

Angebot einer interdisziplinären Blockveranstaltung:

Tier und Wir - Kognition bei Tieren, aktuelle Fragen der Verhaltensbiologie und deren Implikation für die Gesellschaft

Topics:

- **Vom Tier zum Menschen - Entwicklung der Kognition**
- **Gesellschaftliche Rolle von Tieren, - Die Mensch- Tierbeziehung**
- **Juristische Stellung von Tieren im Grundgesetz als auch in der Tier- und Naturschutzgesetzgebung**

Angeboten wird eine Blockveranstaltung von 4 oder 2x2 Tage mit 28 SWH

Veranstaltungsleiter: Dr. Karsten Brensing (Verhaltensbiologe)

Veranstaltungsart: Seminar

Leistungsnachweis: Regelmäßige Teilnahme, Referat

Beginn: **WS 2017**

Interdisziplinäre Lehrveranstaltung

Die Veranstaltung richtet sich an Studenten, die in ihrer beruflichen Zukunft mit lebenden Tieren arbeiten oder für diese direkt oder indirekt verantwortlich sind oder sich verantwortlich fühlen. Dies inkludiert auch technische Studiengänge bei denen Eingriffe in die Natur eine Relevanz haben. Ferner an Studenten der Pädagogik der entsprechenden unterschiedlichen Natur- oder Geisteswissenschaftlichen Disziplinen. Die Interessenten kommen somit aus folgenden Fachrichtungen:

- Biologie (Tierhaltung, Verhaltensforschung, Tierversuche* in den unterschiedlichsten Fachrichtungen)
- Tiermedizin (Tierhaltung, Tierversuche*)
- Humanmedizin (Tierversuche*)
- Landwirtschaft (Tierhaltung)
- Ethik- und Moralforschung (gesellschaftlicher Wandel im Umgang mit Tieren)
- Recht (Tierrechte, Theorie und Praxis, national und international)
- Politik (Aspekte des Umgangs mit Minderheiten, gesellschaftlicher Wandel)

- Verwaltung im Bereich Tier- und Naturschutz
- Sozialwissenschaft (Mensch - Tierinteraktion, Tiergestützte Therapie)
- Psychologie (Mensch - Tierinteraktion, Tiergestützte Therapie, menschliches Verhalten und dessen Ursprung im Tierreich)
- Ethnologie (menschliches Verhalten und dessen Ursprung im Tierreich)
- Anthropologie (menschliches Verhalten und dessen Ursprung im Tierreich)
- Künstliche Intelligenz (Entwicklung der menschlichen Intelligenz als Reaktion auf ein komplexes Sozialleben)
- Pharmakologie (Tierversuche*)
- Lebensmittelchemie (Tierversuche*)
- Ökotoxikologie (Tierversuche*)
- Bau, Bergbau und Verkehr (in Verbindung mit Eingriffen in die Natur)
- Pädagogik der genannten Disziplinen
- u.a. Interessenten

* Die vermittelten Inhalte ergänzen die versuchstierkundliche Qualifikation FELASA B.

Hintergrund der Lehrveranstaltung

Bestseller wie Wohllebens *Das Seelenleben der Tiere* oder Prechts *Tiere denken* zeugen von großem öffentlichem Interesse am Thema Tier. Dieses Interesse spiegelt einen gesellschaftlichen Wandel wieder, bei dem das Wohlergehen der Tiere immer mehr an Bedeutung gewinnt. Neue Erkenntnisse der Verhaltensbiologie, der Neurologie sowie der Endokrinologie werfen in diesem Zusammenhang aber vielfältige moralische Fragen zu unserem Selbstverständnis im Umgang mit Tieren auf.

Die gesellschaftliche Diskussion erfolgt oft sehr emotional und ohne wissenschaftlicher Grundlage. Zudem ist unser Verhältnis zu Tieren ausgesprochen ambivalent. Hunde betrachten wir als Familienangehörige und Schweine werden zu Millionen pro Jahr verspeißt. Glaubt man verschiedenen renommierten Juristen, Ethikern und Politikwissenschaftlern, dann stehen wir vor einem Umdenken in unserem Verhältnis zu Tieren. Doch nur einer kleinen Gruppe von Verhaltensforschern sind die wissenschaftlichen Grundlagen, auf denen eine sachliche Diskussion erfolgen kann, bekannt. Das Wissen der Allgemeinheit aber auch der Praktiker in der Tierhaltung sowie der gesellschaftlichen Entscheidungsträger fußt zu großen Teilen auf einem behavioristischen Weltbild, dass in der Biologie seit ca. zwei Dekaden als zu eingeschränkt betrachtet wird.

Die Lehrveranstaltung hat das Ziel, Interessenten aus den verschiedenen Fachrichtungen die Grundlagen der aktuellen verhaltensbiologischen Erkenntnisse nahe zu bringen und die Studenten zu einer sachlichen Diskussion zu befähigen. Es soll weiterhin in die zugrundeliegende wissenschaftliche Methodik eingeführt werden und der selbstständige Zugang zu den fachfremden Publikationen soll erleichtert werden. Abschließend sollen die gewonnenen Erkenntnisse im gesellschaftlichen, politischen und juristischen Kontext erörtert werden.

Die Veranstaltung thematisiert explizit keine Diskussion über artgerechte Haltung oder das Training von Tieren. Es geht um die Vermittlung eines Verständnisses der kognitiven und emotionalen Möglichkeiten und Grenzen von Tieren. Dieses Wissen soll es den Studenten, in ihrem späteren beruflichen Umfeld ermöglichen, sachlich und kompetent zu agieren, ohne in homozentrischen und von unserer Kultur geprägten Betrachtungen und Verhaltensweisen gefangen zu sein.

Inhalt der Lehrveranstaltung

(In den 14 Doppelstunden (90 min) werden folgende Kenntnisse und Fertigkeiten vermittelt.)

Tag 1

Unterrichtseinheit 1

- Einführung in die Veranstaltung
- Was ist Verhaltensbiologie und welche Fragen können beantwortet werden?
- Grundlagen der Verhaltensbiologie und historische Forschung:
 - Klassische und operante Konditionierung
 - Behaviorismus
 - Aktuelle Forschungsrichtungen

Unterrichtseinheit 2

- Grundlagen der Neurologie:
 - Reizleitung
 - Wahrnehmung
 - Kategoriebildung
 - Kognition

Tag 2 (langer Tag)

Unterrichtseinheit 3

- Von der Objektpermanenz zur Biographie

Unterrichtseinheit 4

- Denken:
 - logisches Denken
 - abstraktes Denken
 - Metakognition

Unterrichtseinheit 5

- Kommunikation
 - Kommunikationssysteme
 - Kontextbezogene Rufe
 - Pointing (das Mysterium der Zeigegeste)
 - Dialekt
 - vokales Lernen (als Voraussetzung der Entwicklung einer Sprachen)

Unterrichtseinheit 6

- Selbstbewusstsein
 - Was ist Selbstbewusstsein?
 - vier Verhaltensweisen im Umgang mit einem Spiegel
 - Tiere, die im Spiegelexperiment getestet wurden

Unterrichtseinheit 7

- Sozialverhalten
 - Theory of Mind
 - Mitgefühl
 - Fähnris
 - Moral im Tierreich?

Tag 3

Unterrichtseinheit 8

- Kultur im Tierreich

Unterrichtseinheit 9

- Gefühle bei Tieren:
 - Grundlagen der Endokrinologie
 - Freude (als wesentlicher Mechanismus der positiven Verstärkung von Verhalten bei Mensch und Tier)
 - Bindung
 - Trauer

Unterrichtseinheit 10

- Überinterpretation & Wissenschaftskritik
 - Der Egoismus der Herde (als Beispiel wie einfache Mechanismen zu komplexen und scheinbar ethisch wertvollem Verhalten führen können)
 - Pointing bei Hunden und die Koevolution mit dem Menschen
 - Das Spiegelexperiment – 40 Jahre Forschung und Weiterentwicklung – Veränderung im Experimental Design in Abhängigkeit zum Wissensstand
 - Möglichkeiten und Grenzen der vergleichenden Verhaltensbiologie

Unterrichtseinheit 11

- Mechanismen in unserem Rechtssystem:
 - Juristische Trennung von Tier- und Umweltschutz
 - Möglichkeiten und Grenzen von Schutzgesetzen
 - Brauchen wir Schutzgesetze?
 - Gibt es Alternativen?

Tag 4

Unterrichtseinheit 12 & 13

12 Studentenvorträge (einzeln oder in Zweiergruppen) zu 15min.

Den Studenten werden bei Anmeldung ein Handout mit speziellen Anweisungen zur Erstellung der Vorträge sowie zwei Links zur Verfügung gestellt:

- Link A - Dropbox mit drei Sonderausgaben zu folgenden Themen:
 - Kultur
 - Logisches Denken
 - Fähnris und Moral
- Link B – SurveyMonkey:
 - hier können die Studenten den von ihnen ausgewählten Vortrag auswählen (Dopplungen sind ausgeschlossen)
 - es kann aber auch ein eigenes Vortragsthema vorgeschlagen werden

Der Vortrag kann im Vorfeld der Veranstaltung erstellt werden. Da die Sonderausgaben in Auszügen bereits während der Veranstaltung besprochen werden und die Vorträge erst am letzten Tag präsentiert werden, hat jeder die Möglichkeit seinen Vortrag entsprechend anzupassen.

Unterrichtseinheit 14

- Abschlussdiskussion

Methodik

- Seminar mit Vorlesung
- Arbeit mit Originalliteratur
- An Hand der zugrundeliegenden Forschung wird an Beispielen in die wissenschaftliche Methodik (Versuchsplanung, Versuchsdurchführung, Datenauswertung und Protokollierung) und Literatur eingeführt.
- Arbeit mit Sonderausgaben zu aktuellen Themen (Kultur; Logisches Denken; Fähnris und Moral)
- Erstellung und Präsentation von Vorträgen (bei Bedarf: Teilnote A)
- Gruppendiskussion an kritischen Fragen (bei Bedarf: Teilnote B)

Zu meiner Person

Ich bin studierter Meeresbiologe aus Kiel und habe an der Freien Universität Berlin in der Verhaltensbiologie bei Prof. Todt promoviert. Mein Thema war die Interaktion zwischen Delfinen und Menschen. In den Jahren zwischen 2004 und 2014 habe ich als wissenschaftlicher Leiter des Deutschlandbüros der weltweit größten Wal- und Delfinschutzorganisation WDC gearbeitet. Seither arbeite ich als freier Consultant, Autor und Lektor (Lehrerfahrung an UNI und höheren Berufsfachschulen ca. 400 SWS).

Mein persönlicher wissenschaftlicher Interessenschwerpunkt liegt bei der Kognition von Tieren und dessen evolutiver Entwicklung. Ich habe zu diesem Thema 2013 im Herder Verlag das Buch *Persönlichkeitsrechte für Tiere* veröffentlicht. Im Herbst 2017 wird ein weiteres Buch zu dem Thema „Das Mysterium der Tiere – Was sie denken, was sie fühlen“ im Aufbau Verlag erscheinen. Bedingt durch die Mitarbeit in verschiedenen wissenschaftlichen Arbeitsgruppen oder Gremien (im Bereich Umweltschutz: TSG11 der EU Kommission; im Bereich Tierschutz: Mitarbeit an der Überarbeitung des deutschen Säugetiergutachten) bin ich auch mit der aktuellen Rechtslage sowie mit der politischen und gesellschaftlichen Dimension zum Thema Mensch – Tier vertraut.

Eine Vita mit Publikationsliste wird auf Anfrage bereitgestellt.

Literatur

Bei der folgenden Liste handelt es sich um eine, noch nicht final bearbeitete, Literaturliste meines im September im Aufbau Verlag erscheinendem Buch: *Das Mysterium der Tiere – Was sie denken, was sie fühlen*. Die Liste soll also lediglich einen ersten Eindruck der verwendeten Literatur vermitteln. Besonderes Augenmerk werde ich aber auf thematische Sonderausgabe legen, wie:

- Special Section: Reasoning Versus Association in Animal Cognition: Current Controversies and Possible Ways Forward. *Journal of Comparative Psychology*. 2016 Volume 130, Issue 3 (6 Artikel)
- Special Issue: Proximate Mechanisms of Animal Personality. *Behaviour* 2016 Volume 153, Issue 13-14 (14 Artikel)
- book publication: *Animal Creativity and Innovation - A volume in Explorations in Creativity Research*. Edited by: Allison B. Kaufman and James C. Kaufman Elsevier Inc. 2015 ISBN: 978-0-12-800648-1 (18 Artikel)

weitere:

- Abigail Z. Rajala, Katharine R. Reininger, Kimberly M. Lancaster, Luis C. Populin 2010 Rhesus monkeys (*Macaca mulatta*) do recognize themselves in the mirror: implications for the evolution of self-recognition. *Public Library of Science One*
- Adam R. Reddon, Constance M. O'Connor, Susan E. Marsh-Rollo, Sigal Balshine (2012) Effects of isotocin on social responses in a cooperatively breeding fish. *Animal Behaviour* Volume 84, Issue 4, Pages 753–760
- Albon, S. D., Staines, H. J., Guinness, F. E. & Clutton-Brock, T. H. 1992 Density-dependent changes in the spacing behaviour of female kin in red deer. *Journal of Animal Ecology*, 61, 131-137.
- Alex H. Taylor, Rachael Miller and Russell D. Gray 2012 New Caledonian crows reason about hidden causal agents. *PNAS* Vol. 109, no. 40, pp 16389–16391
- Alexander Q. Vining, Heidi L. Marsh (2015) Information seeking in capuchins (*Cebus apella*): A rudimentary form of metacognition? *Animal Cognition* Volume 18, Issue 3, pp 667–681
- Alexandra G. Rosati & Laurie R. Santos 2016 Spontaneous Metacognition in Rhesus Monkeys. *Psychological Science* doi: 10.1177/0956797616653737
- Allen SJ, Bejder L, Krutzfeldt M. 2011 Why do Indo-Pacific bottlenose dolphins (*Tursiops* sp.) carry conch shells (*Turbinella* sp.) in Shark Bay, Western Australia? *Mar. Mamm. Sci.* 27, 449–454.
- ALLMAN, J. M., WATSON, K. K., TETRAULT, N. A. & HAKEEM, A. Y. (2005). Intuition and autism: a possible role for Von Economo neurons. *Trends in Cognitive Science* 9, 367–373.
- Amanda C. Jones and Samuel D. Gosling (2005) Temperament and personality in dogs (*Canis familiaris*): A review and evaluation of past research. *Applied Animal Behaviour Science* Volume 95, Issue 1, Pages 1-53

- Ana G. Popa-Lisseanu, Fabio Bontadina, Olga Mora, Carlos IbÁñez 2008 Highly structured fission–fusion societies in an aerial-hawking, carnivorous bat. *Animal Behaviour* Volume 75, Issue 2, Pages 471–482
- André Gonçalves 2015 Blanket stealing in captive chimpanzees (*Pan troglodytes verus*): An observed case of spontaneous fairness related behavior. *Cadernos do GEEVH* 4 (1) pp. 25–40
- Andrew D Foote, Rachael M Griffin, David Howitt, Lisa Larsson, Patrick J.O Miller and A Rus Hoelzel 2006 Killer whales are capable of vocal learning. *Biol. Lett.* vol. 2 no. 4 509–512
- Andrew Whiten, Antoine Spiteri, Victoria Horner, Kristin E. Bonnie, Susan P. Lambeth, Steven J. Schapiro, Frans B.M. de Waal (2007) Transmission of Multiple Traditions within and between Chimpanzee Groups. *Current Biology* 17(12) pp. 1038 - 1043
- Andrews, K. (2009): Understanding norms without a theory of mind. *Inquiry*, 52(5), 433–448.
- Angela S. Stoeger, Daniel Mietchen, Sukhun Oh, Shermin de Silva, Christian T. Herbst, Soowhan Kwon, W. Tecumseh Fitch 2012 An Asian Elephant Imitates Human Speech. *Current Biology* Volume 22, Issue 22, pp 2144–2148
- Anke Brennecke, Jorge Groß, Hansjörg Küster, Raimund Leibold, Karl-Wilhelm Leienbach, André Linnert, Martin Post, Anette Schuck (2012) *Biosphäre Sekundarstufe II - Themenbände: Ökologie. Schülerbuch Taschenbuch* Cornelsen Verlag
- Anna Smirnova, Zoya Zorina, Tanya Obozova, Edward Wasserman (2015) Crows Spontaneously Exhibit Analogical Reasoning. *Volume 25, Issue 2, p256–260*
- Archie, Elizabeth A.; Cynthia J. Moss; Susan C. Alberts (March 2005). "The ties that bind: genetic relatedness predicts the fission and fusion of social groups in wild African elephants". *Proceedings of the Royal Society B*. 273: 513–522.
- Arriaga G, Zhou EP, Jarvis ED (2012) Of Mice, Birds, and Men: The Mouse Ultrasonic Song System Has Some Features Similar to Humans and Song-Learning Birds. *PLoS ONE* 7(10): e46610. doi:10.1371/journal.pone.0046610
- Asendorpf, J. B., Warkentin, V., & Baudonniere, P.-M. (1996). Self-Awareness and Other Awareness II: Mirror Self-Recognition, Social Contingency Awareness, and Synchronic Imitation. *Developmental Psychology*, 32 (2), 313–321.
- Aust U, Range F, Steurer M, Huber L (2008) Inferential reasoning by exclusion in pigeons, dogs, and humans. *Anim Cogn* 11(4):587–597. doi:10.1007/s10071-008-0149-0
- Aust U, Range F, Steurer M, Huber L (2008) Inferential reasoning by exclusion in pigeons, dogs, and humans. *Anim Cogn* 11(4):587–597. doi:10.1007/s10071-008-0149-0
- Barabasi, A.L. & Albert, R. (1999) Emergence of scaling in random networks. *Science*, 286, 509–512.
- Barrett-Lennard, L. G., Deecke, V. B., Yurk, H., & Ford, J. K. B. (2001). A sound approach to the study of culture. *Behavioral & Brain Sciences*, 24, 325–326.
- Barrett-Lennard, L. G., Deecke, V. B., Yurk, H., & Ford, J. K. B. (2001). A sound approach to the study of culture. *Behavioral & Brain Sciences*, 24, 325–326.
- Bates, L.A., Sayialel, K.N., Njiraini, N., Poole, J.H., Moss, C., and Byrne, R.W. (2008). African elephants have expectations about the locations of out-of-sight family members. *Biol. Lett.* 4, 34–36
- Bekoff, M. (1995). Play signals as punctuation: The structure of social play in canids. *Behaviour* 132, 419–429.
- Benno Woelfing, Arne Traulsen, Manfred Milinski, Thomas Boehm: Does intra-individual major histocompatibility complex diversity keep a golden mean? *Phil. Trans. R. Soc. Volume: 364 Issue: 1513 (2009) DOI: 10.1098/rstb.2008.0174.*
- Bercovitch, F. B. and Berry, P. S. M. 2013 Herd composition, kinship and fission–fusion social dynamics among wild giraffe. *Afr. J. Ecol.*, 51: 206–216
- Berg KS, Delgado S, Okawa R, Beissinger SR, Bradbury JW (2011) Contact calls are used for individual mate recognition in free-ranging green-rumped parrotlets, *Forpus passerinus*. *Anim Behav* 81:241–248
- Berridge, K.C., and Kringelbach, ML (2008). Affective neuroscience of pleasure: reward in humans and animals. *Psychopharmacology* 199, 457–480.
- Bettina Pollok, Helmut Prior, Onur Guentuerkuen: Development of object permanence in food-storing magpies (*Pica pica*).. In: *Journal of Comparative Psychology*. 114, 2000, S. 148–157
- Bird CD, Emery NJ (2009) Rooks use stones to raise the water level to reach a floating worm. *Current Biology* 19: 1410–1414.
- Bojanowski, E. (2002). Vocal behaviour in bottlenose dolphins (*Tursiops truncatus*): Ontogeny and contextual use in specific interactions. Doctoral dissertation, Free University of Berlin, Germany.
- Bräuer J, Call J, Tomasello M (2005) All Great Ape species follow gaze to distant locations and around barriers. *J Comp Psychol* 119: 145–154.
- Bräuer, J., Kaminski, J., Riedel, J., Call, J. & Tomasello, M. 2006 Making inferences about the location of hidden food: social dog, causal ape. *J. Comp. Psychol.* 120, 38–47.
- Bravery BD, Nicholls JA, Goldizen AW 2006 Patterns of painting in satin bowerbirds *Ptilonorhynchus violaceus* and males' responses to changes in their paint. *J Avian Biol* 37:77–83
- Brensing, K., Linke, K. & Todt, D., 2001 Sound source location by phase differences of signals. *J. Acoust. Soc. America* 109: pp. 430–433.
- Brensing, Karsten (2013) *Persönlichkeitsrechte für Tiere: Die nächste Stufe der moralischen Evolution*. Verlag Herder GmbH, Freiburg im Breisgau ISBN: 978-3451305139 pp. 1–240
- Briffa M, Weiss A (2010) Animal Personality. *Current Biology* 20: R912–R914.
- Brockmann H. Jane 1985 Tool use in digger wasps (Hymenoptera: Sphecinae). *Psyche* 92: pp 309–330
- Brosnan, S. F. & de Waal, F. B. M. (2003) Monkeys reject unequal pay. *Nature* 425, 297–299
- Brosnan, S. F., Flemming, T., Talbot, C. F., Mayo, L., & Stoinski, T. (2010). Orangutans (*Pongo pygmaeus*) do not form expectations based on their partner's outcomes. *Folia Primatologica*, 82, pp 56–70.
- Brosnan, S. F., Schiff, H. C., & de Waal, F. B. M. (2005). Tolerance for inequity may increase with social closeness in chimpanzees. *Proceedings of the Royal Society B*, 272, pp 253–258
- Brosnan, S. F., Talbot, C., Ahlgren, M., Lambeth, S. P., & Schapiro, S. J. (2010). Mechanisms underlying responses to inequitable outcomes in chimpanzees, *Pan troglodytes*. *Animal Behaviour*, 79(6), 1229–1237.
- Bruck JN. 2013 Decades-long social memory in bottlenose dolphins. *Proc R Soc B* 280: 20131726
- Burghardt, G.M. 2014 A brief glimpse at the long evolutionary history of play. *Anim. Behav. Cogn.* 1, 90–98
- Buston, P., 2003. Size and growth modification in clownfish. *Nature* 424:145–146.

- BUTTI, CAMILLA; CHET C. SHERWOOD; ATIYA V. HAKEEM; JOHN M. ALLMAN and PATRICK R. HOF. 2009 Total number and volume of von Economo neurons in the cerebral cortex of cetaceans. *JOURNAL OF COMPARATIVE NEUROLOGY* 515(2):243-259.
- Byrne RW, Bates LA, Moss CJ (2009) Elephant cognition in primate perspective. *Comp Cog Behav Rev* 4:1–15
- C. Tate Holbrook, Colin M. Wright, Jonathan N. Pruitt (2014) Individual differences in personality and behavioural plasticity facilitate division of labour in social spider colonies. *Animal Behaviour* Volume 97, Pages 177–183
- C.N. Slobodchikoff, J. Kiriazis, C Fischer, E. Creef, Semantic information distinguishing individual predators in the alarm calls of Gunnison's prairie dogs, *Anim. Behav.* 42 (1991) 713–719.
- Caldwell, M. C. & Caldwell, D. K. 1965. Individualized whistle contours in bottlenose dolphins (*Tursiops truncatus*). *Science*, 207, 434–435. & Caldwell, M. C., Caldwell, D. K. & Tyack, P. L. 1990. Review of the signature-whistle hypothesis for the Atlantic bottlenose dolphin. In: *The Bottlenose Dolphin* (Ed. by S. Leatherwood & R. R. Reeves), pp. 199–233. New York: Academic Press.
- Caldwell, M.C. & Caldwell, D.K., (1966) Epimeletic (Care-giving) behavior in cetacea. In: Norris, K.S. (ed.). *Whales, Dolphins and Porpoises*. University of California Press, Berkeley and Los Angeles. Chapter 33: 755-788
- Call J, Carpenter M (2001) Do apes and children know what they have seen? *Anim Cogn* 3(4):207–220
- Call, J. 2004 Inferences about the location of food in the great apes (*Pan paniscus*, *Pan troglodytes*, *Gorilla gorilla*, and *Pongo pygmaeus*). *J. Comp. Psychol.* 118, 232–241.
- Cammaerts, M-C. & Cammaerts, R. (2015) Are Ants (Hymenoptera, Formicidae) Capable of Self Recognition? *Journal of Science* 5, 521-532. doi: 10.1093/jisesa/ieu096. 13
- Castro, L., & Wasserman, E. A. (2013). Information-seeking behavior: Exploring metacognitive control in pigeons. *Animal Cognition*, 16, 241-254
- Chaminda P. Ratnayake & Eben Goodale & Sarath W. (2010) Kotagama Two sympatric species of passerine birds imitate the same raptor calls in alarm contexts. *Naturwissenschaften* 97:103–108
- Cheke LG, Loissel E, Clayton NS (2012) How Do Children Solve Aesop's Fable? *PloS one* 7: e40574 doi:10.1371/journal.pone.0040574
- Chen MK, Lakshminarayanan V, Santos LR (2006) The evolution of our preferences: evidence from capuchin monkey trading behavior. *J Polit Econ* 114:517 537
- Chen Q, Panksepp JB, Lahvis GP (2009) Empathy Is Moderated by Genetic Background in Mice. *PLoS ONE* 4(2)
- Chen Y, Liu Q, Su Q, Sun Y, Peng X, He X, et al. (2016) 'Compromise' in Echolocation Calls between Different Colonies of the Intermediate Leaf-Nosed Bat (*Hipposideros larvatus*). *PLoS ONE* 11(3): e0151382. doi:10.1371/journal.pone.0151382
- Christian Kandler, Rainer Riemann, Frank M. Spinath, Alois Angleitner; 2010. Sources of Variance in Personality Facets: A Multiple-Rater Twin Study of Self-Peer, Peer-Peer, and Self-Self (Dis)Agreement. *Journal of Personality* Volume 78, Issue 5, pp 1565–1594
- Christian Schloegl, Judith Schmidt, Markus Boeckle, Brigitte M. Weiß and Kurt Kotrschal 2012 Grey parrots use inferential reasoning based on acoustic cues alone. *Proc. R. Soc. B* doi:10.1098/rspb.2012.1292
- Christophe Boesch (2005) Joint cooperative hunting among wild chimpanzees: Taking natural observations seriously. *Commentary/Tomasello et al.: Understanding and sharing intentions. BEHAVIORAL AND BRAIN SCIENCES* (2005) 28:5
- Christophe Boesch (2005) Joint cooperative hunting among wild chimpanzees: Taking natural observations seriously. *Commentary/Tomasello et al.: Understanding and sharing intentions. BEHAVIORAL AND BRAIN SCIENCES* (2005) 28:5
- Christophe Boesch (2012) From material to symbolic cultures: Culture in primates. In *The Oxford Handbook of Culture and Psychology* edited by Jaan Valsiner ISBN13: 978-0-19-539643-0
- Christopher Krupenye, Fumihiro Kano, Satoshi Hirata, Josep Call, Michael Tomasello (2016). "Great apes anticipate that other individuals will act according to false beliefs". *Science*. 354 (6308): 110–114
- Christopher R. Birkinshaw (1999) Use of Millipedes by Black Lemurs to Anoint Their Bodies. *Folia Primatol* Vol 70, pp 170–171
- Christopher R. Olson, Devin C. Owen, Andrey E. Ryabinin, Claudio V. Mello (2014) Drinking Songs: Alcohol Effects on Learned Song of Zebra Finches. *PLOS one* <http://dx.doi.org/10.1371/journal.pone.0115427>
- Chun Siong Soona, Anna Hanxi Heb, Stefan Bodeb, and John-Dylan Haynesa (2013) Predicting free choices for abstract intentions. *Proceedings of the National Academy of Sciences (PNAS)* vol. 110 no. 15
- CITES ist das internationale Abkommen zu Handel mit geschützten Tieren und Pflanzen (Convention on International Trade in Endangered Species of Wild Fauna and Flora) www.cites.org
- Claus Lamma, Jasminka Majdandžića, (2015) The role of shared neural activations, mirror neurons, and morality in empathy – A critical comment. *Neuroscience Research*, Volume 90, January 2015, Pages 15–24
- Connor, R. C. & Norris, K. S., (1982) Are dolphins reciprocal altruists?. *The American Naturalist* 119(3): 385–372
- Craig Haney; Curtis Banks; Philip G. Zimbardo 1973 Interpersonal Dynamics in a Simulated Prison. *International Journal of Criminology and Penology* 1, pp. 69-97 oder <https://de.wikipedia.org/wiki/Stanford-Prison-Experiment>
- Crews, David; Garstka, William R. (1982). "The Ecological Physiology of a Garter Snake". *Scientific American* 247: 159–168.
- Crockford, C., Herbinger, I., Vigilant, L. & Boesch, C. 2004 Wild chimpanzees produce group-specific calls: a case for vocal learning? *Ethology* 10, 221-243
- Croft, D.P., Krause, J., and James, R. (2004). Social networks in the guppy (*Poecilia reticulata*). *Biol. Lett.* 271, 516–519.
- Csaba Molnár, Péter Pongrácz*, Tamás Faragó, Antal Dóka, Ádám Miklósi 2009 Dogs discriminate between barks: The effect of context and identity of the caller. *Behavioural Processes* 82 (2009) 198–201
- Csilla Ari, Dominic P. D'Agostino (2016) Contingency checking and self-directed behaviors in giant manta rays: Do elasmobranchs have self-awareness? *Journal of Ethology* Volume 34, Issue 2, pp 167–174
- Cummins, Scott F. et al.: Extreme Aggression in Male Squid Induced by a β -MSP-like Pheromone. *Current Biology* 2011, Volume 21, Issue 4, 322 - 327
- D. Lukas, T. H. Clutton-Brock 2013 The Evolution of Social Monogamy in Mammals. *Science(online)* 29 Jul 2013
- Daniel B. M. Haun, Christan Nawroth, Josep Call 2011 Great Apes' Risk-Taking Strategies in a Decision Making Task. *PLoS ONE* 6(12): e28801. Doi:10.1371/journal.pone.0028801
- Daniel B.M. Haun, Yvonne Rekers, Michael Tomasello, 2012 Majority-Biased Transmission in Chimpanzees and Human Children, but Not Orangutans. *Current Biology* 22(8):727-31 doi:10.1016/j.cub.2012.03.006

- Daniel T. Blumstein, Lawrence K. Chung, Jennifer E. Smith 2013 Early play may predict later dominance relationships in yellow-bellied marmots (*Marmota flaviventris*). *Proc. R. Soc. B* Volume 280, issue 1759
- Dapporto, L., Turillazzi, S., and Palagi, E. (2006). Dominance interactions in young adult paper wasp (*Polistes dominulus*) foundresses: A playlike behavior? *J. Comp. Psychol.* 120, 394-400.
- DAVID LUSSEAU, BEN WILSON, PHILIP S. HAMMOND, KATE GRELLIER, JOHN W. DURBAN, KIM M. PARSONS, TIM R. BARTON and PAUL M. THOMPSON (2005) Quantifying the influence of sociality on population structure in bottlenose dolphins. *Journal of Animal Ecology* doi: 10.1111/j.1365-2656.2005.01013.x
- Davidsen, J., Ebel, H. & Bornholdt, S. (2002) Emergence of a small world from local interactions: modeling acquaintance networks. *Physical Review Letters*, 88, art. no. 128701.
- Davies, N. B. 1978 Territorial defence in the speckled wood butterfly (*Pararge aegeria*): the resident always wins. *Anim. Behav.* 26, 138–147
- Denise L. Herzog; Fabienne Delfour; Adam A. Pack 2012 Responses of Human-Habituated Wild Atlantic Spotted Dolphins to Play Behaviors Using a Two-Way Human/Dolphin Interface. *International Journal of Comparative Psychology*, 25, 137-165.
- Der Propellerantrieb bei Bakterien: Die Flagellen bestehen aus einem langen, wendelförmigen, etwa 15 bis 20 nm dicken Proteinfaden. Die Drehfrequenz liegt bei ca. 40–50 Hz und mehr. Die bisher Schnellsten sind zwei Archaeenarten (*Methanocaldococcus jannaschii* und *Methanocaldococcus villosus*) mit Geschwindigkeiten von bis zu 400 bis 500 bps (Körperlängen pro Sekunde). Ein Sportwagen mit 400bps wäre 6000km/h schnell) <https://idw-online.de/de/news465303>
- Dheeraj S. Roy, Autumn Arons, Teryn I. Mitchell, Michele Pignatelli, Tomás J. Ryan & Susumu Tonegawa 2016 Memory retrieval by activating engram cells in mouse models of early Alzheimer's disease. *Nature* 531, 508–512
- Diana Reiss & Lori Marino (2001) Mirror self-recognition in the bottlenose dolphin: A case of cognitive convergence. *PNAS* vol. 98; no. 10; pp 5937–5942
- Die Epigenetik beschäftigt sich mit der Umweltbedingten Aktivierung und Deaktivierung von Genen ohne, dass dabei der genetische Code verändert wird.
- Dingemanse N. J and Réale D 2005 Natural selection and animal personality. *Behaviour*, Volume 142, Numbers 9-10, 1159-118
- Donald M. Broom, Hilana Sena, Kiera L. Moynihan 2009 Pigs learn what a mirror image represents and use it to obtain information. *Animal Behaviour* Volume 78, Issue 5, Pages 1037–1041
- Dora Biro, Tatyana Humle, Kathelijne Koops, Claudia Sousa, Misato Hayashi, Tetsuro Matsuzawa (2010) Chimpanzee mothers at Bossou, Guinea carry the mummified remains of their dead infants. *Current Biology*, Volume 20, Issue 8, Pages R351–R352;
- Douglas J. Levey, R. Scot Duncan & Carrie F. Levins 2004 Use of dung as a tool by burrowing owls. *Nature* 431, 39
- Douglas, P. H. and Moscovice, L. R. Pointing and pantomime in wild apes? Female bonobos use referential and iconic gestures to request genito-genital rubbing. *Sci. Rep.* 5, 13999; doi: 10.1038/srep13999 (2015).
- Douglas-Hamilton, I., Bhalla, S., Wittemyer, G. and Vollrath, F. 2006. Behavioural reactions of elephants towards a dying and deceased matriarch. *Applied Animal Behaviour Science*, 100 (1–2): 87–102.
- Dudley, R. (2002) Fermenting fruit and the historical ecology of ethanol ingestion: Is alcoholism in modern humans an evolutionary hangover? *Addiction* 97, pp 381–388
- Dudzinski K.M., Sakai M., Masaki K., Kogi K., Hishii T., Kurimoto M. 2003. Behavioural observations of bottlenose dolphins towards two dead conspecifics. *Aquatic Mammals* 29(1):108-116.
- Duffy-Echevarria, E. E., Connor, R. C. & St. Aubin, D. J. 2008 Observations of strandfeeding behavior by bottlenose dolphins (*Tursiops truncatus*) in Bull Creek, South Carolina. *Marine Mammal Science*, 24,
- E. Reindl, S. R. Beck, I. A. Apperly, C. Tennie (2016) Young children spontaneously invent wild great apes' tool-use behaviours. *Proceedings of the Royal Society B* Volume 283, issue 1825
- E.S. Savage-Rumbaugh, E. McDonald, R.A. Sevcik, W.D. Hopkins, E. Rupert, Spontaneous symbol acquisition and communicative use by pygmy chimpanzees [*Pan paniscus*], *J. Exp. Psychol.* 112 (1986) 211–235.
- Elizabeth Loftus: Creating False Memories. *Scientific American*, September 1997, Vol 277 (3), pp. 70–75
- Emma A. Foster, Daniel W. Franks, Sonia Mazzi, Safi K. Darden, Ken C. Balcomb, John K. B. Ford, Darren P. Croft (2012) Adaptive Prolonged Postreproductive Life Span in Killer Whales. *Science* Vol. 337 no. 6100 p. 1313
- Enggist-Dueblin, P., and U. Pfister. 2002 Cultural transmission of vocalizations in ravens, *Corvus corax*. *Animal Behaviour* 64:831–841.
- Enggist-Dueblin, P., and U. Pfister. 2002 Cultural transmission of vocalizations in ravens, *Corvus corax*. *Animal Behaviour* 64:831–841.
- Epstein, Lanza; Skinner, RP; Skinner, BF 1981 "Self-awareness" in the pigeon. *Science* 212 (4495): 695–696
- Esther Clarke, Ulrich H. Reichard, Klaus Zuberbühler (2006) The Syntax and Meaning of Wild Gibbon Songs. *PLOS* <http://dx.doi.org/10.1371/journal.pone.0000073>
- Estrella Triana, Robert Pasnak: Object permanence in cats and dogs. In: *Animal Learning & Behavior*. 9, 1981, S. 135–139
- F Delfoura, K Martenb (2001) Mirror image processing in three marine mammal species: killer whales (*Orcinus orca*), false killer whales (*Pseudorca crassidens*) and California sea lions (*Zalophus californianus*). *Behavioural Processes* Volume 53, Issue 3, Pages 181–190
- Falk, Dean (1975) "Comparative Anatomy of the Larynx in Man and the Chimpanzee: Implications for Language in Neanderthal". *American Journal of Physical Anthropology* 43: 123–132.
- Fertl, D., & Wilson, B. 1997 Bubble use during prey capture by a lone bottlenose dolphin (*Tursiops truncatus*). *Aquatic Mammals*, 23, 113-114.
- Filatova, Olga A.; Fedutin, Ivan D.; Burdin, Alexandr M. and Hoyt, Erich (2007) The structure of the discrete call repertoire of killer whales *Orcinus orca* from Southeast Kamchatka. *Bioacoustics* 16: 261–280
- Fitch, W. T. & Jarvis, E. D. (2012) Birdsong and other animal models for human speech, song, and vocal learning. In: *Language, music and the brain*, ed. M. Arbib, pp. 499–540. MIT Press.
- Flemming, T.M., Thompson, R.K.R., and Fagot, J. (2013) Baboons, like humans, solve analogy by categorical abstraction of relations. *Anim. Cogn.* 16: 519–524
- Foley CAH, Pettorelli N, Foley L (2008) Severe drought and calf survival in elephants. *Biol Lett* 4:541–544
- Foote AL, Crystal JD (2007) Metacognition in the rat. *Curr Biol* 17(6):551–555

- Ford JKB, Ellis GM. 1999. Transients – mammal-hunting killer whales. Vancouver: UBC Press.
- Ford, J. K. B., Ellis, G. M., & Balcomb, K. C., III (2000). Killer whales: The natural history and genealogy of *Orcinus orca* in British Columbia and Washington State (2nd ed.). Vancouver: UBC Press.
- Ford, J.K.B. (1991). Vocal traditions among resident killer whales (*Orcinus orca*) in coastal waters of British Columbia. *Can. J. Zool.*, 69, 1454-1483.
- Fouts, R. S. 1974 Language: Origins, definition, and chimpanzees. *Journal of Human Evolution*, 3, 475–482.
- Frans B.M. de Waal 2006 Bonobo Sex and Society. *Scientific American Special Edition*, Vol 16, issue 2, pp. 14–21.
- Frans B.M. de Waal: "Bonobo Sex and Society," *Scientific American Special Edition*. June 2006, vol 16, issue 2, pp. 14–21.
- Freeland W. J. (1976) Pathogens and the evolution of primate sociality. *Biotropica* 8, 12–24.
- G. A. Bradshaw, Allan N. Schore, Janine L. Brown, Joyce H. Poole and Cynthia J. Moss (2005) Elephant breakdown Social trauma: early disruption of attachment can affect the physiology, behaviour and culture of animals and humans over generations. *NATURE*, VOL 433
- G. A. Bradshaw, Allan N. Schore, Janine L. Brown, Joyce H. Poole and Cynthia J. Moss (2005) Elephant breakdown Social trauma: early disruption of attachment can affect the physiology, behaviour and culture of animals and humans over generations. *NATURE*, VOL 433
- Gabriela-Alina Sauciuc, Tomas Persson, Rasmus Bååth, Katarzyna Bobrowicz, Mathias Osvath (2016) Affective forecasting in an orangutan: predicting the hedonic outcome of novel juice mixes. *Anim Cogn* Volume 19, Issue 6, pp 1081–1092
- Gallup, GG Jr. (1970). "Chimpanzees: Self recognition". *Science* 167 (3914): 86–87
- Gardner, R.A., Gardner, B.T., and Van Cantfort, T.E. (1989), *Teaching Sign Language to Chimpanzees*, Albany: SUNY Press.
- GARLAND, ELLEN C.; ANNE W. GOLDIZEN; MELINDA L. REKDAHL; ROCHELLE CONSTANTINE; CLAIRE GARRIGUE; NAN DAESCHLER HAUSER; M. MICHAEL POOLE; JOOKE ROBBINS and MICHAEL J. NOAD. (2011) Dynamic horizontal cultural transmission of humpback whale song at the ocean basin scale. *CURRENT BIOLOGY* 21(8):687-691.
- Geoffrey North (Editor) 2015 *The Biology of Fun and the Fun of Biology*. *Current Biology* Volume 25, Issue 1, pR1–R2
- Giacomo Bernardi:2011 The use of tools by wrasses (Labridae). *Coral Reefs* doi:10.1007/s00338-011-0823-6
- Gilardi, J.D., Duffey, S.S., Munn, C.A. et al. *J Chem Ecol* (1999) Biochemical Functions of Geophagy in Parrots: Detoxification of Dietary Toxins and Cytoprotective Effects. *Journal of Chemical Ecology*, Volume 25, Issue 4, pp 897–922
- Gordon M. Burghardt 2015 Play in fishes, frogs and reptiles. *Current Biology* Volume 25, Issue 1
- Gordon M. Burghardt, Vladimir Dinets and James B. Murphy 2015 Highly Repetitive Object Play in a Cichlid Fish (*Tropheus duboisi*). *Ethology* Volume 121, Issue 1, pages 38–44
- Guinet, C. & Bouvier, J. 1995 Development of intentional stranding hunting techniques in killer whale (*Orcinus orca*) calves at Crozet Archipelago. *Canadian Journal of Psychology*, 73, 27-33.
- H. C. Miller, C. D. Gipson, A. Vaughan, R. Rayburn-Reeves, T. R. Zentall: Object permanence in dogs: Invisible displacement in a rotation task. In: *Psychonomic Bulletin & Review*. 16, 2009, S. 150–155
- HAKEEN, ATIYA Y.; CHET C. SHERWOOD; CHRISTOPHER J. BONAR; CAMILLA BUTTI; PATRICK R. HOF and JOHN M. ALLMAN. 2008 Von Economo neurons in the elephant brain. *ANATOMICAL RECORD: ADVANCES IN INTEGRATIVE ANATOMY AND EVOLUTIONARY BIOLOGY* 292(2):242-248.
- Hal Hodson (2015) I know it's me talking. *NewScientist* 18 July
- Hans Kruuk 1972 *The Spotted Hyena: A Study of Predation and Social Behaviour*. University of California Press. ISBN 0226455084
- Hanus D, Mendes N, Tennie C, Call J (2011) Comparing the performances of apes (Gorilla gorilla, Pan troglodytes, Pongo pygmaeus) and human children (Homo sapiens) in the floating peanut task. *PLoS one* 6: e19555 doi:10.1371/journal.pone.0019555.
- Harald Stümpke: *Bau und Leben der Rhinogradentia*. Fischer, Stuttgart 1961, ISBN 3-437-30083-0
- Hare, B., & Tomasello, M. (1999). Domestic dogs (*Canis familiaris*) use human and conspecific social cues to locate hidden food. *Journal of Comparative Psychology*, 113, 173-177.
- Hart B. L. (1990) Behavioral adaptations to pathogens and parasites: five strategies. *Neurosci. Biobehav. Rev.* 14, 273–294.
- Hart, B. L. (2011). Behavioral defenses in animals against pathogens and parasites: parallels with the pillars of medicine in humans. *Philosophical Transactions of the Royal Society B*, 366, 3406–3417
- Hart, B. L., Hart, L. A., McCoy, M., & Sarath, C. R. (2001). Cognitive behaviour in Asian elephants: use and modification of branches for fly switching. *Animal Behaviour*, 62, 839-847.
- Hasset, J.M., Siebert, E.R., and Wallen, K. (2008) Sex differences in rhesus monkey toy preferences parallel those of children. *Hormones Behav.*; 54: 359–364
- Heinzen, T. E., Lilienfeld, S. O., & Nolan, S. A. (2015). Clever Hans: What a horse can teach us about self deception. *Skeptic* 20(1): 10-18
- Heinzen, T. E., Lilienfeld, S. O., & Nolan, S. A. (2015). Clever Hans: What a horse can teach us about self deception. *Skeptic* 20(1): 10-18
- Herman LM, Richards DG, Wolz JP (1984) Comprehension of sentences by bottlenosed dolphins. *Cognition* 16:129–219
- Herman, L. M., Morrel-Samuels, P. and Pack, A. A. (1990). Bottlenosed dolphin and human recognition of veridical and degraded video displays of an artificial gestural language. *Journal of Experimental Psychology: General*, 119, 215-230.
- Herman, L.M., Kuczaj, S. III, & Holder, M. D. (1993). Responses to anomalous gestural sequences by a language-trained dolphin: Evidence for processing of semantic relations and syntactic information. *Journal of Experimental Psychology: General* 122, 184-194.
- Herzing, D. L., 2014 Clicks, whistles and pulses: Passive and active signal use in dolphin communication, *Acta Astronautica*, vol. 105, no. 2, pp. 534–537
- Hill, A., Collier-Baker, E. & Suddendorf, T. 2012 Inferential reasoning by exclusion in children (*Homo sapiens*). *J. Comp. Psychol.* (doi:10.1037/a0024449)
- Hobaiter, C. & Byrne, R. W. 2011 The gestural repertoire of the wild chimpanzee. *Anim. Cogn.* 14, 745–767
- Hoier S, Pfeifle C, von Merten S, Linnenbrink M (2016) Communication at the Garden Fence – Context Dependent Vocalization in Female House Mice. *PLoS ONE* 11(3): e0152255. doi:10.1371/journal.pone.0152255

- Humle, T. and Matsuzawa, T. (2002) Ant-dipping among the chimpanzees of Bossou, Guinea, and some comparisons with other sites. *Am. J. Primatol.* 58, 133–148
- Hyatt, C. W. (1998) *Am. J. Primatol.* 45, 30–311. / Anderson, J. R. (1983) *Q. J. Exp. Psychol.* 35B, 201–212. / Bayart, F. & Anderson, J. R. (1985) *Behav. Processes* 10, 219–227. / Gallup, G. G., Wallnau, L. & Suarez, S. D. (1980) *Folia Primatol.* 33, 210–219. / Suarez, S. D. & Gallup, G. G. (1986) *Am. J. Primatol.* 11, 239–244. / Anderson, J. R. & Roeder, J. J. (1989) *Primates* 30, 581–587. / Povinelli, D. J. (1989) *J. Comp. Psychol.* 103, 122–131.
- In seltenen Fällen spricht man im Deutschen von Metallisierung aber auch dieser Begriff bedarf einer gewissen Erklärung.
- Irene M. Pepperberg (2004) Evolution of Communication from an Avian Perspective. In *Evolution of Communication Systems- A Comparative Approach* edited by D. Kimbrough Oller and Ulrike Griebel, The Vienna Series in Theoretical Biology of the MIT (Massachusetts Institute of Technology) Press
- Isabel Behncke 2015 Play in the Peter Pan ape. *Current Biology* Vol 25 No 1 R24
- Isabela Zaine, Camila Domeniconi, Julio C. de Rose 2016 Exclusion performance and learning by exclusion in dogs. *Journal of the Experimental Analysis of Behavior* Volume 105, Issue 3
- Isabela Zaine, Camila Domeniconi, Julio C. de Rose 2016 Exclusion performance and learning by exclusion in dogs. *Journal of the Experimental Analysis of Behavior* Volume 105, Issue 3
- Itakura, S. (1987) Mirror guided behavior in Japanese monkeys (*Macaca fuscata fuscata*). *Primates* 28, pp 149-161.
- Ivan V. Seryodkin (2014) Marking activity of the Kamchatka brown bear (*Ursus arctos piscator*). *Achievements in the Life Sciences* Volume 8, Issue 2, October 2014, Pages 153–161
- J. GOMEZ: Species comparative studies and cognitive development. In: *Trends in Cognitive Sciences.* 9, 2005, S. 118–125
- J. Goodall (1968) The behaviour of free-living chimpanzees in the Gombe Stream Reserve *Anim. Behav. Monogr.*, 1, pp. 163-311
- J. Goodall 1986 *The Chimpanzees of Gombe*. Belknap Press, Cambridge
- J. L. Oliva, J.-L. Rault, B. Appleton, A. Lill 2015 Oxytocin enhances the appropriate use of human social cues by the domestic dog (*Canis familiaris*) in an object choice task. *Animal Cognition* Volume 18, Issue 3, pp 767-775
- J. Locke, *An Essay Concerning Human Understanding* (Oxford, 1690)
- Jaakkola, Kelly; Fellner, Wendi; Erb, Linda; Rodriguez, Mandy; Guarino, Emily 2005 Understanding of the concept of numerically "less" by bottlenose dolphins (*Tursiops truncatus*). *Journal of Comparative Psychology*, Vol 119(3), 296-303.
- Jack W. Bradbury and Thorsten J. S. Balsby 2016 The functions of vocal learning in parrots. *Journal Behavioral Ecology and Sociobiology*, Volume 70, Issue 3, pp 293-312
- James P. Burkett et al.: Oxytocin-dependent consolation behavior in rodents. In: *Science*. Band 351, Nr. 6271, 2016, S. 375–378
- James P. Burkett et al.: Oxytocin-dependent consolation behavior in rodents. In: *Science*. Band 351, Nr. 6271, 2016, S. 375–378
- Janik VM, Sayigh LS (2013) Communication in bottlenose dolphins: 50 years of signature whistle research. *J Comp Physiol A* 199:479-489.
- Janik, Vincent (2014) Cetacean vocal learning and communication. *Current Opinion in Neurobiology*, 28:60–65
- Jelbert, S. A., Taylor, A. H., Cheke, L. G., Clayton, N. S., and Gray, R. D. (2014). Using the Aesop's fable paradigm to investigate causal understanding of water displacement by new caledonian crows. *PLoS One* 9:e92895. doi: 10.1371/journal.pone.0092895
- Jessica F. Cantlon, Elizabeth M. Brannon (2007) Basic Math in Monkeys and College Students. *PLOS Biology* December Issue, doi:10.1371/journal.pbio.0050328.g001
- Jill D. Pruett, Paco Bertolani. (2007) Savanna Chimpanzees, Pan troglodytes verus, Hunt with Tools. *Current Biology* Volume 17, Issue 5, Pages 412–417
- Joah R. Madden: Do bowerbirds exhibit cultures? *Anim Cogn* (2008) 11:1–12
- Joanna M. Dallya, Nathan J. Emeryb & Nicola S. Claytona (2010) Avian Theory of Mind and counter espionage by food-caching western scrub-jays (*Aphelocoma californica*). In *Special Issue: Theory of Mind: Specialized capacity or emergent property?* *European Journal of Developmental Psychology* Volume 7, Issue 1, pages 17-37
- Joel Shurkin (2014) News Feature: Animals that self-medicate. *PNAS* vol. 111 no. 49, pp 17339–17341, doi: 10.1073/pnas.1419966111
- Johanna H. Meijer, Yuri Robbers 2014 Wheel running in the wild. *Proceedings of the Royal Society B* Volume 281, issue 1786
- Johanna H. Meijer, Yuri Robbers 2014 Wheel running in the wild. *Proceedings of the Royal Society B* Volume 281, issue 1786
- John A. Endler, Lorna C. Endler and Natalie R. Doerr: Great Bowerbirds create theaters with forced perspective when seen by their audience. 2010 *Current Biology* 20, 1679–1684
- John C. Mitani, David P. Watts, Sylvia J. Amsler 2010 Lethal intergroup aggression leads to territorial expansion in wild chimpanzees. *Current Biology*, Volume 20, Issue 12, pp R507-R508
- Joly-Mascheroni RM, Senju A, Shepherd AJ (2008) Dogs catch human yawns. *Biol Lett* 4:446–448
- Jonathan Prathera, Kazuo Okanoyab, Johan J. Bolhuis (2017) Brains for birds and babies: Neural parallels between birdsong and speech acquisition. *Neuroscience & Biobehavioral Reviews* (accepted manuscript in press 10 January)
- Josep Call and Michael Tomasello (2008) Does the chimpanzee have a theory of mind? 30 years later. *Trends in Cognitive Sciences* Vol.12 No.5
- Joshua M. Plotnik, Frans B.M. de Waal, and Diana Reiss (2006) Self-recognition in an Asian elephant. *Proceedings of the National Academy of Sciences* 103(45):17053–17057
- Joyce F. Benenson, Robert Tennyson, Richard W. Wrangham 2011 Male more than female infants imitate propulsive motion. *Cognition* Volume 121, Issue 2, Pages 262–267
- Julia Cissewski and Christophe Boesch 2016 Communication without language - How great apes may cover crucial advantages of language without creating a system of symbolic communication. *Gesture* 15:2, pp 224–249.
- Julio Mercader, Huw Barton, Jason Gillespie, Jack Harris, Steven Kuhn, Robert Tyler and Christophe Boesch (2007) 4,300-Year-old chimpanzee sites and the origins of percussive stone technology. *PNAS* 104 (9) 3043-3048
- Jürgen Tautz und Helga R. Heilman: *Phänomen Honigbiene Gebundene Ausgabe* 2012 Spektrum Akademischer Verlag
- Kahlenberg, S. M.; Wrangham, R. W. 2010. Sex differences in chimpanzees' use of sticks as play objects resemble those of children. *Current Biology*. 20: 1067–1068.
- Kahneman D, Tversky A (1979) Prospect theory: an analysis of decision under risk. *Econometrica* 47:263 292

- Karl Krall (1912) Denkende Tiere. Beiträge zur Tierseelenkunde auf Grund eigener Versuche. Der kluge Haus und meine Pferde Muhamed und Zarif. Friedrich Engelmann - Leipzig. <https://archive.org/details/denkendetierebei00kral>
- Karl S. Berg, Soraya Delgado, Kathryn A. Cortopassi, Steven R. Beissinger, Jack W. Bradbury (2012) Vertical transmission of learned signatures in a wild parrot. *Proc. R. Soc. B* 279 585-591
- Katherine A. Cronin, Edwin J.C. van Leeuwen, Innocent Chitalu Mulenga, Mark D. Bodamer 2011 Behavioral response of a chimpanzee mother toward her dead infant. *American Journal of Primatology*, DOI: 10.1002/ajp.20927
- Katherine McAuliffea, Jillian J. Jordanb, Felix Warneken 2015 Costly third-party punishment in young children. *Cognition* Volume 134, January, Pages 1–10
- Kevin N. Laland and Vincent M. Janik 2006 The animal cultures debate. *TRENDS in Ecology and Evolution* Vol.21 No.10
- Keyser, C., Gazzola, V. (2016) A Plea for Cross-species Social Neuroscience. *Current Topics in Behavioral Neurosciences* 1–13
- King, S. L. & Janik, V. 2013 Bottlenose dolphins can use learned vocal labels to address each other. *Proceedings of the National Academy of Sciences of the United States of America*. 110, 32, p. 13216-13221
- Kish, G. B., & Donnenwerth, G. V. (1972). Sex differences in the correlates of stimulus seeking. *Journal of Consulting and Clinical Psychology*, 38(1), 42.
- Kulik L, Langos D, Widdig A (2016) Mothers Make a Difference: Mothers Develop Weaker Bonds with Immature Sons than Daughters. *PLoS ONE* 11(5): e0154845. Doi:10.1371/journal.pone.0154845
- Kuo LE, Kitlinska JB, Tilan JU, et al. (July 2007). "Neuropeptide Y acts directly in the periphery on fat tissue and mediates stress-induced obesity and metabolic syndrome". *Nat. Med.* 13
- L.M. Aplin, D.R. Farine, J. Morand-Ferron, A. Cockburn, A. Thornton, and B.C. Sheldon (2015) Experimentally induced innovations lead to persistent culture via conformity in wild birds. *Nature* 518 (7540): 538–541
- L.M. Herman, D.G. Richards, J.P. Wolz (1984) Comprehension of sentences by bottlenosed dolphins. *Cognition* 16 129–219.
- Laland, K. N., & Galef, B. G., Jr. (Eds.) (2009). *The question of animal culture*. Cambridge, MA: Harvard University Press.
- Laland, Kevin et al. 2016 The evolution of dance. *Current Biology*, Volume 26, Issue 1, R5 - R9
- Leavens, David A. & William D. Hopkins (1998) Intentional communication by chimpanzees (*Pan troglodytes*): A cross-sectional study of the use of referential gestures. *Developmental Psychology* 34: 813–822.
- Leidi Laurimaa, Karmen Süld, John Davison, Epp Moks, Harri Valdmann, Urmas Saarma (2016) Alien species and their zoonotic parasites in native and introduced ranges: The raccoon dog example. *Veterinary Parasitology* Vol 219, pp. 24–33
- Leimgruber, K.L., Rosati, A.G. & Santos, L.R., 2015 Capuchin monkeys punish those who have more, *Evolution and Human Behavior* doi: 10.1016/j.evolhumbehav.2015.12.002
- Lewis, J.S. and Schroeder, W., 2003 Mud plume feeding, a unique foraging behavior of the bottlenose dolphin (*Tursiops truncatus*) in the Florida Keys. *Gulf of Mexico Science*, Vol 21(1)
- Lewis, M. (1986) in *Psychological Perspectives on the Self*, eds. Greenwald, A. G. & Suls, J. (Erlbaum, Hillsdale, NJ), pp. 55–78.
- Lewis, M. 2011. The origins and uses of self-awareness or the mental representation of me. *Consciousness and Cognition* 20, 120-129. doi.org/10.1016/j.concog.2010.11.002
- Lina Oberliessen, Julen Hernandez-Lallement, Sandra Schable, Marijn van Wingerden, Maayke Seinstra, Tobias Kalenscher 2016 Inequity aversion in rats, *Rattus norvegicus*. *Animal Behaviour* 115 pp 157-166
- Lucy A. Bates, Phyllis C. Lee, Norah Njiraini, Joyce H. Poole, Katito Sayialel, Soila Sayialel, Cynthia J. Moss and Richard W. Byrne (2008) Do Elephants Show Empathy? *Journal of Consciousness Studies*, 15, No. 10–11, pp. 204–25
- Lydia V. Luncz, Roger Mundry, Christophe Boesch 2012 Evidence for Cultural Differences between Neighboring Chimpanzee Communities. *Current Biology* Volume 22, Issue 10, Pages 922–926
- Lynda P. Dunkel, Natasha Arora, Maria A. van Noordwijk, Sri Suci Utami Atmoko, Angga Prathama Putra, Michael Krützen and Carel P. van Schaik (2013). Variation in developmental arrest among male orangutans: a comparison between Sumatran and a Bornean population. *Frontiers in Zoology* 10:12 DOI: 10.1186/1742-9994-10-12
- M. I. Kashkina 2004 *Dendronasus* sp.—a New Member of the Order Nose-Walkers (Rhinogradentia) *Russian Journal of Marine Biology* Volume 30, Issue 2, pp 148–150
- Macdonald, David 1992 *The Velvet Claw: A Natural History of the Carnivores*. New York: Parkwest. ISBN 0-563-20844-9.
- Malavasi, R. & Huber, L. 2016 Evidence of heterospecific referential communication from domestic horses (*Equus caballus*) to humans. *Animal Cognition* doi:10.1007/s10071-016-0987-0
- Malavasi, R. & Huber, L. 2016 Evidence of heterospecific referential communication from domestic horses (*Equus caballus*) to humans. *Animal Cognition* doi:10.1007/s10071-016-0987-0
- Mann J, Sargeant BL (2003) Like mother, like calf. In: Fragaszy D, Perry S, editors. *The Biology of traditions*. Cambridge, MA: Cambridge University Press. pp. 236–266.
- Manson, J.H.; Perry, S.; Parish, A.R.: "Nonconceptive Sexual Behavior in Bonobos and Capuchins". 1997 *International Journal of Primatology* 18 (5): 767–86.
- Manuela Sellitto, Elisa Ciaramelli, Giuseppe di Pellegrino (2011) The neurobiology of intertemporal choice: insight from imaging and lesion studies. In: *Reviews in the Neurosciences*. Band 22, Nr. 5
- Marc Bekoff 2015 Playful fun in dogs. *Current Biology* Vol 25 No 1
- Margaret A. Stanton, Quincy A. Gibson, Janet Mann 2011 When mum's away: a study of mother and calf ego networks during separations in wild bottlenose dolphins (*Tursiops* sp.). *Animal Behaviour* 82 405e412
- Marina Davila Ross, Michael J Owren, Elke Zimmermann 2009 Reconstructing the Evolution of Laughter in Great Apes and Humans. *Current Biology* Volume 19, Issue 13, p1106–1111
- Marion Mangelsdorf (2014) Interaktion zwischen Menschen und Pferden-im Vergleich zu Wölfen und Hunden in Interspezies-Kommunikation. Voraussetzungen und Grenzen. *PeriLog Freiburger Beiträge zur Kultur- und Sozialforschung*, Band 7 Michael Schetsche & Marion Mangelsdorf (Hrsg.) pp. 42-64 ISBN-10: 3832538305
- Marion Mangelsdorf (2014) Interaktion zwischen Menschen und Pferden-im Vergleich zu Wölfen und Hunden in Interspezies-Kommunikation. Voraussetzungen und Grenzen. *PeriLog Freiburger Beiträge zur Kultur- und Sozialforschung*, Band 7 Michael Schetsche & Marion Mangelsdorf (Hrsg.) pp. 42-64 ISBN-10: 3832538305
- Mark Briffa and Lynne U. Sneddon (2016) Proximate mechanisms of animal personality among-individual behavioural variation in animals. *Behaviour* DOI: 10.1163/1568539X-00003402

- Mark J. Xitco Jr., John D. Gory, Stan A. Kuczaj II (2004) Dolphin pointing is linked to the attentional behavior of a receiver. *Animal Cognition* Volume 7, Issue 4, pp 231-238
- Mark O'Hara, Raoul Schwing, Ira Federspiel, Gyula K. Gajdon, Ludwig Huber (2016) Reasoning by exclusion in the kea (*Nestor notabilis*) *Anim Cogn* 19: 965
- Marthe Kiley-Worthington (2016) Nonhuman mind-reading ability Commentary on Harnad on Other Minds. *Animal Sentience* 2016.070
- Martin Surbeck, Roger Mundry, Gottfried Hohmann 2010 Mothers matter! Maternal support, dominance status and mating success in male bonobos (*Pan paniscus*) *Proc. R. Soc.* DOI: 10.1098/rspb.2010.1572
- Martin Surbeck, Tobias Deschner, Grit Schubert, Anja Weltring, Gottfried Hohmann 2012 Mate competition, testosterone and intersexual relationships in bonobos (*Pan paniscus*) *Animal Behaviour* Volume 83, Issue 3, Pages 659–669
- Martine Hausberger, Emmanuel Bigot and Philippe Clergeau 2008 Dialect use in large assemblies: a study in European starling *Sturnus vulgaris* roosts. *Journal of Avian Biology* Volume 39, Issue 6, pages 672–682
- Martinho III, A. Kacelnik (2016) Ducklings imprint on the relational concept of “same or different”. *Science* 353, 286
- Massen, J. J. M., van den Berg, L. M., Spruijt, B. M., & Sterck, E. H. M. (2012). Inequity aversion in relation to effort and relationship quality in long-tailed macaques (*Macaca fascicularis*). *American Journal of Primatology*, 74, pp 145-156
- Mathias Osvath (2009) Spontaneous planning for future stone throwing by a male chimpanzee. *Current Biology* Vol 19 No 5 pp. R190 - R191
- Matkin CO, Saulitis EL, Ellis GM, Olesiuk P, Rice SD. 2008. Ongoing population-level impacts on killer whales *Orcinus orca* following the ‘Exxon Valdez’ oil spill in Prince William Sound, Alaska. *Marine Ecology Progress Series* 356: 269–281.
- Mc Comb, K., Baker, L. and Moss, C. 2006. African elephants show high levels of interest in the skulls and ivory of their own species. *Biol. Lett.* 2: 26-28.
- McComb, K., Moss, C., Durant, S. M., Baker, L., & Sayialel, S. (2001). Matriarchs as repositories of social knowledge in African elephants. *Science*, 292, 491-494.
- McGrew WC: The cultured chimpanzee. (2004) Cambridge University Press, Cambridge
- Medina, F.S., Taylor, A.H., Hunt, G.R. & Gray, R.D. (2011) New Caledonian crows responses to mirrors. *Animal Behaviour* 82, pp 981-993
- Meggan E. Craft, Erik Volz, Craig Packer, Lauren Ancel Meyers 2011 Disease transmission in territorial populations: the small-world network of Serengeti lions. *J. R. Soc. Interface* 8 776-786
- Melendez KV, Feng AS. Communication calls of little brown bats display individual-specific characteristics. *J Acoust Soc Am.* 2010; 128(2): 919–923
- Michael Gazzaniga (2012) Die Ich-Illusion: Wie Bewusstsein und freier Wille entstehen. Carl Hanser Verlag GmbH & CO. KG
- Michael Griesser (2009) Mobbing calls signal predator category in a kin group-living bird species. *Proc Biol Sci.* 276(1669): 2887–2892.
- Michael Kosfeld, Markus Heinrichs, Paul J. Zak, Urs Fischbacher and Ernst Fehr (2005) Oxytocin increases trust in humans. *Nature* 435, 673-676
- Michael Krützen, Carel van Schaik and Andrew Whiten 2006 Response to Laland and Janik: The animal cultures debate. *TRENDS in Ecology and Evolution* Vol.22 No.1
- Michael Krützen, Erik P. Willems, and Carel P. van Schaik (2011) Culture and Geographic Variation in Orangutan Behaviour. *Current Biology*, Volume 21, Issue 21,
- Michael Krützen, Janet Mann, Michael R. Heithaus, Richard C. Connor, Lars Bejder and William B. Sherwin (2005) Cultural transmission of tool use in bottlenose dolphins. *Proc. Natl. Acad. Sci. U. S. A.* 102, 8939–8943
- Michael Marshall 2013 Alligators use tools to lure in bird prey. *New Scientist* Volume 220, Issues 2948–2949, 2013, Pages 16
- Michael Schetsche (2014) Interspezies-Kommunikation. Voraussetzungen und Grenzen. (PeriLog - Freiburger Beiträge zur Kultur- und Sozialforschung) im Logos Verlag Berlin, Herausgeber Michael Schetsche
- Michael Tomasello (2006) Why don't apes point? In *Roots of Human Sociality*. (Eds.): N. Endfield and S. Levinson Berg Publishers.
- Mikrobiologischer Lehrpfad Max Plank Institut für terrestrische Mikrobiologie Lehrtafel: Bakterien mit Gemeinschaftssinn
- MILIUS, S. 2005 Getting the gull: Baiting trick spreads among killer whales. (*Orcinus orca*). *SCIENCE NEWS* 168(8):118. 2005.
- Miller ML, Gallup AC, Vogel AR, Vicario SM, Clark AB (2012) Evidence for contagious behaviors in budgerigars (*Melopsittacus undulatus*): an observational study of yawning and stretching. *Behav Process* 89:264–270.
- Monserrat Suárez-Rodríguez, Isabel López-Rull, Constantino Macías García (2012) Incorporation of cigarette butts into nests reduces nest ectoparasite load in urban birds: new ingredients for an old recipe? *Biology Letters* DOI: 10.1098/rsbl.2012.0931
- Moore R (2015) Meaning and ostension in great ape gestural communication. *Anim Cogn.* doi:10.1007/s10071-015-0905-x
- N. S. Clayton, J. Russell, A. Dickinson (2009) Are Animals Stuck in Time or Are They Chronesthetic Creatures? *Topics in Cognitive Science* 1 (2009) 59–71
- N. S. Clayton, J. Russell, A. Dickinson (2009) Are Animals Stuck in Time or Are They Chronesthetic Creatures? *Topics in Cognitive Science* 1 (2009) 59–71
- Nadia K. Byrnesa, and John E. Hayes: Behavioral measures of risk tasking, sensation seeking and sensitivity to reward may reflect different motivations for spicy food liking and consumption. (2016) *Appetite* Volume 103, Pages 411–422
- Nathan J. Emery, Nicola S. Clayton (2015) Do birds have the capacity for fun? *Current Biology* Volume 25, Issue 1, Pages R16–R20
- Neville B The strange case of Billy the bowerbird. (1988) *Geo Mag* 10:73–79
- Nick Bos, Liselotte Sundstrom, Siiri Fuchs, and Dalial Freitak (2015) Ants medicate to fight disease. *Evolution* 69-11: 2979–2984
- Nicolas Guillerault, Sébastien Delmotte, Stéphanie Boulêtreau, Christine Lauzeral, Nicolas Poulet, Frédéric Santoul (2015) Does the non-native European catfish *Silurus glanis* threaten French river fish populations? *Freshwater Biology* Volume 60, Issue 5, pp 922–928
- Nihei, Y. and Higuchi, H. (2001) When and where did crows learn to use automobiles as nutcrackers? *Tohoku Psychologica Folia* 60:93–97.
- Nikolaenko, V.A. (2003) Kamchatka Bear. Logata, Moscow

- NIMCHINSKY, E. A., GLISSEN, E., ALLMAN, J. M., PERL, D. P., ERWIN, J. M., & HOF, P. R. (1999). A neuronal morphologic type unique to humans and great apes. *Proceedings of the National Academy of Sciences* 96, 5268–5273.
- Nishida T (1980) The leaf-clipping display: a newly-discovered expressive gesture in wild chimpanzees. *J Hum Evol* 9:117–128
- Nora Lewin, Lisa A. Treidel, Kay E. Holekamp, Ned J. Place, Mark F. Hausmann 2015 Socioecological variables predict telomere length in wild spotted hyenas. *Biology Matters*. Royal Society Publishing. 11 (2)
- Nottestad, L., Ferno, A., & Axelsen, B. E. 2002 Digging in the deep: killer whales' advanced hunting tactic. *Polar Biology*, 25, 939-941
- O. Thalmann, B. Shapiro, P. Cui, V. J. Schuenemann, S. K. Sawyer, D. L. Greenfield, M. B. Germonpré, M. V. Sablin, F. López-Giráldez, X. Domingo-Roura, H. Napierala, H-P. Uerpmann, D. M. Loponte, A. A. Acosta, L. Giemisch, R. W. Schmitz, B. Worthington, J. E. Buikstra, A. Druzhkova, A. S. Graphodatsky, N. D. Ovodov, N. Wahlberg, A. H. Freedman, R. M. Schweizer, K.-P. Koepfli, J. A. Leonard, M. Meyer, J. Krause, S. Pääbo, R. E. Green, R. K. Wayne (2013) Complete Mitochondrial Genomes of Ancient Canids Suggest a European Origin of Domestic Dogs. *Science* Vol. 342, Issue 6160, pp. 871-874
- O'Hara M, Auersperg AMI, Bugnyar T, Huber L (2015) Inference by Exclusion in Goffin Cockatoos (*Cacatua goffini*). *PLoS ONE* 10(8): e0134894. doi:10.1371/journal.pone.0134894
- Oliver P. John, Laura P. Naumann, Christopher J. Soto: (2008) Paradigm Shift to the Integrative Big Five Trait Taxonomy. *Handbook of Personality Theory and Research Third Edition*.
- Onishi, S. 2008 Mutualistic fishing between fisherman and Irrawaddy dolphins in Myanmar. *Tigerpaper*, 35, 1-8
- Oostenbroek et al., *Comprehensive Longitudinal Study Challenges the Existence of Neonatal Imitation in Humans*, *Current Biology* (2016), <http://dx.doi.org/10.1016/j.cub.2016.03.047>
- Owen-Smith, N. (2003). Foraging behavior, habitat suitability, and translocation success, with special reference to large mammalian herbivores. In M. Festa-Bianchet & M. Apollonio (Eds.), *Animal behavior and wildlife conservation* (pp. 93-109). Washington, DC: Island Press.
- Palestina Guevara-Fiore & John A Endler (2015) Male sexual behaviour and ethanol consumption from an evolutionary perspective: A comment on "Sexual Deprivation Increases Ethanol Intake in *Drosophila*". *Fly* Volume 8, 2014 - Issue 4
- Patterson, F. G. & Cohn, R. H. (1994) in *Self-Awareness in Animals and Humans: Developmental Perspectives*, eds. Parker, S. T., Mitchell, R. W. & Boccia, M. L. (Cambridge Univ. Press, Cambridge, U.K.), pp. 273–290.
- Pepperberg, I.M. & Gordon, J.D. (2005). Numerical comprehension by a Grey Parrot (*Psittacus erithacus*), including a zero-like concept. *J. Comp Psychol.*119: 197-209.
- Pepperberg, I.M., Garcia, S.E., Jackson, E.C. & Marconi, S. (1995) Mirror use by African Grey Parrots (*Psittacus erithacus*). *Journal of Comparative Psychology* 109, pp 182-195.
- Perry CJ, Barron AB (2013) Honey bees selectively avoid difficult choices. *Proc Natl Acad Sci USA* 110(47):19155–19159
- PFISTER, J.A., STEGELMEIER, B.L., GARDNER, D.R., JAMES, L.F. (2003) GRAZING OF SPOTTED LOCOWEED (*ASTRAGALUS LENTIGINOSUS*) BY CATTLE AND HORSES IN ARIZONA. *JOURNAL OF ANIMAL SCIENCE* 81:2285-2293
- Pierre-Yves Henry and Jean-Christophe Aznar 2006 Tool-use in Charadrii: Active Bait-Fishing by a Herring Gull. *Waterbirds* 29(2):233-234.
- Piertney, S. & Oliver, M.: The evolutionary ecology of the major histocompatibility complex. In: *Heredity*, Nr. 96, 2006, S. 7–21
- Pilleri, G., (1984) Epimeletic behavior in cetacea: Intelligent or instinctive?. In: Pilleri, G. (ed.). *Investigations on Cetacea*. Vammalan Kirjapaino Oy, Finland. 16: 30-48
- Plutarch (1874) *Plutarch's Morals*. Translated from the Greek by several hands. Corrected and revised by. William W. Goodwin, PH. D. Boston. Little, Brown, and Company. Cambridge. Press p 163
- Premack, D. and Woodruff, G. (1978) Does the chimpanzee have a theory of mind? *Behav. Brain Sci.* 1, 515–526
- Prior, Helmut; Schwarz, Ariane; Güntürkün, Onur; De Waal, Frans (2008) "Mirror-Induced Behavior in the Magpie (*Pica pica*): Evidence of Self-Recognition". *PLoS Biology* 6 (8)
- Proust, Joëlle (2005): *Das intentionale Tier*. In: Perler, D. & Wild M. (Eds.): *Der Geist der Tiere*. Frankfurt am Main: 223-244
- Pruitt, J.N., Burghardt, G.M., and Riechert, S.E. (2012). Non-conceptive sexual behavior in spiders: a form of play associated with body condition, personality type, and male intrasexual selection. *Ethology* 118, 33–40.
- Pryor, K., Lindbergh, J., Lindbergh, S., & Milano, R. 1990 A dolphin-human fishing cooperative in Brazil. *Marine Mammal Science*, 6, 77-82.
- Quick NJ, Janik VM(2012) Bottlenose dolphins exchange signature whistles when meeting at sea. *Proc R Soc B* 279:2539- 2545
- R. Allen Gardner, Beatrice T. Gardner (1978) *COMPARATIVE PSYCHOLOGY AND LANGUAGE ACQUISITION*. *Annals of the New York Academy of Sciences* Volume 309, Psychology: The State of the Art pages 37–76
- Randy Thornhill and Craig Palmer: *Natural History of Rape: Biological Bases of Sexual Coercion* 2000 University Press Group Ltd
- Range, F., Leitner, K., & Viranyi, Z. (2012). The influence of the relationship and motivation on inequity aversion in dogs. *Social Justice Research*, 25, pp170-194
- Reinhard Brandt 2009 Können Tiere denken?: Ein Beitrag zur Tierphilosophie. *Suhrkamp Reihe: edition unseld*
- Reiss, D., & McCowan, B. (1993). Spontaneous vocal mimicry and production by bottlenose dolphins (*Tursiops truncatus*): Evidence for vocal learning. *Journal of Comparative Psychology*, 107, 301-312.
- Rendell L, Whitehead H (2001) Culture in whales and dolphins. *Behav Brain Sci* 24(2):309–324 discussion 324-382
- Rendell, L. & Whitehead, H. (2001) Culture in whales and dolphins. *Behavioral and Brain Sciences* 24, 309–382
- Rendell, L. E., & Whitehead, H. (2001). Culture in whales and dolphins. *Behavioral & Brain Sciences*, 24, 309-324.
- Revis, H.C.; Waller, D.A. (2004). "Bactericidal and fungicidal activity of ant chemicals on feather parasites: An evaluation of anting behavior as a method of self-medication in songbirds". *The Auk*. 121 (4): 1262–1268.
- Richard C. Connor, Jana J. Watson-Capps, William B. Sherwin and Michael Krützen 2011 A new level of complexity in the male alliance networks of Indian Ocean bottlenose dolphins (*Tursiops* sp.) *Biol. Lett.* vol. 7 no. 4 623-626
- Richard Dawkins (2008) *Der Gotteswahn*. Ullstein, Berlin ISBN 978-3-548-37232-7
- Richard W. Byrne & Hélène Cochet 2016 Where have all the (ape) gestures gone? *Psychon Bull Rev* DOI 10.3758/s13423-016-1071-0
- Richards DG, Wolz JP, Herman LM 1984 Vocal mimicry of computer-generated sounds and vocal labeling of objects by a bottlenosed dolphin, *Tursiops truncatus*. *J. Comp. Psychol.* 98, 10–28

- Richerson PJ, Boyd R. 2005. Not by genes alone: how culture transformed human evolution. Chicago: University of Chicago Press.
- Ridgway, Sam ; Donald Carder; Michelle Jeffries; Mark Todd (2012): Spontaneous human speech mimicry by a cetacean. *Current Biology*, Volume 22 , Issue 20 , R860 - R861
- Riedel, K., Jensen, K., Call, J. & Tomasello, M. (2012). No third-party punishment in chimpanzees. *Proceedings of the National Academy of Sciences*, 109, 14824–9
- RIESCH, RUDIGER; LANCE G. BARRETT-LENNARD; GRAEME M. ELLIS; JOHN K. B. FORD and VOLKER B. DEECKE. (2012) Cultural traditions and the evolution of reproductive isolation: Ecological speciation in killer whales? (*Orcinus orca*). *BIOLOGICAL JOURNAL OF THE LINNEAN SOCIETY* 106(1):1-17. 2012.
- Ritters, L.V. (2011). Pleasure seeking and birdsong. *Neurosci. Biobehav. Rev.* 35, 1837–1845.
- Ritesh Joshi (2010); Social behaviour of Asian elephants. How Social are Asian Elephants *Elephas maximus*? *New York Science Journal* 3(1) 27-31
- Ritter F. 2007. Behavioural responses of rough-toothed dolphins to a dead newborn calf. *Marine Mammal Science* 23(2):429-433.
- Rozin, P., Gruss, L., & Berk, G. The reversal of innate aversions: Attempts to induce a preference for chili peppers in rats. *Journal of Comparative and Physiological Psychology*, 79, 93, 1001-1014.
- RÜDIGER RIESCH, LANCE G. BARRETT-LENNARD, GRAEME M. ELLIS, JOHN K. B. FORD and VOLKER B. DEECKE 2012 Cultural traditions and the evolution of reproductive isolation: ecological speciation in killer whales? *Biological Journal of the Linnean Society*, 106, 1–17.
- Rumbaugh, D. M. 1977 *Language learning by a chimpanzee*. New York, NY: Academic Press.
- Ryan, S. J. (2006). The role of culture in conservation planning for small or endangered populations. *Conservation Biology*, 20, 1321-1324.
- S. E. Glickman, C. J. Zabel, S. I. Yoerg, M. L. Weldele, C. M. Drea und L. G. Frank 1997 Social facilitation, affiliation, and dominance in the social life of spotted hyenas. *Annals of the New York Academy of Sciences* 807 pp. 175–84
- Sana Inoue, Tetsuro Matsuzawa (2007) Working memory of numerals in chimpanzees. *Current Biology* Vol. 17, Issue 23, pp. R1004-R1005
- Sarah K. Huber (2007) Reproductive isolation of sympatric morphs in a population of Darwin's finches. *Proceedings of the Royal Society B* vol. 274 no. D709-1714
- Sarah Zylinski 2015 Fun and play in invertebrates. *Current Biology* Volume 25, Issue 1
- Savage-Rumbaugh, S., & Lewin, R., (1994). *Kanzi: The Ape at the Brink of the Human Mind*. Wiley.
- Scott K. Robinson 1994 Use of Bait and Lures by Green-Backed Herons in Amazonian Peru. *The Wilson Bulletin* Vol. 106, No. 3, pp. 567-569
- Scott-Phillips TC (2015a) Meaning in animal and human communication. *Anim Cogn* 18(3):801–805
- Seyfarth R.M, Cheney D.L 2002 What are big brains for?. *Proc. Natl Acad. Sci. USA*. 99, 4141–4142.
- Shaw, Alex; Olson, Kristina R. (2012) Children discard a resource to avoid inequity. *Journal of Experimental Psychology: General*, Vol 141(2), 382-395
- Shohat-Ophir, G., Kaun, K.R., Azanchi, R., Mohammed, H., and Heberlein, U. (2012). Sexual deprivation increases ethanol intake in *Drosophila*. *Science* 335, 1351–1355.
- Shuker (2001) *The Hidden Powers of Animals: Uncovering the Secrets of Nature*. Marshall Editions, ISBN-10: 1840285265
- Sileshi Semaw (2000) The World's Oldest Stone Artefacts from Gona, Ethiopia: Their Implications for Understanding Stone Technology and Patterns of Human Evolution Between 2.6–1.5 Million Years Ago. *Journal of Archaeological Science*, Band 27, pp. 1197–1214,
- Simila, T., & Fugarte, F. 1993 Surface and underwater observations of cooperatively feeding killer whales in Northern Norway. *Canadian Journal of Zoology*, 71, 1494- 1499.
- Simone Pika & Thomas Bugnyar (2011) The use of referential gestures in ravens (*Corvus corax*) in the wild. *Nature Communications* 2, Article number: 560
- Smith, J. D., Schull, J., Strote, J., McGee, K., Egnor, R., & Erb, L. (1995). The uncertain response in the bottlenosed dolphin (*Tursiops truncatus*). *Journal of Experimental Psychology: General*, 124(4), pp 391–408.
- Smith, Jennifer E.; Sandra K. Memenis; Kay E. Holekamp (March 2007). "Rank-related partner choice in the fission–fusion society of the spotted hyena (*Crocuta crocuta*)" (PDF). *Behavioral Ecology and Sociobiology*. Springer-Verlag. 61 (5): 753–765.
- Smolker RA, Richards A, Connor RC, Mann J, Berggren P (1997) Sponge carrying by dolphins (*Delphinidae*, *Tursiops* sp): a foraging specialization involving tool use? *Ethology* 103(6): 454–465
- Smolker, R. A., Richards, A. F., Connor, R. C., Mann, J. & Berrgren, P. 1997 Sponge carrying by Indian Ocean bottlenose dolphins: possible tool use by a delphinid. *Ethology*, 103, 454-465.
- SMOLKER, RACHEL A. (1987) Sponge carrying: A puzzle in the behavior of bottlenose dolphins. In: *Seventh Biennial Conference on the Biology of Marine Mammals*. 5-9 December, Miami, Florida. p.65.
- Sommerfeld, R. D.; Boehm, T.; Milinski, M.: Desynchronising male and female reproductive seasonality: dynamics of male MHC-independent olfactory attractiveness in sticklebacks. *Ethology Ecology & Evolution* 20 (4), S. 325-336 (2008)
- Sonja M. Eisfeld, Mark P. Simmonds, Laura R. Stansfield (2010) Behavior of a Solitary Sociable Female Bottlenose Dolphin (*Tursiops truncatus*) off the Coast of Kent, Southeast England. *Journal of Applied Animal Welfare Science* Volume 13, Issue 1
- Soon CS, Brass M, Heinze HJ, Haynes JD (2008) Unconscious determinants of free decisions in the human brain. *Nat Neurosci* 11(5):543–545.
- Special Section: Reasoning Versus Association in Animal Cognition: Current Controversies and Possible Ways Forward. *Journal of Comparative Psychology*. 2016 Volume 130, Issue 3
- STAN A. KUCZAJ; JOHN D. GORY; MARK J. XITCO Jr. 2009 How intelligent are dolphins? A partial answer based on their ability to plan their behavior when confronted with novel problems. *The Japanese Journal of Animal Psychology*, 59, 1 99-115
- Stefano Ghirlandaa, S.; Johan Lindd, J. (2017) 'Aesop's fable' experiments demonstrate trial-and-error learning in birds, but no causal understanding. *Animal Behaviour* Volume 123, January 2017, Pages 239–247

- Stephanie L. Watwood; Peter L. Tyack; Randall S. Wells 2004 Whistle sharing in paired male bottlenose dolphins, *Tursiops truncatus*. *Behav Ecol Sociobiol* 55:531–543
- Steve Morris, David Humphreys and Dan Reynolds (2016) "Myth, Marula, and Elephant: An Assessment of Voluntary Ethanol Intoxication of the African Elephant (*Loxodonta africana*) Following Feeding on the Fruit of the Marula Tree (*Sclerocarya birrea*)," *Physiological and Biochemical Zoology* 79, no. 2
- Steve Ramirez, Xu Liu, Pei-Ann Lin, Junghyup Suh, Michele Pignatelli, Roger L. Redondo, Tomás J. Ryan, Susumu Tonegawa 2013 Creating a False Memory in the Hippocampus. *Science* Vol. 341, Issue 6144, pp. 387-391
- Steven Pinker (2002) *The Blank Slate: The Modern Denial of Human Nature* Penguin Deutsch: Das unbeschriebene Blatt ISBN-10: 3827005094
- Strandburg-Peshkin, A., Farine, D., Couzin, I., Crofoot, M.C. 2015 Shared decision-making drives collective movement in wild baboons. *Science*. 348 (6241), 1358-1361
- Sueda, K. L. C., Hart, B. L. & Cliff, K. D. 2008 Characterisation of plant eating in dogs. *Appl. Anim. Behav. Sci.* 111, 120–132. (doi:10.1016/j.applanim.2007.05.018)
- Sundaresan, S. R., Fischhoff, I. R., Dushoff, J., & Rubenstein, D. I. 2007 Network metrics reveal differences in social organization between two fission–fusion species, Grevy’s zebra and onager. *Oecologia*, 151(1), 140-149.
- T. Kooriyama (2009) The death of a newborn chimpanzee at Mahale: reactions of its mother and other individuals to the body. *Pan Afr. News*, 16 (2)
- T.J. Izzoab, D.J. Rodriguesabc*, M. Meninad, A.P. Limaa & W.E. Magnussona 2012 Functional necrophilia: a profitable anuran reproductive strategy? *Journal of Natural History* Volume 46, Issue 47-48
- Talbot, C. F., Freeman, H. D., Williams, L. E., & Brosnan, S. F. (2011). Squirrel monkeys' response to inequitable outcomes indicates a behavioural convergence within the primates. *Biology Letters*, 7, pp 680-682
- Tanya Broesch, Tara Callaghan, Joseph Henrich, Christine Murphy, Philippe Rochat 2011 Cultural Variations in Children’s Mirror Self-Recognition. *Journal of Cross-Cultural Psychology* vol. 42 no. 6 1018-1029
- Teaney, D. O. (2004). The insignificant killer whale: A case study of inherent flaws in the wildlife services’ distinct population segment policy and a proposed solution. *Environmental Law*, 34, 647-702.
- Teresa Romero , Marie Ito, Atsuko Saito, Toshikazu Hasegawa (2014) Social Modulation of Contagious Yawning in Wolves. *PLOS one* <http://dx.doi.org/10.1371/journal.pone.0105963>
- Thaler, R. H. (1980). Toward a Positive Theory of Consumer Choice. *Journal of Economic Behavior and Organization*, 1 (1), 39-60.
- The Nature of Culture. (2016) book publication based on an Interdisciplinary Symposium ‘The Nature of Culture’, Tübingen, Germany in *Vertebrate Paleobiology and Paleoanthropology*, Editors: Miriam N. Haidle, Nicholas J. Conard, Michael Bolus
- Thiele TE, Koh MT, Pedrazzini T (February 2002). "Voluntary alcohol consumption is controlled via the neuropeptide Y Y1 receptor". *J. Neurosci.* 22 (3)
- Tiffani J. Howella & Pauleen C. Bennettb (2011) Can dogs (*Canis familiaris*) use a mirror to solve a problem? *Journal of Veterinary Behavior: Clinical Applications and Research* Volume 6, Issue 6, Pages 306–312
- Tobias Rahde (2014) *Stufen der mentalen Repräsentation bei Keas (Nestor notabilis)*. Dissertation im Fachbereich Biologie, Chemie, Pharmazie der Freien Universität Berlin www.diss.fu-berlin.de/diss/receive/FUDISS_thesis_000000096348
- Tobias Rahde (2014) *Stufen der mentalen Repräsentation bei Keas (Nestor notabilis)*. Dissertation im Fachbereich Biologie, Chemie, Pharmazie der Freien Universität Berlin www.diss.fu-berlin.de/diss/receive/FUDISS_thesis_000000096348
- Toshitaka N. Suzuki, David Wheatcroft & Michael Griesser (2016) Experimental evidence for compositional syntax in bird calls. *Nature Communications* 7, Article number: 10986 doi:10.1038/ncomms10986
- Troje, Nikolaus F.; Huber, Ludwig; Loidolt, Michaela; Aust, Ulrike; Fieder, Martin (1999): Cate- gorical learning in pigeons: the role of texture and shape in complex static stimuli. *Vision Re-search* 39: 353-366.
- Tschudin, A., Call, J., Dunbar, R. I. M., Harris, G., & van der Elst, C. (2001). Comprehension of signs by dolphins (*Tursiops truncatus*). *Journal of Comparative Psychology*, 115, 100-105.
- Understanding intraspecific variation in animal phenotypes from genes to behaviour
- V. S. Banschbach, A. Brunelle, K. M. Bartlett, J. Y. Grivetti, R. L. Yeamans 2006 Tool use by the forest ant *Aphaenogaster rudis*: Ecology and task allocation. *Insectes Sociaux*. Band 53, Nr. 4, pp 463–471
- V. Southgate, A. Senju, G. Csibra, (2007) Action Anticipation Through Attribution of False Belief by 2-Year-Olds *Psychol. Sci.* 18, 587–592
- van Schaik CP, Ancrenaz M, Borgen G, Galdikas B, Knott CD, Singleton I, Suzuki A, Utami SS, Merrill M (2003) Orangutan cultures and the evolution of material culture. *Science* 299(5603): 102–105
- van Schaik CP, Damerius L, Isler K (2013) Wild Orangutan Males Plan and Communicate Their Travel Direction One Day in Advance. *PLoS ONE* 8(9): e74896. doi:10.1371/journal.pone.0074896
- van Schaik, Carel P. (1999). "The socioecology of fission-fusion sociality in Orangutans". *Biomedical and Life Sciences*. 40 (1): 69–86.
- Vera A. Matrosova; Irena Schneiderová; Ilya A. Volodin; Elena V. Volodina (2012) Species-specific and shared features in vocal repertoires of three Eurasian ground squirrels (genus *Spermophilus*) *Acta Theriologica*, Volume 57, Issue 1, pp 65-78
- Verhulst CE, Mateman AC, Zwier MV, Caro SP, Verhoeven KJF, van Oers K (2016) Evidence from pyrosequencing indicates that natural variation in animal personality is associated with DRD4 DNA methylation. *Molecular Ecology*, 25, 1801–1811.
- Vicki K. Bentley-Condit, E.O. Smith: Animal tool use: current definitions and an updated comprehensive catalog. In: *Behaviour*. 2010 Vol. 147, Nr. 2
- Victoria Fishlock, Christine Caldwell, Phyllis C. Lee 2016 Elephant resource-use traditions. *Anim Cogn* 19:429–433
- Viola Strompfová, Ivana Kubašová, Jana Farbáková, Soňa Gancarčíková, Dagmar Mudroňová, Aladár Mačari, Andrea Lauková (2015) Experimental application of *Lactobacillus fermentum* CCM 7421 in combination with chlorophyllin in dogs. *Appl Microbiol Biotechnol* Vol 99, pp. 8681–8690
- Visser, I. N., Smith, T. G., Bullock, I. D., Green, G. D., Carlsson, O. G. & Imberti, S. 2008 Antarctic peninsula killer whales (*Orcinus orca*) hunt seals and a penguin on floating ice. *Marine Mammal Science*, 24, 225-234.
- Volker B. Deecke, Peter J. B. Slater & John K. B. Ford 2002 Selective habituation shapes acoustic predator recognition in harbour seals. *Nature* 420, 171-173

- VOLKER BERNT DEECKE 1998 STABILITY AND CHANGE OF KILLER WHALE (ORCINUS ORCA) DIALECTS. A THESIS FOR THE DEGREE OF MASTER OF SCIENCE in THE UNIVERSITY OF BRITISH COLUMBIA
- Vonk, J. (2003) Gorilla (*Gorilla gorilla gorilla*) and orangutan (*Pongo abelii*) understanding of first- and second-order relations. *Anim. Cogn.* 2003; 6: 77–86
- Wallberg A, Pirk CW, Allsopp MH, Webster MT (2016) Identification of Multiple Loci Associated with Social Parasitism in Honeybees. *PLoS Genet* 12(6)
- Walter Mischel: *The Marshmallow Test: Mastering Self-Control*, Little Brown, New York 2014, ISBN 0316230855. Deutsch: *Der Marshmallow-Test: Willensstärke, Belohnungsaufschub und die Entwicklung der Persönlichkeit*, Siedler Verlag, München 2015, ISBN 9783641119270.
- Warner, R.R. (1988) Traditionality of mating-site preferences in a coral reef fish. *Nature* 335, 719–721
- Wascher, C. A. F., & Bugnyar, T. (2013). Behavioral responses to inequity in reward distribution and working effort in crows and ravens. *PLOS One*, 8. <http://dx.doi.org/10.1371/journal.pone.0056885>.
- Watwood SL, Owen ECG, Tyack PL, Wells RS. 2005 Signature whistle use by temporarily restrained and free-swimming bottlenose dolphins, *Tursiops truncatus*. *Anim. Behav.* 69, 1373–1386.
- Whiten, A. and van Schaik, C. P. 2007: The evolution of animal ‘cultures’ and social intelligence. *Philosophical Transactions of the Royal Society B* 362, 603-620.
- Whiten, A., Goodall, J., McGrew, W. C., Nishida, T., Reynolds, V., Sugiyama, Y., Tutin, C. E., Wrangham, R. W. & Boesch, C. (1999) Chimpanzee cultures. *Nature* 399: 682-685.
- Whiten, Goodall J, McGrew WC, Nishida T, Reynolds V, Sugiyama Y, Tutin CE, Wrangham RW, Boesch C (1999) Cultures in chimpanzees. *Nature* 399(6737):682–685
- Whitney B. Musser, Ann E. Bowles, Dawn M. Grebner and Jessica L. Crance 2014 Differences in acoustic features of vocalizations produced by killer whales cross-socialized with bottlenose dolphins. *The Journal of the Acoustical Society of America*, Volume 136, Issue 4
- Noad, M.J. et al. (2001) Cultural revolution in whale song. *Nature* 408, 537
- Lucy G. Cheke, Jon S. Simons & Nicola S. Clayton 2016 Higher body mass index is associated with episodic memory deficits in young adults. *The Quarterly Journal of Experimental Psychology* DOI:10.1080/17470218.2015.1099163
- Payne, K. and Payne, R. (1985) Large-scale changes over 19 years in songs of humpback whales in Bermuda. *Z. Tierpsychol.* 68, 89–114
- Wu W, Moreno AM, Tangen JM, Reinhard J. (2013) Honeybees can discriminate between Monet and Picasso paintings. *J Comp Physiol A Neuroethol Sens Neural Behav Physiol.* 199(1):45-55