal lesions on visual matching in Hebrew and English readers. Poster presented at the Conference on Recent Advances in the Analysis of Attention, April, 1990.
- Friedrich, F. J. Factors affecting the orienting of attention in space. Presented in a symposium on "Neuropsychology of Spatial Cognitive Systems" at the annual meeting of the American Psychological Society, June, 1990.
- Friedrich, F. J., Henik, A., & Tzelgov, J. Localizing prime task effects in semantic priming. Presented at the annual meeting of the Psychonomic Society, November, 1990.
- Rader, S. & Friedrich, F.J. Spatial distribution of attention in detection and identification tasks. Presented at the annual meeting of the Psychonomic Society, November, 1991.
- Friedrich, F.J. Prime task effects on semantic priming: Evidence against a post-lexical effect. Poster presented at the 3rd annual meeting of the West Coast Conference on Attention, Eugene, Oregon, May, 1993.
- Friedrich, F.J. Prime task effects on naming response times. Presented at the annual meeting of the Psychonomic Society, Washington, D.C., November, 1993.
- Henik, A., Tzelgov, J., Friedrich, FJ. and Levi-Manor, T. Cognitive load reduces semantic priming effects. Presented at the annual meeting of the Psychonomic Society, St. Louis, MO, November, 1994.
- Friedrich, FJ, Beck, D., Rafal, R. & Egly, R. Covert orienting of attention: Effects of Parietal lobe and superior temporal gyrus lesions. Presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA, March, 1995.

- Prenovitz, M., Friedrich, F. J., & Strayer, D. ERP evidence of automatic lexical activation. Presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA, March, 1996.
- Stricker, J.L., Filoteo, J.V. & Friedrich, F.J. The role of superior colliculus in selective attention: Evidence from patients with Progressive Supranuclear Palsy". Presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA, March, 1996.
- Friedrich, F. J., Strayer, D.L. & Christensen, S.M. ERP evidence for prime task effects in semantic priming. Presented at the 38th annual meeting of the Psychonomic Society, Philadelphia, PA, 1997.
- Prenovitz, M., Filoteo, J.V., Friedrich, F.J. & Stricker, J.L. Repetition and semantic priming in Parkinson's disease patients. Presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA, April, 1998.
- Rabbel, C., Filoteo, J.V., Stricker, J.L. & Friedrich, F.J. Dissociation between conscious and unconscious global processing in a case of the occipital lobe variant of Alzheimer's. Presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA, April, 1998.
- Friedrich, F.J., Filoteo, J.V. & Stricker, J.L. Attention shifting to different levels within global-local stimuli. Presented at the Annual meeting of the Psychonomic Society, Los Angeles, CA, November, 1999.
- Fargo, J.D., Friedrich, F.J. & Swallow, K.M. The role of the anterior attention network in switching attention between well-learned response sets. Presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA, April, 2000.
- Friedrich, F.J., Swallow, K.M. & Fargo, J.D. Reducing costs of switching between well-learned response sets. Presented at the annual meeting of the Psychonomic Society, New Orleans, LA, November, 2000.
- Kunz, B. & Friedrich, F.J. Task switch costs for simple and choice response time tasks. Presented at the annual meeting of the Psychonomic Society, Orlando, FL, November, 2001.
- Cagigas, X., Filoteo, J.V., Stricker, J.L., Rilling, L.M. & Friedrich, F.J. The striatum and its relationship to attention and action. Presented at the annual meeting of the Cognitive Neuroscience Society, April, 2001.
- Costa, R. & Friedrich, F. Task-Switching Performance: Univalent Versus Bivalent Target and Response Mapping. Presented at the annual meeting of the Psychonomic Society, Vancouver, BC, November, 2003.

Lemmons, B. & Friedrich, F. Mental Reconfiguration and Task Switching. Presented at the annual meeting of the Southeastern Psychological Association, March, 2004.

Costa, R. & Friedrich, F. Are specific stimulus values of the irrelevant task inhibited during task switching? Presented at the annual meeting of the Psychonomic Society, Minneapolis, MN, November, 2004.

Costa, R. & Friedrich, F. Investigating task switch costs using univalent, neutral and bivalent stimuli. Presented at the annual meeting of the Psychonomic Society, Houston, TX, November, 2006.

Friedrich, F. & Costa, R. Exploring how preparatory cues are used in task switching. Presented at the annual meeting of the Psychonomic Society, Chicago, IL, November, 2008.

Costa, R. & Friedrich, F. Investigating inhibitory processes in task switching. Presented at the annual meeting of the Psychonomic Society, Boston, MA, November, 2009.

Nelson, J. & Friedrich, F. Task Variability and Cognitive control: What is different about color? Presented at the UROP Spring symposium, April, 2012.

Friedrich, F., Nelson, J. & Costa, R. Exploring task differences in Backward Inhibition. Presented at the annual meeting of the Psychonomic Society, Minneapolis, MN, November, 2012.

Courses Taught

Undergraduate

Coordinator for Introductory Psychology, modular format
Sensation, Perception, Memory Modules, Introductory Psychology
Psychology of Everyday Thinking
Human Cognition
Human Cognition, Online format
Sensation and Perception
Psychology of Language
Cognitive Neuropsychology
History and Theories of Psychology
History and Theories of Psychology, Honors section

Graduate

Advanced Cognitive Psychology
History and Systems of Psychology
Neuropsychology
Seminar on Consciousness

