PAUL JACK TREFFNER

www.metaffordance.com

Google Scholar – 1200+ citations
Main site: tinyurl.com/79a5cmf
Also: tinyurl.com/4enlukg

YouTube video channel - perceivingacting
40,000+ views, 180 subscribers, since 2013

PUBLICATIONS (PEER-REVIEWED, BOOKS, CONFERENCES; PDFS ON WEBSITE)

Treffner, P. J., Peter, M., & Kleidon, M. (2008). Gestures and phases: The dynamics of speech-hand communication. *Ecological Psychology, 20,* 32-64. Video

Treffner, P. J., & Barrett, R. (2004). Hands-free mobile phone speech while driving degrades coordination and control. *Transportation Research, Part F: Traffic Psychology and Behaviour, 7,* 229-246. Video video2

Treffner, P. J. (Ed.) (2003). *Abstracts and Proceedings of the 12th International Conference on Perception and Action.* Brisbane, QLD: Studio 55 Press. Video Video set

Treffner, P. J., & Peter, M. (2003). Intention and attention in gestural coordination: Asymmetric HKB model. In S. Rogers and J. Effken, Studies *in perception and action VII* (pp. 73-78). Mahwah, NJ: Erlbaum. Video

Krumins, R., & **Treffner**, P. J. (2003). Altered depth perception in stereoscopic visualisation. In S. Rogers and J. Effken, *Studies in perception and action VII* (pp. 15-18). Mahwah, NJ: Erlbaum. Video

Leonard, J., **Treffner**, P. J., Thornton, J. (2003). Tau guidance for mobile soccer robots. In S. Rogers and J. Effken, *Studies in perception and action VII* (pp. 169-172). Mahwah, NJ: Erlbaum.

Petersen, A., **Treffner**, P. J., & Barrett, R. (2003). Mobile phones and driving: Affordances and attention. In S. Rogers and J. Effken, *Studies in perception and action VII* (pp. 140-144). Mahwah, NJ: Erlbaum. Video

Treffner, P. J. Petersen, A., & Barrett, R. (2003). Speaking on a hands-free mobile phone while driving degrades perception of affordances. In *Vision in Vehicles 10 (VIV10)*, Grenada, Spain. Video

Treffner, P. J., Barrett, R., & Petersen, A. J. (2002). Stability and skill in driving. *Human Movement Science, 21,* 749-784. Video video2

Treffner, P. J., & Peter, M. (2002). Intentional and attentional dynamics of speech-hand coordination. *Human Movement Science, 21*, 641-697. Video

Treffner, P. J., & Peter, M. P. (2002). Dynamics of speech-hand gestures: Functional asymmetry and handedness. In *Proceedings of Australasian Winter Conference on Brain Research (AWCBR),* Queenstown, New Zealand.

Treffner, P. J., Barrett, R. S., Petersen, A. J., & White, R. (2002). Active stabilisation and perceptual sensitivity in safe driving. In *Developing Safer Drivers and Riders: Proceedings of Travelsafe-Australian College of Road Safety Conference* (91-104), Mawson, ACT: ACRS; *Conference award* "Best Peer-reviewed Paper".

Treffner, P. J., Doyle, T. L. A., & Barrett, R. S., (2001). Controlled braking during driving. In G. Burton and R. C. Schmidt (Eds.), *Studies in perception and action VI* (pp. 238-241). Mahwah, NJ: Erlbaum.

Treffner, P. J., & Morrison, S. M. (Eds.) (2001). An interdisciplinary focus on skilled perception-action. *Human Movement Science, 20*, v-vi.

Treffner, P. J., & Peter, M. (2001). Gestural dynamics of speech-hand interaction. In

Proceedings of the Sixth Biennial Motor Control & Human Skill Research Workshop, Freemantle, Australia.
Treffner, P. J., & Peter, M. (2001). Dynamics of speech-hand gestures. In *Proceedings of 11th International Conference on Perception and Action*, Storrs, CT, USA.
Treffner, P. J., & Peter, M. (2001). Coordination dynamics and gestural meaning. In *Proceedings of Oralité & Gestualité*, Aix-en-Provence, France.
Treffner, P. J., Barrett, R. S., Walker, G., & Petersen, A. J. (2001). Information and active stabilisation in skilled driving. In *Proceedings of the Sixth Biennial Motor Control & Human Skill Research Workshop*, Fremantle, Australia.
Treffner, P. J., Doyle, T. L. A., & Barrett, R. S. (2001). Invariant time-to-contact information in the control of braking. In *Proceedings of Vision in Vehicles 9*. Brisbane, Australia.
Barrett, R. S., **Treffner**, P. J., & Petersen, A. J. (2001). Driving performance and skill: Field investigations using an instrumented vehicle. In Proceedings of *Vision in Vehicles 9*, Brisbane, Australia.
Treffner, P. J., & Peter, M. (2000). Dynamics of speech-hand interaction. In *Proceedings of Australasian Winter Conference on Brain Research*, Queenstown, New Zealand.
Doyle, T. L. A., **Treffner**, P. J., & Barrett, R. S., & White, R. (2000). Perceptual and biomechanical constraints on safe driving: Theoretical issues and experimental approach. In *Proceedings of Road Safety Research, Policing & Education Conference 2000* (pp. 17-22), Brisbane, Australia.
Treffner, P. J., & Morrison, S. M. (Eds.) (2000). *Abstracts and Proceedings of the Fifth Biennial Motor Control & Human Skill Research Workshop*. Southport, QLD: Griffith University Press. Video Video set
Treffner, P. J., & Kelso, J. A. S. (1999). Dynamic encounters: Long-memory during functional stabilization. *Ecological Psychology, 11*, 103-137. Video
Treffner, P. J. (1999). The common structure of concepts is the affordance in the ecology. Commentary on Ruth Millikan's "A common structure of individuals, stuffs, and real kinds". *Behavioral and Brain Sciences, 22,* 729-733.
Treffner, P. J. (1999). Resonance constraints on between-person polyrhythms. In M. A. Grealy and J. A. Thomson (Eds.), *Studies in perception and action V* (pp. 165 – 169). Mahwah, NJ: Erlbaum. Video
Riley, M. A., Amazeen, E. L., Amazeen, P. G., **Treffner**, P. J., & Turvey, M. T. (1997). Effects of temporal scaling and attention on the asymmetric dynamics of bimanual coordination. *Motor Control, 1,* 263-283.
Amazeen, E., Amazeen, P., **Treffner**, P. J., & Turvey, M. T. (1997). Attention and handedness in bimanual coordination dynamics. *Journal of Experimental Psychology: Human Perception and Performance, 23,* 1552-1560. Video
Treffner, P. J., & Kelso, J. A. S. (1997). Scale-invariant memory during functional stabilization. In M. Schmuckler and J. M. Kennedy (Eds.), *Studies in perception and action IV (*pp. 275-279). Mahwah, NJ: Erlbaum. Video
Treffner, P. J., & Kelso, J. A. S. (1996). Generic mechanisms of coordination in special populations. *Behavioral and Brain Sciences, 19,* 89.
Treffner, P. J., & Turvey, M. T. (1996). Symmetry, broken symmetry, and the dynamics of bimanual coordination. *Experimental Brain Research, 107,* 463-478. Video
Treffner, P. J., & Turvey, M. T. (1995). Handedness and the asymmetric dynamics of bimanual rhythmic coordination. *Journal of Experimental Psychology: Human Perception and Performance, 21,* 318-333. Video
Treffner, P. J., & Kelso, J. A. S. (1995). Functional stabilization of unstable fixed-points. In B. Bardy, R. Bootsma, and Y. Guiard (Eds.) *Studies in perception and action III*, pp. 83-86. Mahwah, NJ: Erlbaum. Video
Treffner, P. J., & Kelso, J. A. S. (1995). Functional stability of perception-action dynamics. In

Proceedings of the Association for Research in Vision and Opthalmology (ARVO), S357.
Treffner, P. J., & Turvey, M. T. (1993). Resonance constraints on rhythmic movement. *Journal of Experimental Psychology: Human Perception and Performance, 19,* 1221-1237. Video
Schmidt, R. C., **Treffner**, P. J., Shaw, B. K., & Turvey, M. T. (1992). Dynamical aspects of learning an interlimb rhythmic movement pattern. *Journal of Motor Behavior, 24,* 67-83.
Schmidt, R. C., **Treffner**, P. J., & Turvey, M. T. (1991). Neural networks and the first and second rounds of theorizing on Bernstein's problem. *Human Movement Sci., 10,* 117-131.
Schmidt, R. C., Beek, P. J., **Treffner**, P. J., & Turvey, M. T. (1991). Dynamical substructure of coordinated rhythmic movements. *Journal of Experimental Psychology: Human Perception and Performance, 17*, 635-651.
Treffner, P. J. (1991). Resonance constraints on rhythmic movement. In P. J. Beek, R. J. Bootsma, and P. C. W. van Wieringen (Eds.), *Studies in perception and action I* (pp. 330-336). Amsterdam, Netherlands: Rodopi.
Gonzales, M. E. Q., French, T., & **Treffner**, P. J. (1990). A naturalistic approach to mental representation. In K. J. Gilhooly, M. T. G. Keane, R. H. Logie, and G. Erdos (Eds.), *Lines of thinking: Reflections on the psychology of thought* (pp. 57-86). London, UK: Wiley.
Treffner, P. J. (1990). Ecos and logos. *Perceiving-acting workshop review, 5,* 51-53.
Treffner, P. J. (1989). Ecological coupling: The dynamics of perception and action. *The General Systems Bulletin, 19,* 11-13.
Treffner, P. J. (1987). Ecological connectionism and animal-environment mutuality. In M. Caudill (Ed.), *Proceedings of IEEE First International Conference on Neural Networks, Vol. 2* (pp. 813-820). San Diego: IEEE Press.

INVITED GUEST LECTURES

Treffner, P. J. (2014). Safety, attention and distracted driving. Hamilton Council, New Zealand. Video
Treffner, P. J. (2013). Attentive driving. Waipa Council, New Zealand. Video
Treffner, P. J. (2013. Coordination and affordances. Australasian Skill Acquisition Research Group (ASARG) conference. Video
Treffner, P. J. (2012). Direct perception, ecological realism. Department of Philosophy, Waikato University. Video
Treffner, P. J. (2012). Affordances, technology, and safety. Department of Psychology, Waikato University. Video
Treffner, P. J. (2012). Attention and distracted driving. Hamilton Council, New Zealand.
Treffner, P. J. (2011). Attention and distraction: Challenges for 21st century mobile communication. Fonterra, Hamilton, New Zealand.
Treffner, P. J. (2010). Information and distraction. Bay of Plenty Polytechnic, Tauranga, New Zealand.
Treffner, P. J. (2010). Information, attention, and ecological interface design. Human Systems Group, Defence Technology Agency, New Zealand Defence Force, Auckland.
Treffner, P. J. (2010). Attention and mobile communication devices. Fulton Hogan, Auckland.
Treffner, P. J. (2004). Dynamics of gestural communication. Invited Guest Lecture. Advanced Telecommunications Research Institute International (ATR), Kyoto, Japan.
Treffner, P. J. (2004). Ecological and dynamical approaches to language and communication. Invited Guest Lecture Series, Japanese Society for Developmental Psychology, Tokyo, Japan.
Treffner, P. J. (2001). Time to contact: David Lee's contributions to ecological psychology. Invited Guest Lecture, *5th Annual Symposium on Perception & Action*, Deakin University, March, 2001.
Treffner, P. J. (2000). Human balance: The fractal approach. Invited Guest Lecture, Department of Rehabilitation Sciences, Hong Kong Polytechnic University.
Treffner, P. J. (2000). Dynamics of attention and handedness. Invited Guest Lecture, Department of Psychology, Chinese University of Hong Kong.
Treffner, P. J. (2000). Dynamics of functional stabilisation. Invited Guest Lecture, Department of Psychology, Chinese University of Hong Kong.

Treffner, P. J. (1998). The ecological approach to motor control, rhythm, and music. Invited Keynote Address, *Third International/Brazilian Conference on Cognitive Science*, UNESP, Sao Paolo, Brazil.

Treffner, P. J. (1997). Resonance constraints on social coordination. Invited Keynote Address, *Fourth Biennial Motor Control & Human Skill Research Workshop*, Perth, Australia.

Treffner, P. J. (1997). Informational invariants and stochastic memory in the coordination dynamics of skilled action. Invited Keynote Address, *Conference on direct versus representational approaches to perception and cognition.* University of Wollongong, Australia.

Treffner, P. J. (1996). Dynamical systems in physiotherapy and rehabilitation. Invited Guest Lecture, Department of Physiotherapy, Sargent College, Boston University, MA, USA.

Treffner, P. J. (1996). Dynamical systems in experimental psychology. Invited Guest Lecture, Department of Psychology, Ohio State University, OH, USA.

Treffner, P. J. (1996). Dynamics, affordances, and ecological reality. Invited Keynote Address, *Second International/Brazilian Conference on Cognitive Science*, Universidade Estadual do Norte Fluminense, Rio de Janeiro, Brazil.

AWARDS AND GRANTS

Treffner, P. J., Barrett, R. S., Adams, L., Thornton, J. R., & Kim, N. (2003-2005). Dynamics of locomotion: Visualisation in skill acquisition & rehabilitation. *Australian Research Council (ARC) Discovery:* ***A$140,000****.* Video

Treffner, P. J. (2002). Director, Complex Active Visualisation Lab. *Griffith University Major Infrastructure*. ***A$1.5M****.* Video

Estivill-Castro, V., **Treffner**, P. J., Sattar, A., Thornton, J., Pullan, & Barrett, R. (2003). Perception, action, reasoning, and learning for intelligent mobile agents. *Griffith U. Infrastructure:* ***A$78,000****.*

Treffner, P. J. (2002-2005). Audio-visual information for speech-hand gestures. *ARC Discovery:* ***A$140,000****.*

Treffner, P. J. (1999-2001). Speech-hand interaction. *ARC Large****: A$127,000****.*

Treffner, P. J., & Barrett, R. (2000-2002). Perceptual and biomechanical constraints on driving performance. *ARC SPIRT (Strategic Partnerships in Industry):* ***A$118,395****.* Video

Treffner, P. J., Summers, J. J., & Byblow, W. D. (1997). Dynamics of attentional and intentional asymmetries in human coordination. *ARC:* ***A$15,149****.*

Treffner, P. J., Barrett, R. S., & Gass, E. (1998). Motor coordination and dynamics laboratory. *Griffith University Infrastructure Grant:* ***A$71,090****.*

Treffner, P. J., Summers, J. J., & Byblow, W. D. (1996). Attentional asymmetries in human perceptual-motor coordination. *University of Southern Queensland - Team Project Research Program:* ***A$18,000****.*

Treffner, P. J. (1993). American Psychological Association (APA) Science Directorate Dissertation Research Award***: US$2000****.*

CONFERENCES ORGANISED (MAIN ORGANISER)

Treffner, P. J. (Ed.) (2003). *12th International Conference on Perception & Action: ICPA 12,* Gold Coast, Australia. Video Video set

Treffner, P. J. (Ed.) (2000). *5th Biennial Motor Control and Human Skill Research Workshop*, Gold Coast, Australia. Video Video set