

ISAZ2012

The Arts & Sciences of Human–Animal Interaction

11 to 13 July, 2012

Murray Edwards College, Cambridge, UK



Abstracts appear as they were submitted. Their content have not been changed, although their appearance may have been changed for stylistic reasons.

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Arts and Sciences of Human-Animal Interactions

ISAZ 2012

The Arts & Sciences of Human–Animal Interaction
11 to 13 July 2012, Murray Edwards College, Cambridge, UK

ISAZ 2012

Below is a list of the oral presentations. Most of these were filmed and links to view them are provided.

Opening Remarks

<http://www.youtube.com/watch?v=74c60Nq3U6Y&feature=plcp>

Plenary Talks

PLENARY 1: On being an Anthrozoön

Mary Midgley

http://www.youtube.com/watch?v=_pm30aal38s&feature=plcp

The text of this talk can be downloaded [here](#).

PLENARY 2: Lives that will not disentangle: what is so special about animal film imagery?

Jonathan Burt

PLENARY 3: Animal personality: what do we know and where shall we go?

Sam Gosling

PLENARY 4: No animals were harmed®

Karen Rosa

<http://www.youtube.com/watch?v=qTq4r4chkTI&feature=plcp>

Oral Presentations

O1. Does pleasure exceed pain in moral significance?

Jonathan Balcombe

http://www.youtube.com/watch?v=a_qrhswKWS8&feature=plcp

O2. Camels out of place and time: the dromedary in Australia

Sarah Batt

<http://www.youtube.com/watch?v=ysftUnZD9Bc&feature=plcp>

O3. Pet-friendly planning: how wildlife protection laws are making local councils accommodate dog owners' needs in new housing developments

Stephen Jenkinson

http://www.youtube.com/watch?v=DKo4g10eR_E&feature=plcp

O4. Demographic themes and trends: twenty-five years of Anthrozoös research and review articles

Clarissa Uttley

<http://www.youtube.com/watch?v=53-9WyKQgJg&feature=plcp>

O5. Does emotional support from cats depend upon anthropomorphism?

John Bradshaw

<http://www.youtube.com/watch?v=xLMb6X3Jab4&feature=plcp>

O6. The tiger in the tank: animal symbolism and visual metaphor in a media culture – a review of the uses and impacts of animals in the automobile advertising industry

Cluny South

<http://www.youtube.com/watch?v=VBKFQzr2XTE&feature=plcp>

O7. Kill 'em dead!: The ordinary practices of pest control in the home

Emma Power

<http://www.youtube.com/watch?v=jC1XpaWKy0E&feature=plcp>

O8. Factors associated with dog walking in 9-10 year old children in Liverpool, UK

Carri Westgarth

<http://www.youtube.com/watch?v=MqTokShiTQ4&feature=plcp>

O9. 'Let us clear the stage and clear our conscience, too': historic British campaigns against animal performance

David Wilson

<http://www.youtube.com/watch?v=y8hAV8ZvU5I&feature=plcp>

O10. Quantifying the impact of incorporating therapy dogs in an after-school program: a comparison of net change in reading fluency

Jennifer Emmert

<http://www.youtube.com/watch?v=bpkUU7o7ZHg&feature=plcp>

O11. Pet ownership and attachment in 9-10 year old children in Liverpool, UK

Alexander German

O12. Marginalization in the wake of domestication; the aisle of the barn

Judith Mazzucco

This was an interactive art installation. Not filmed.

O13. Conflicting representations of the treatment of dispersing and raiding male baboons on South Africa's Cape Peninsula

Samantha Hurn

O14. An elephant in my mirror: human-elephant attachment styles and their impact on captive elephant health and well-being

Lokesh Coomar

<http://www.youtube.com/watch?v=15wP26twEck&feature=plcp>

O15. Measuring speciesism: scale development and validation

Stephanie Grayson

<http://www.youtube.com/watch?v=96n6ssYOnXU&feature=plcp>

O16. The role of personality and sex in owner-cat behaviours and interactions

Kurt Kotrschal

<http://www.youtube.com/watch?v=5G2jYLaBcjE&feature=plcp>

O17. Dog breed popularity is driven by cultural transmission, not behavioural qualities

Harold Herzog

<http://www.youtube.com/watch?v=rXDXIyXpvI4&feature=plcp>

O18. Are the presence of pets or the presence of partners associated with better moods during people's daily lives?

Erika Friedmann

www.youtube.com/watch?v=gGAZWXjg0UE&feature=plcp

O19. Deconstructing the animal in search of the real

Giovanni Aloï

<http://www.youtube.com/watch?v=R3cwldLdDTM&feature=plcp>

O20. Moving beyond the five freedoms: a new definition for the parameters of caring for companion animals

Kathryn Atema

<http://www.youtube.com/watch?v=l5qyG6Btlug&feature=plcp>

O21. Older and younger adults make different attributions for interactions with animals and robots

Matthew Chin

O22. Emotional and behavioural repercussions in dogs of two obedience-separation tasks with the owner within sight or out of sight

Donald Broom

<http://www.youtube.com/watch?v=UuQ22AFSY9Y&feature=plcp>

O23. Zoopolitan futures

Ray Hutchison

<http://www.youtube.com/watch?v=v52DexPhPrM&feature=plcp>

O24. Autism guide dogs and changes in family life

Marie-Jose Enders-Slegers

<http://www.youtube.com/watch?v=kTiUUbu1eHo&feature=plcp>

O25. Socio-emotional effects of a dog in the classroom

Andrea Beetz

<http://www.youtube.com/watch?v=vn5C2U5CoiU&feature=plcp>

O26. Characteristics of 24 cases of animal hoarding in Spain

Paula Calvo

O27. Canines and childhood cancer: examining the effects of therapy dogs with childhood cancer patients and their families

Molly Jenkins

<http://www.youtube.com/watch?v=F3mdLKnFO-o&feature=plcp>

O28. Measuring benefits to Scottish male young offenders in the first prison-based dog training programme in the UK.

Rebecca Leonardi

O29. Upon the death of a dog: three women artists and works of love and loss

Kathleen Vaughan

O30. Increasing our understanding of the role of oxytocin in dog-human bonding.

Jessica L. Oliva

http://www.youtube.com/watch?v=hsJ4xi462_Y&feature=plcp

O31. Animal assisted therapy at the U.S. Army Air Forces Convalescent Center at Pawling, New York: an idea that barely found a place in medical history

Helena Pycior

O32. Development of the SPANA caring for animals questionnaire

Stephen Albone

<http://www.youtube.com/watch?v=NxQQ6oUzeS4&feature=plcp>

O33. Other voices: human and animal vocal entanglements in performance

Austin McQuinn

<http://www.youtube.com/watch?v=aJuF3fxspzg&feature=plcp>

O34. Designing playful encounters between farm animals and humans to reshape the interface between animal science, philosophy and ethics

Clemens Driessen

O35. From gate to plate: perspectives on contemporary food production and animal welfare

Nik Taylor

<http://www.youtube.com/watch?v=r5iVv6d09MI&feature=plcp>

O36. Effects of an animal-assisted intervention for children with autism spectrum disorder and their peers in a classroom setting

Marguerite O'Haire

<http://www.youtube.com/watch?v=mkq1CDIJNyM&feature=plcp>

O37. Equine gatekeepers: the active role of horses in fox-hunting and fieldwork

Alison Acton

<http://www.youtube.com/watch?v=owC3GzKOQuU&feature=plcp>

O38. Breed identification of dogs: an illusion

Victoria Voith

O39. Quality management in AAI: are ordinary people as observers accurate raters?

Birgit Stetina

http://www.youtube.com/watch?v=B91q3RP_tLo&feature=plcp

O40. Eye movements, expertise and animal type as predictors of animal contentment attributions

Valerie Sims

<http://www.youtube.com/watch?v=OH0aVXtmjUY&feature=plcp>

O41. The role of pets in the family systems of children from diverse cultures in the US

Brinda Jegatheesan

O42. Rick Gibson.

The use of live insects in art and entertainment

Rick Gibson

<http://www.youtube.com/watch?v=HOLONdiKm6k&feature=plcp>

O43. The art of naming cats: cross-cultural study continued

Penny Bernstein

O44. Companion dogs act as psychological assets for successful professionals

Pauleen Bennett

<http://www.youtube.com/watch?v=4s3gEKfiliU&feature=plcp>

O45. Guidelines for dog-assisted interventions in institutions

Christine Olsen

<http://www.youtube.com/watch?v=AAng3ak7ofY&feature=plcp>

O46. Understanding past and present objections to greyhound racing in the United States: a revised view

Gwyneth Thayer

<http://www.youtube.com/watch?v=TTbcqyqH5Cg&feature=plcp>

O47. Human classification of context-related vocalisations emitted by known and unknown domestic cats (*Felis catus*)

Sarah Ellis

<http://www.youtube.com/watch?v=twzRhi2DYbo&feature=plcp>

O48. "The woman with the dog": issues of independence and identity for guide dog owners

Ruth Butler

<http://www.youtube.com/watch?v=Ft5MDCJfPpc&feature=plcp>

O49. Children's attitudes to farm animals

Nelly Lakestani

<http://www.youtube.com/watch?v=7JetsuYd27M&feature=plcp>

O50. Factors that predict owner attachment to pet dogs

Christy L. Hoffman

<http://www.youtube.com/watch?v=junNKPRVyBE&feature=plcp>

O51. Can they suffer? Facing animal suffering in Jacques Derrida and Primo Levi

Damiano Benvegnù

http://www.youtube.com/watch?v=iPIGE1_zgDY&feature=plcp

O52. Companion animal attachment and general well being in older adults, living in the Western Region of Puerto Rico

Yahaira Segarra Gonzalez

<http://www.youtube.com/watch?v=Y1CC-rp9IHw&feature=plcp>

O53. Thrill killing

Karen Dalke

<http://www.youtube.com/watch?v=XEvuWIIjnkI&feature=plcp>

O54. Seeing the other—animal identities through children's eyes

Wouter Servaas

<http://www.youtube.com/watch?v=9FNjExLqMuw&feature=plcp>

O55. Posthumeneutics and the animal avant garde: digital experiments in inter-species translation

Thomas Doran

O56. The changing human-feline relationship in Britain c.1900-1950

Hilda Kean

<http://www.youtube.com/watch?v=YFHFg41dS-Y&feature=plcp>

O57. Teacher attitudes to animals in primary education in England

Diahann Gallard

http://www.youtube.com/watch?v=1efme7X_S_U&feature=plcp

O58. The fall and rise of animals in fiction

Gabrielle Regney

<http://www.youtube.com/watch?v=926rfLjlxTU&feature=plcp>

Closing Remarks

http://www.youtube.com/watch?v=1l_kUo36__8&feature=plcp

Compilation: Final Thoughts

<http://www.youtube.com/watch?v=2Utp8ITr4I4&feature=plcp>

Posters

Presenters were invited to upload a pdf of their poster to the ISAZ Online Poster Session. These can be viewed [here](#).

Note that not all authors uploaded their poster to the site. Posters from previous years can also be viewed [here](#).

HAI Research Funding Forum: Tips for Success

- Do you want to learn about the Human-Animal Interaction research that's currently being co-funded by the U.S. National Institutes of Health (NIH) and Mars-WALTHAM®?
- Do you want to learn how to navigate the NIH and WALTHAM® grant application processes?

If so, then please plan to attend this session being hosted by the *Eunice Kennedy Shriver* National Institute of Child Health & Human Development (NICHD), WALTHAM®, and Mars, Incorporated.

Wednesday, 11 July 2012

12:30pm – 2:00pm

Buckingham House Seminar Room: Research Poster Viewing

1:00pm – 1:50pm

Buckingham House Lecture Theatre: Funding Presentation

During the lunch break, representatives from the public-private partnership formed between NICHD/Mars-WALTHAM® will provide real-world advice—taken from the NIH peer-review of HAI research applications—about how to navigate the NIH and WALTHAM® grant application processes and improve your chances of submitting a successful proposal.

In addition, research posters will be available for viewing in the Buckingham House Seminar Room, featuring studies currently receiving funding through the partnership.



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About the International Society for Anthrozoology

The International Society for Anthrozoology (ISAZ) was formed in 1991 as a supportive organization for the scientific and scholarly study of human–animal interactions. ISAZ is a nonprofit, nonpolitical organization with a worldwide, multi-disciplinary membership of students, scholars and interested professionals.

Our mission is to serve the growing community of scholars and scientists working in the field of Anthrozoology (the study of human–animal interactions and relationships) by supporting research, publishing and disseminating new insights and discoveries, and promoting the exchange of knowledge and expertise within the field. To learn more, please explore our web site: www.isaz.net

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anthrozoös25
25th Anniversary Volume

A multidisciplinary journal of the interactions of people and animals

EDITOR-IN-CHIEF

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ASSOCIATE EDITORS

Penny Bernstein, Kent State University, USA

Patricia K. Anderson, Western Illinois University, USA

anthrozoös is a peer-reviewed multidisciplinary journal that provides a vital forum for academic dialogue on human-animal relations. As a pioneer in the field it addresses the characteristics and consequences of interactions and relationships between people and non-human animals across anthropology, ethology, medicine, psychology, veterinary medicine and zoology.

***anthrozoös* is the official publication of the International Society for Anthrozoology (ISAZ).**

Join ISAZ and benefit from a wide range of membership offers! For complete details on membership, visit the ISAZ website www.isaz.net.

Visit the Berg/Bloomsbury stand during the conference to:

- Catch a first glimpse of the special anniversary supplementary issue
- enter our free prize draw for the chance to win the complete print archive (vols 1-19)
- celebrate 25 years of *anthrozoös* with a piece of birthday cake!

www.bergjournals.com/anthrozoos



Welcome

On behalf of the organizing committee, I warmly welcome you to Cambridge and the 21st conference of the International Society for Anthrozoology. The Society was actually founded here—in 1991 (St. Catharine’s College)—and our last conference here was in 1996, at Downing College. As the editor of *Anthrozoös*, the Society’s journal, I’m particularly happy to be hosting the conference this year, as the journal celebrates its 25th anniversary. A special supplementary issue of the journal has been edited and will be available at the conference. Of course, ISAZ members will get a free copy of this issue – a birthday present from us to you! And there should be some birthday cake for you to eat, too, if you visit the Berg stand.

The ISAZ conference programme for 2012 encompasses both the Arts and Sciences of Human–Animal Interaction and offers an exciting variety of topics, including an interactive art installation. Two oral parallel sessions are offered throughout each day of the conference. Rather than separating out themes into particular time-slots or clusters as has been the case in past conferences, ISAZ 2012’s topics are deliberately spread throughout the programme. This means that no one theme is privileged over another. Therefore for participants who are only able to attend for a day or two, they are not disadvantaged in missing out on all the talks, for example, related to welfare or health, as no themes are clustered together. In addition, almost all the talks will be filmed and made available for viewing on the ISAZ website at a later date, so there’s no reason to despair if you miss a talk at the conference! This will be the first time ISAZ has recorded conference presentations—we hope you think it is worthwhile and look forward to your feedback.

I hope you enjoy the wonderful variety of oral, poster and film presentations on both the Arts and Sciences of Human–Animal Interaction!

Anthony L. Podberscek, Conference Chair

Organizing Committee



Anthony L. Podberscek (Conference Chair)

University of Cambridge, UK

E-mail: alp18@cam.ac.uk

Anthony L. Podberscek is an Australian living and working in Cambridge, UK. He received his veterinary degree and Ph.D. (in animal behaviour and human–animal interactions) from the University of Queensland, Australia. Since 1992, he has been a post-doctoral research associate in the Department of Veterinary Medicine at the University of Cambridge. Since 1997, he has also been the editor-in-chief of *Anthrozoös*, Journal of the International Society for Anthrozoology. His research interests include companion animal behaviour, the treatment of animal behavioural problems, attitudes to animals and animal welfare, and cultural aspects of human– animal interaction. He is an Officer of the International Society for Anthrozoology and is on the editorial board of the *Journal of Applied Animal Welfare Science*.



Adrienne Thomas

Independent Scholar, New Zealand & Wales

E-mail: adriennegoddess@gmail.com

Adrienne Thomas has a background in education, health, social work and counseling. Born in Wales, she lives between Christchurch, New Zealand and Cardiff, Wales. Her main interests lie in the human–animal bond and grief and the everyday ethics of working with, and living alongside, non-human animals.



Giovanni Aloï

Editor, Antennae: The Journal of Nature in Visual Culture

E-mail: antennaeproject@googlemail.com

Giovanni Aloï was born in Milan, Italy in 1976. In 1995 he obtained his first degree in Fine Art – Theory and Practice, then moved to London in 1997 where he furthered his studies in Visual Cultures (MA) at Goldsmiths College. From 1999 to 2004 he worked at Whitechapel Art Gallery and as a film programmer at Prince Charles Cinema in London whilst continuing to work as freelance photographer. Today he is a lecturer in History of Art at Roehampton University, Queen Mary University of London, The Open University, and Tate Galleries. Since 2006, he also is the founder and Editor-in-Chief of *Antennae, The Journal of Nature in Visual Culture*. The Journal combines a heightened level of academic scrutiny of animals in art, with a less formal and more experimental format designed to appeal to wider audiences. Since 2009, Giovanni has been researching for his PhD at Goldsmiths College on the subject of “animals as art objects in the gallery space.” His first book, *Art & Animals*, part of the series ‘Art &’ published by IB Tauris is now available.



Pauline Appleby

Interface Event Management

E-mail: pauline.interface@virgin.net

Pauline Appleby is a professional conference organiser and member of the ABPCO (Assoc of British Professional Conference Organisers). She arranges conferences, seminars, webinars, public meetings and awards dinners for a variety of clients in various sectors including the Assoc of Pet Behaviour Counsellors (APBC), Sail Training International and the National Institute for Health and Clinical Excellence (NICE). Wearing various hats, she also works as media manager for The Tall Ships Races and is Association Manager for the Association of Pet Behaviour Counsellors.

Acknowledgements

CONFERENCE MANAGEMENT

*Interface Event Management Ltd:
www.interfaceconferences.co.uk*

AUDIO-VISUAL SUPPORT

*AN Event Services:
www.aneventservices.co.uk*

ABSTRACT BOOK

Design

John Livesey, Adrienne Thomas and Anthony Podberscek

Layout & Production

*Andrea Ptak, Communicating Words & Images
E-mail: andrealeighptak@me.com*

POSTER DESIGN

*Giovanni Aloï
antennaeproject@googlemail.com*

WEB DESIGN

*Tom Peake
E-mail: tmpeake@gmail.com*

ONLINE ABSTRACT SUBMISSION AND REVIEW SYSTEM

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MURRAY EDWARDS COLLEGE CONFERENCE TEAM

*Tania Gannon
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*Sculptures by Wendy Taylor
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PHOTOS OF CAMBRIDGE

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What Is ISAZ?



The International Society for Anthrozoology (ISAZ) was formed in 1991 as a supportive organization for the scientific and scholarly study of human–animal interactions (anthrozoology). It is a nonprofit, nonpolitical organization with a worldwide, multi-disciplinary membership of scientists, scholars, students, interested organizations, and laypersons.

ISAZ aims to promote the study of human–animal interactions and relationships by encouraging and publishing research, holding meetings, and disseminating and exchanging information. To accommodate its international membership, ISAZ has held meetings and conferences across the globe.

Why Join ISAZ?

Benefits to ISAZ members include:

- The Society's quarterly journal, *Anthrozoös*, the leading academic journal on human–animal interactions and relationships
- Substantially reduced registration fees for all ISAZ conferences



- Listserv distribution of items of interest to society members
- 20% discount on books and journal subscriptions from Berg Publishers



Anyone can join ISAZ! To ensure that anyone with an interest in the field can enjoy access to the most up-to-date information and scholarship from the field, the Society offers a range of membership options: Individual, Student, Affiliate, and Corporate.

For complete details on membership, visit the ISAZ website today. www.isaz.net

ISAZ2012 Conference Programme

Wednesday 11 July, 2012

| | Buckingham House–Lecture Theatre | Buckingham House–Seminar Room |
|------------------|---|---|
| 0900–0945 | Registration and refreshments - Buckingham House Foyer Posters in the Long Room and throughout conference. | |
| 0945–1015 | Opening remarks | |
| 1015–1100 | Plenary 1 Chair: Adrienne Thomas On being an Anthrozoön <i>Mary Midgley</i> | |
| | Session 1A Chair: John Livesey | Session 1B Chair: Cheryl Krause-Parello |
| 1110–1130 | O1. Does pleasure exceed pain in moral significance? <i>Jonathan Balcombe</i> | O7. Kill 'em dead!: The ordinary practices of pest control in the home <i>Emma Power</i> |
| 1130–1150 | O2. Camels out of place and time: the dromedary in Australia <i>Sarah Batt</i> | O8. Factors associated with dog walking in 9–10-year-old children in Liverpool, UK <i>Carri Westgarth</i> |
| 1150–1210 | O3. Pet-friendly planning: how wildlife protection laws are making local councils accommodate dog owners' needs in new housing developments <i>Stephen Jenkinson</i> | O9. 'Let us clear the stage and clear our conscience, too': historic British campaigns against animal performance <i>David Wilson</i> |
| 1210–1230 | O4. Demographic themes and trends: twenty-five years of <i>Anthrozoös</i> research and review articles <i>Clarissa Uttley</i> | |
| 1230–1400 | Lunch – Buckingham House Foyer | |
| 1300–1350 | NICHD/Mars-WALTHAM® HAI Research Funding Forum: Tips for Success – Funding Presentation | |
| 1400–1445 | Plenary 2 Chair: Ken Shapiro Lives that will not disentangle: what is so special about animal film imagery? <i>Jonathan Burt</i> | |
| | Session 2A Chair: Marie-José Enders-Slegers | Session 2B Chair: Clarissa Uttley |
| 1450–1510 | O5. Does emotional support from cats depend upon anthropomorphism? <i>John Bradshaw</i> | O10. Quantifying the impact of incorporating therapy dogs in an after-school program: a comparison of net change in reading fluency <i>Jennifer Emmert</i> |
| 1510–1530 | O6. The tiger in the tank: animal symbolism and visual metaphor in a media culture – a review of the uses and impacts of animals in the automobile advertising industry <i>Cluny South</i> | O11. Pet ownership and attachment in 9–10-year-old children in Liverpool, UK <i>Alexander German</i> |

Wednesday 11 July, 2012 continued...

| | Buckingham House–Lecture Theatre | Buckingham House–Seminar Room |
|------------------|---|--|
| 1530–1600 | Refreshments. Poster viewing in the Long Room | |
| 1600–1730 | Short films Chair: Giovanni Aloï | |
| 1730–1830 | ISAZ AGM [should last no longer than 30 min.] | O12. Marginalization in the wake of domestication; the aisle of the barn <i>Judith Mazzucco</i> This is an interactive art installation – max. of 25 people can attend at any one time. Each session lasts 20 min. The session will be repeated at least once. If there is demand, this presentation will be given again in the evening. |
| 1830–1930 | Champagne poster reception – Long Room | |
| 1930–2100 | Buffet dinner – Fountain Court Walkway Posters – Long Room | |



Thursday 12 July, 2012

| | Buckingham House–Lecture Theatre | Buckingham House–Seminar Room |
|------------------|--|---|
| 0845–0930 | Plenary 3 Chair: Hal Herzog Animal personality: what do we know and where shall we go? <i>Sam Gosling</i> | |
| | Session 3A Chair: Lynette Hart | Session 3B Chair: Andrea Beetz |
| 0940–1000 | O13. Conflicting representations of the treatment of dispersing and raiding male baboons on South Africa's Cape Peninsula <i>Samantha Hurm</i> | O26. Characteristics of 24 cases of animal hoarding in Spain <i>Paula Calvo</i> |
| 1000–1020 | O14. An elephant in my mirror: human–elephant attachment styles and their impact on captive elephant health and well-being <i>Lokesh Coomar</i> | O27. Canines and childhood cancer: examining the effects of therapy dogs with childhood cancer patients and their families <i>Molly Jenkins</i> |
| 1020–1040 | O15. Measuring speciesism: scale development and validation <i>Stephanie Grayson</i> | O28. Measuring benefits to Scottish male young offenders in the first prison-based dog training programme in the UK. <i>Rebecca Leonardi</i> |
| 1040–1110 | Refreshments. Poster viewing in the Long Room | |
| | Session 4A Chair: Beth Daly | Session 4B Chair: Anne McBride |
| 1110–1130 | O16. The role of personality and sex in owner–cat behaviours and interactions <i>Kurt Kotrschal</i> | O29. Upon the death of a dog: three women artists and works of love and loss <i>Kathleen Vaughan</i> |
| 1130–1150 | O17. Dog breed popularity is driven by cultural transmission, not behavioral qualities <i>Harold Herzog</i> | O30. Increasing our understanding of the role of oxytocin in dog–human bonding. <i>Jessica L. Oliva</i> |
| 1150–1210 | O18. Are the presence of pets or the presence of partners associated with better moods during people's daily lives? <i>Erika Friedmann</i> | O31. Animal assisted therapy at the U.S. Army Air Forces Convalescent Center at Pawling, New York: an idea that barely found a place in medical history <i>Helena Pycior</i> |
| 1210–1230 | O19. Deconstructing the animal in search of the real <i>Giovanni Aloï</i> | O32. Development of the SPANA Caring for Animals questionnaire <i>Stephen Albone</i> |
| 1230–1330 | Lunch – Buckingham House Foyer | |

Thursday 12 July, 2012 continued...

| | Buckingham House–Lecture Theatre | Buckingham House–Seminar Room |
|------------------|---|---|
| 1330–1415 | Plenary 4 Chair: Don Broom No animals were harmed® <i>Karen Rosa</i> | |
| | Session 5A Chair: James Serpell | Session 5B Chair: Rick Timmins |
| 1420–1440 | O20. Moving beyond the Five Freedoms: a new definition for the parameters of caring for companion animals <i>Kathryn Atema</i> | O33. Other voices: human and animal vocal entanglements in performance <i>Austin McQuinn</i> |
| 1440–1500 | O21. Older and younger adults make different attributions for interactions with animals and robots <i>Matthew Chin</i> | O34. Designing playful encounters between farm animals and humans to reshape the interface between animal science, philosophy and ethics <i>Clemens Driessen</i> |
| 1500–1520 | O22. Emotional and behavioural repercussions in dogs of two obedience-separation tasks with the owner within sight or out of sight <i>Donald Broom</i> | O35. From gate to plate: perspectives on contemporary food production and animal welfare <i>Nik Taylor</i> |
| 1520–1600 | Refreshments. Poster viewing in the Long Room | |
| | Session 6A Chair: Elizabeth Paul | Session 6B Chair: Rebecca Johnson |
| 1600–1620 | O23. Zoopolitan futures <i>Ray Hutchison</i> | O36. Effects of an animal-assisted intervention for children with autism spectrum disorder and their peers in a classroom setting <i>Marguerite O'Haire</i> |
| 1620–1640 | O24. Autism guide dogs and changes in family life <i>Marie-José Enders-Slegers</i> | O37. Equine gatekeepers: the active role of horses in fox-hunting and fieldwork <i>Alison Acton</i> |
| 1640–1700 | O25. Socio-emotional effects of a dog in the classroom <i>Andrea Beetz</i> | O38. Breed identification of dogs: an illusion <i>Victoria Voith</i> |
| 1700–1800 | Free time | |
| 1800–1900 | Punt Trip (departs from Magdalene Bridge) | |
| 1900–1930 | Drinks, Old Hall, Queens' College (ticketed event) | |
| 1930–2300 | Dinner, Old Hall, Queens' College (ticketed event) | |

Friday 13 July, 2012

| | Buckingham House–Lecture Theatre | Buckingham House–Seminar Room |
|------------------|--|---|
| | Session 7A Chair: Erika Friedmann | Session 7B Chair: Kurt Kotschal |
| 0900–0920 | O39. Quality management in AAI: are ordinary people as observers accurate raters? <i>Birgit Stetina</i> | O49. Children's attitudes to farm animals <i>Nelly Lakestani</i> |
| 0920–0940 | O40. Eye movements, expertise and animal type as predictors of animal contentment attributions <i>Valerie Sims</i> | O50. Factors that predict owner attachment to pet dogs <i>Christy L. Hoffman</i> |
| 0940–1000 | O41. The role of pets in the family systems of children from diverse cultures in the US <i>Brinda Jegatheesan</i> | O51. Can they suffer? Facing animal suffering in Jacques Derrida and Primo Levi <i>Damiano Bervegñu</i> |
| 1000–1020 | O42. The use of live insects in art and entertainment <i>Rick Gibson</i> | O52. Companion animal attachment and general well being in older adults, living in the Western Region of Puerto Rico <i>Yahaira Segarra Gonzalez</i> |
| 1020–1100 | Refreshments. Poster viewing in the Long Room | |
| | Session 8A Chair: Birgit Stetina | Session 8B Chair: Valerie Sims |
| 1100–1120 | O43. The art of naming cats: cross-cultural study continued <i>Penny Bernstein</i> | O53. Thrill killing <i>Karen Dalke</i> |
| 1120–1140 | O44. Companion dogs act as psychological assets for successful professionals <i>Pauleen Bennett</i> | O54. Seeing the other—animal identities through children's eyes <i>Wouter Servaas</i> |
| 1140–1200 | O45. Guidelines for dog-assisted interventions in institutions <i>Christine Olsen</i> | O55. Posthumeneutics and the animal avant garde: digital experiments in inter-species translation <i>Thomas Doran</i> |
| 1200–1220 | O46. Understanding past and present objections to greyhound racing in the United States: a revised view <i>Gwyneth Thayer</i> | O56. The changing human–feline relationship in Britain c.1900–1950 <i>Hilda Kean</i> |
| 1220–1330 | Lunch – Buckingham House Foyer | |

Friday 13 July, 2012 continued...

| | Buckingham House–Lecture Theatre | Buckingham House–Seminar Room |
|-----------|--|---|
| | Session 9A Chair: John Bradshaw | Session 9B Chair: Pauleen Bennett |
| 1330–1350 | O47. Human classification of context-related vocalisations emitted by known and unknown domestic cats (<i>Felis catus</i>) <i>Sarah Ellis</i> | O57. Teacher attitudes to animals in primary education in England <i>Diahann Gallard</i> |
| 1350–1410 | O48. “The woman with the dog”: issues of independence and identity for guide dog owners <i>Ruth Butler</i> | O58. The fall and rise of animals in fiction <i>Gabrielle Regney</i> |
| 1410–1540 | Film. <i>NokotaHeart</i> (60 minutes), followed by a 30-minute Q&A session with director Sean Garland Chair: Giovanni Aloï | |
| 1540–1550 | Closing remarks. Conference ends | |
| 1550–1630 | Refreshments in Buckingham House foyer | |



Notes:

Plenary Presentations



PLENARY 1

Mary Midgley

ON BEING AN ANTHROZOOON

*A*nthrozoons (or anthrozoa) are presumably humans who are also animals. Since no human has ever been anything but an animal it seems rather odd that we should now have such a difficulty in grasping this concept. Yet our imaginations still can't seem to get on the right track for it at all.

The trouble is not just that our traditional story shows us as created by a humanoid god who appointed us as his deputies to rule the world. That story is, of course, now widely disbelieved; evolution replaces God as the creator. And this might have been expected to undermine our viceregal status. But the idea that most people have of evolution isn't Darwin's idea of a wide-spreading, egalitarian bush—an idea which would have given all evolved creatures equal standing in the world. Instead it's Herbert Spencer's hierarchical idea of the survival of the fittest.

Evolution is seen today as a zero-sum game, a competition that is bound to be won by the most deserving. And since at present we have drifted into taking charge of so many earthly processes we are assumed to be that worthy candidate—a race destined to rule, not just this planet but also (if people like Stephen Hawking and Isaac Asimov are to be believed) much of the rest of the universe as well.

This provides us with a far grander status than we ever got from Christianity. Once God, who might always have had ideas of his own, is removed and there is nobody above to limit our freedom, nothing (it seems) can prevent us from becoming literally omnipotent. This warm and colourful imagery is, I think, what blocks our sense of the physical realities around us; producing widespread climate-change denial. News about things like global warming which has been reaching us for more than half a century now is not easily acted on; it often only produces cognitive dissonance. It clashes so drastically with our self-concept that it cannot be heard.

One particularly bitter feature about this news is that it does not come only from impractical people such as women or poets who might easily be ignored. It comes from scientists. But this whole ideology of evolution has prided itself on being the message of Science. When we bring ourselves—as we must—to shake up this ideology and start accepting truths we shall need to rethink the whole concept of science and therewith the meaning of our own nature.

Mary Midgley is a philosopher whose special interests are in the relations of humans to the rest of nature, particularly animals, and in the tendency of science to become a religion. She formerly lectured in Philosophy at the University of Newcastle on Tyne, UK. Her books include *Beast and Nature*, *Animals and Why They Matter*, *Science and Poetry*, *The Myths We Live By*, *The Solitary Self*, *Darwin and the Selfish Gene* and a memoir, *The Owl of Minerva*. She still lives in Newcastle and has three sons.
E-mail: dr.mary.midgley@googlemail.com



PLENARY 2

Jonathan Burt

*LIVES THAT WILL NOT DISENTANGLE:
WHAT IS SO SPECIAL ABOUT ANIMAL
FILM IMAGERY?*

The phrase at the beginning of my title is based on a remark of Stanley Cavell's in his wonderful essay "Leopards in Connecticut" on the film *Bringing Up Baby*. I begin by contrasting Cavell's reading of human–animal relations in the film with that of Raymond Bellour's in his recent *Le Corps du Cinéma*, the most important contribution to the theorising of animals in film in recent years. The entanglement between humans and animals on the one hand, and the possibility that there is something particular (and peculiar) about animal film imagery is a problem that I will develop out of these two very different readings of the film, and Bellour's thesis of animal film more generally. Bearing in mind of course, that any claim for a special status for animal imagery raises a number of difficulties, most notably essentialism and over-generalisation. Though that doesn't make the question any less interesting to pursue. In the second part of my talk I will explore these two themes through a number of different kinds of film including some very recent documentary, video art, and fiction film. By way of a coda, July 2012 will be almost exactly ten years since the publication of my *Animals in Film*. A number of claims are made in that book for the special status of animal films, which I will reconsider in the light of what I have learnt since. In fact an alternative title to this lecture could be—"What I knew then, and what I don't know now."

Jonathan Burt is the editor of the Reaktion "Animal" series, author of *Animals in Film* (2002) and *Rat* (2008), and numerous articles on aspects of animal history. He is currently writing a novel which has more animals in it than he ever intended.
E-mail: pcfav@aol.com



PLENARY 3

Sam Gosling

ANIMAL PERSONALITY: WHAT DO WE KNOW AND WHERE SHALL WE GO?

In the late 1990s, the idea of non-human animals having personality was treated with skepticism or even ridicule by the scientific community. But now, little more than a decade later, the topic is a well-established, vibrant area of research in such fields as behavioral ecology and applied ethology. Consistent individual differences in personality have been identified in numerous non-human species, ranging from octopuses and guppies to hyenas and chimpanzees. What brought about animal personality's change in fortunes? And what promise does it hold for Anthrozoology and allied fields? This talk will summarize the major discoveries from the field, focusing on the challenges the field has faced and those that lie ahead. For example, questions about measurement have long dogged the field, with concerns focusing on three basic issues: (1) that personality cannot be measured reliably in animals, (2) that the assessments are overly subjective, (3) that the methods required to obtain valid assessments are impractical. Using data from our studies on spotted hyenas, dogs, chimpanzees, squid, and humans I address each concern and evaluate the viability of personality assessments in animals. Next, I shall discuss some major challenges that lie ahead. These include addressing concerns regarding anthropomorphism, determining the best level at which to conceptualize personality, the need to develop a common taxonomy for describing personality, the importance of construct validation, and integrating the ideas of variation within individuals and across the lifespan. Finally, I shall consider the implications of this work in science (e.g., understanding the genetic bases of personality) and applied settings (e.g., identifying dogs well suited to explosive-detection work).

Sam Gosling is a Professor of Psychology at the University of Texas at Austin. He did his doctoral work at the University of California at Berkeley, where his dissertation focused on personality in spotted hyenas. His non-human research has also examined dogs, cats, chimpanzees, and squid. He also does research on Internet-based methods of data collection and on how human personality is manifested in everyday contexts like bedrooms, offices, web pages, and music preferences. Gosling is the recipient of the American Psychological Association's Distinguished Scientific Award for Early Career Contribution. E-mail: samg@mail.utexas.edu



PLENARY 4

Karen Rosa

NO ANIMALS WERE HARMED®

From the first moving images of a horse by Eadweard Muybridge in 1872 to the present, animals have had a prominent place in filmed media. American Humane Association opened its Hollywood office in 1940 as a response to the cruel treatment of animals during the early days of cinema and continues today as the only official monitor for the humane treatment of animal actors in all forms of filmed and digital media. The parallel progress of the film industry and the animal welfare movement, coupled with global production and distribution has presented American Humane Association with great opportunity and great challenges as public attitudes, animal studies and technological advancements coincide with a deepening appreciation for the human–animal bond. Today, the Film & Television Unit protects tens of thousands of animals in over 2,000 productions a year, working domestically throughout the United States and its territories and also internationally.

For 135 years, American Humane Association has been America's leading voice for the protection of children and animals and the only one devoted to this unique dual mission and the power of the human–animal bond. As early as 1924, American Humane Association was tracking and criticizing inhumane animal treatment by movie makers who viewed animals as disposable props. As the movies gained in popularity, so did social mores that found people to be intolerant of animal cruelty for the sake of entertainment. Today the scope of film and digital production encompasses internet productions, music videos, commercials and direct to DVD productions as well as traditional theatrical releases.

The scope of our work is vast and our *Guidelines for the Safe Use of Animals in Filmed Media*, the industry standard, continue to evolve along with

film technology, social attitudes, animal behavioral studies, animal science and over seventy years of on-set, practical experience. More distribution channels mean more product and international locations can mean divergent attitudes towards animals. Animals are part of our lives with pet ownership at an all-time high and our awareness of their survival challenges made more apparent daily. Historically animals share the human experience and therefore will inevitably be part of the stories filmmakers tell. As long as live animals are used in film, American Humane Association's mission will be ensuring "No Animals Were Harmed."[®]

Karen Rosa is Senior Vice President of the Film & TV Unit at American Humane Association. She has been with AHA for more than 18 years and leads the Los Angeles-based Film & TV Unit. The program includes 50 full-time and part-time staff, including American Humane Association Certified Animal Safety Representatives[™], who monitor animal action on 2,000 productions a year. The Film & TV Unit grants filmed productions that follow its guidelines and requirements the famed "No Animals Were Harmed"[®] end-credit certification.
E-mail: Krosa@americanhumane.org

Oral Presentations: Wednesday 11 July

01 DOES PLEASURE EXCEED PAIN IN MORAL SIGNIFICANCE?

Jonathan Balcombe

Humane Society University, Washington DC, USA. jbalcombe@hsus.org

Sentience, which is the bedrock of ethics, is the capacity for both pain and pleasure. In discussions of animal rights, the prevention of pain and suffering are predominant themes, and rarely if ever does animals' capacity for pleasure enter the debate (e.g., Singer 1990, Scully 2002). In this paper, I will develop the argument that animals' capacity for pleasure exceeds in moral weight their capacity for pain, specifically in reference to death. There is little scientific literature on the experience of pleasure in nonhuman animals, and only one author has attempted a synthesis (Balcombe 2006, 2009). Pleasure has an important evolutionary role in motivating and reinforcing adaptive behaviors in man and other animals (Cabanac 1971, 2005), and it finds expression in a broad range of vertebrate taxa (e.g., Balaskó & Cabanac 1998, Bshary & Würth 2001, Panksepp 2007, Widowski & Duncan 2000). The wrongfulness of murder is due more to the loss of future pleasures than to the pain of death. Otherwise, we would have no objection to the pristinely humane murder of an anonymous victim, without friends or relatives and totally unaware of what befell her. Murder is wrong because it cuts short a life worth living. Thus, it is pleasure and not pain that underlies the offense of murder. That animals of all vertebrate taxa are pleasure-seekers (see Balcombe 2006, 2009, and references below) and not merely pain-avoiders means that they too have a great stake in their lives. Animals' capacity to enjoy life's pleasures compounds humankind's enormous toll on animals; this is especially the case with animal agriculture, which kills over sixty billion sentient animals yearly. In light of these considerations, pleasure warrants a prominent place in both the discourse and practice of human-animal relations.

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O2 CAMELS OUT OF PLACE AND TIME: THE DROMEDARY IN AUSTRALIA

Sarah Batt

University of Wales: Trinity Saint David, Lampeter, UK. sarahlbatt@gmail.com

The deserts of the Australian outback are ideal territories for dromedary camels, *Camelus dromedarius*. Dromedaries' flexible adaptations allow them to eat 80% of Australian plant species and obtain much of their water through ingesting vegetation; they thrive where other species perish. In many ways, the dromedary could be said to 'belong' in this harsh environment. Yet for numerous Australians—particularly ranchers, conservation managers and, following the publication of a condemning report (Edwards et al. 2008), local and national governments—camels are increasingly perceived as pests and unwelcome invaders.

Mary Douglas' influential book *Purity and Danger* suggests that substances classified as 'dirt', or 'pollution' can often be understood as "matter out of place" (1966: 35). Douglas proposed that 'anomalous' species, which fail to fit neatly into existing classification systems, become pollutants and therefore taboo. John Knight developed this concept by suggesting that 'pest' species become "animals out of place" when they enter human domains or disturb human perceptual boundaries of "environmental order" (2000: 14). Through exploring and critically reviewing academic, government and media publications, this paper proposes that today's Australian dromedaries exemplify 'animals out of place' and discusses how and why they have developed this anomalous status. It also suggests that the dromedary is not only increasingly considered 'out of place' in Australia, but also 'out of time', as its status transforms with temporal shifts in human circumstances and worldviews.

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O3 PET-FRIENDLY PLANNING: HOW WILDLIFE PROTECTION LAWS ARE MAKING LOCAL COUNCILS ACCOMMODATE DOG OWNERS' NEEDS IN NEW HOUSING DEVELOPMENTS

Stephen Jenkinson^{1,2}

¹*Access and Countryside Management, Orkney, UK.*

²*The Kennel Club, London, UK. steve@sjacm.co.uk*

Concerns about adverse impacts on wildlife from pet dogs in new housing developments (Antos et al 2006; Banks and Bryant 2007), have traditionally led to ineffective dog bans and on-lead restrictions. This review presents how robust spatial planning policies can more effectively promote the health and social benefits of dog ownership, while also better protecting wildlife.

A dog is taken on 48% of all visits to the English countryside and urban greenspace (TNS 2010); priorities for most dog walkers are off-lead exercise, close to home and away from traffic (Barlow and Hart 2008). European laws prevent development that is likely to cause significant detrimental effects on protected wildlife. Traditional management measures of legally or physically restricting greenspace access for dog owners do not reduce the likelihood of disturbance to wildlife, due to low compliance (Jenkinson 2011).

Instead, major housing developments are now funding research into the precise extent, location and amenities of greenspace that dog owners seek every day, so these can be incorporated into strategic development masterplans. For example, a typical dog walk around the Whitehill Bordon Eco Town, is 2.7km long with a mean greenspace penetration distance of 784m; 78.9% have their dogs off-lead most or all of the time (Anon 2009). Housing developers then pay levies of up to £10,000 (EUR12,000, \$US16,000) per home into a trust fund that will provide sufficient accessible, off-leash, traffic-free, greenspace in perpetuity (Anon 2006). This protects wildlife sites from additional disturbance, and so allows new houses to be built, as dog-owning residents will go to the bespoke dog-friendly greenspaces out of choice, as they are more attractive than the wildlife areas.

This new approach is being increasingly adopted by councils in England; it has worldwide implications for development planning, human health and wildlife protection.

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O4 DEMOGRAPHIC THEMES AND TRENDS: TWENTY-FIVE YEARS OF ANTHROZOÖS RESEARCH AND REVIEW ARTICLES

Clarissa Uttley

Plymouth State University, Plymouth/New Hampshire, USA. cmuttley@plymouth.edu

To honor the 25th anniversary of *Anthrozoös*, the Official Journal of the International Society for Anthrozoology (ISAZ), a content analysis was conducted to explore several article demographics including academic affiliation and geographic location of first author, and gender of first and all supporting authors. In addition, journal specifics were calculated on the Research and Review articles. A total of 448 individual Research and Review articles have been published since the inception of *Anthrozoös* in 1987 and served as the sample for this study. A review of the geographic location of the published articles presented an over-representation of articles from the United States (230 or 51.3%), followed by Australia with 45 articles (10.0%), and the United Kingdom (40, 8.9%). Results identified females as the first author for 57.4% (257) articles, males served as the first author for 40.4% (181) articles. Academic disciplines of the first author were also reviewed, showing Social Sciences (Psychology, Developmental studies, Sociology, etc) publishing the highest number of articles (187, 41.7%) followed by Natural Sciences (Animal Science, Biology, Environmental & Wildlife, etc.) with 75 (16.7%) and Liberal Arts (73, 16.3%). Social Sciences consistently represented the highest number of articles across all years, again followed by the field of Natural Sciences. The number of articles published from Social & Natural Sciences consistently increased throughout the years while articles from other disciplines (and private foundations or organizations) have fluctuated over time. For example, the Health field published their highest number of articles in the 1987–1991 time-period (n=10), their lowest during the 2002–2006 range (n=2), and increased to 7 articles during 2007–2011. This presentation will review the methodology utilized for the study and present the complete results of the content analysis. Areas for future exploration will also be discussed during the presentation.

O5 DOES EMOTIONAL SUPPORT FROM CATS DEPEND UPON ANTHROPOMORPHISM?

John Bradshaw, Peter Hiscox, Elizabeth Paul

University of Bristol, Bristol, UK. j.w.s.bradshaw@bristol.ac.uk

Anthropomorphism has been described as an intrinsic component of the pet-owner bond, and may contribute to psychological benefits such as general well-being. We have used questionnaires to probe links between emotional support received by 75 adult cat owners and the extent to which they attributed emotions to their cats. Attributions of emotional capacities were measured both qualitatively, through free descriptions of photographs and video clips of cat behaviour, and quantitatively, asking respondents to rate how likely it was that their cats experienced primary (e.g. fear), non-evaluative (e.g. jealousy) and evaluative secondary emotions (e.g. guilt). Once demographic variables such as age and gender of respondent had been taken into account in regression models, the proportion of images given emotional descriptions was found to be associated with confidence that cats experience primary ($t=3.07$, $p<0.01$) and non-evaluative ($t=3.12$, $p<0.01$) emotions, though not evaluative emotions ($t=0.83$, $p=0.4$), suggesting an underlying variation in perceptions of cats' emotional capacities. Emotional support from the cat was measured by postulating nine different scenarios in which owners might turn to their cats: ratings for emotional support were significantly correlated with those for primary emotions ($\rho=0.272$, $p=0.02$) but not with non-evaluative emotions ($\rho=0.101$) evaluative emotions ($\rho=0.189$) or emotional descriptions of images ($\rho=0.077$). Linear regression on all four ratings of emotions ($R^2=0.16$, $F(4,70)=2.64$, $p=0.03$) confirmed the positive association with primary emotions alone ($t=2.73$, $p<0.01$). It therefore appears that emotional support may not depend upon uncritical anthropomorphism, at least when it takes the form of believing that cats are capable of experiencing secondary and especially evaluative emotions. However, emotional support was lower in those owners who expressed some uncertainty as to whether their cats experience the full range of primary emotions, suggesting that an affectionate bond between pet and owner requires confidence that the pet has an internal emotional life.

O6 THE TIGER IN THE TANK: ANIMAL SYMBOLISM AND VISUAL METAPHOR IN A MEDIA CULTURE – A REVIEW OF THE USES AND IMPACTS OF ANIMALS IN THE AUTOMOBILE ADVERTISING INDUSTRY

Cluny South

University of British Columbia, Vancouver, BC, Canada. cluny@clunysouth.com

This review builds on the work of Spears et al. (1996) focusing on the use of animal symbolism and visual metaphor within the automobile advertising industry; from the early days of simple metaphoric use, using cheetahs to denote speed, to more recent print advert campaigns combining multiple animal symbolism and referencing complex human–animal relationships with the natural world and automobiles. Resulting impacts on human–animal interaction outside of the advertising industry are also discussed.

Consumers are often attracted to animals, and their use in marketing has been noted to boost product sales. As a result animal imagery has been a feature of the global advertising media for over a century (Spears and Germain, 2007). Studies into the application of visual metaphor in advertising (Kaplan, 2005) have demonstrated the frequency with which animals are linked to products to confer positive qualities. One example being Esso’s “Put a Tiger in your tank” campaign, developed in 1959 using a species rated high in qualities such as charisma, natural performance and energy. While association with these well-rated animal qualities often reaps rewards for the brand, for the associated animal there may be less benefit. The animal qualities used in advertising are as much products of a culturally constituted world (Spears et al, 1996) as they are physical attributes of the animal, and as such they are shaped by a variety of communication systems beyond the advertising media. Since the development of animal symbolism and characterization is considered an iterative process, where-by consumers and communicators are involved in a feedback loop, the result is an evolving animal symbolism that is liable re-impact on real-life human–animal interactions in society, potentially negatively. The effects that animal use in automobile advertising may have on general human–animal relations is discussed.

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07 KILL 'EM DEAD!: THE ORDINARY PRACTICES OF PEST CONTROL IN THE HOME

Emma Power

University of Western Sydney, Penrith, Australia. e.power@uws.edu.au

In recent years critical animal geographies have pointed to the dearth of stories about the small, the microscopic, the slimy and the abject. The exoskeleton, though painfully present to anyone bitten by a bedbug or disgusted by a cockroach, has been all but absent in dominant animal geographies. Death and the killing of animals is a further notable absence. However, this scholarly absence is not paralleled within the popular imagination, where cockroaches, flies and dust mites loom large at the centre of a homemaking war focused on the eradication of house pests. Such practices depend on the death of numerous nonhuman animals and are central to everyday homemaking practice. The paper looks at the normalised practice of killing pest species within the home. Through content and discourse analysis of advertisements and editorial pieces from popular Australian homemaker magazines from the 1950s, 1970s and 2000s it highlights the discourses surrounding this act that seek to normalise and make the practice of killing an essential part of everyday homemaking. In particular, the paper highlights advertising strategies used to make pest killing not just ethically neutral, but normal and necessary. First, advertisements establish a practical asymmetry by emphasising the health threats of pest species and the vulnerability of the family unit, in particular children. Imagined threats are often out of proportion with the extent and nature of the practical threat afforded by identified species. Second, advertisements play with numbers and scale associating individual nonhumans with a population threat, connecting visible pests with hidden hordes, and providing large scale images of microscopic creatures. Third, they emphasise the value of sprays and poisons that “kill ‘em quick” and ensure they are “definitely dead”. In these depictions insect destruction is an ethically neutral and normalised practice that connects with discourses of homemaking and good mothering.

O8 FACTORS ASSOCIATED WITH DOG WALKING IN 9–10-YEAR-OLD CHILDREN IN LIVERPOOL, UK

Carri Westgarth¹, Lynne Boddy², Gareth Stratton², Alexander German¹, Rosalind Gaskell¹, Karen Coyne¹, Peter Bundred¹, Sandra McCune³, Susan Dawson¹

¹University of Liverpool, Liverpool, UK. carri.westgarth@liverpool.ac.uk

²Liverpool John Moores University, Liverpool, UK.

³Waltham Centre for Pet Nutrition, Waltham-on-the-Wolds, UK.

Introduction

Walking with a pet dog could improve child health through participation in physical activity, although evidence to support this is conflicting. The objective of this study was to describe the participation of children in dog walking, and investigate factors associated with walking with a dog.

Methods

1,021 primary school children (9–10 yrs) from a deprived area of Liverpool were surveyed during a 'fitness fun day' as part of the SportsLinx project. The 'Child Lifestyle and Pets' survey included questions about pet ownership, pet attachment, and dog walking. Multivariable regression models were used to investigate factors associated with dog walking.

Main results

Overall, 15.4% of children reported walking with any dog (their own or belonging to a friend or family member) \geq once daily, 14.1% several times a week, 27.6% \leq once a week, and 42.8% never. Dog owning children more often reported walking with any dog 'several times a week or more' (OR=12.30, 95%CI=8.10-18.69, $p<0.001$) but were less likely to report other walking. 40.7% of children indicated that they did not usually walk with their own dog, even though only 4.1% of dogs were never walked. 34.6% reported walking their own dog \geq once daily. Attachment score was highly associated with the child reporting walking their dog (lower score=higher attachment; OR=0.93, 95%CI=0.89-0.96, $p<0.001$). There was no evidence that gender, ethnicity, sibling status or deprivation score was associated with dog walking. Children that were non-white, and children that reported owning Pit Bulls, were more likely to report friends walking with their dog (OR=7.47, 95%CI=2.50-22.27, $p<0.001$; and OR=10.01, 95%CI=1.52-65.76, $p=0.02$, respectively).

Conclusion

Promotion of supervised walking of suitable pet dogs may be an opportunity for increasing physical activity in 9–10-year-old children. The identification of stronger attachment to dogs regularly walked is similar to findings in adult studies.

09 'LET US CLEAR THE STAGE AND CLEAR OUR CONSCIENCE, TOO': HISTORIC BRITISH CAMPAIGNS AGAINST ANIMAL PERFORMANCE

David Wilson

University of Leicester, Leicester, UK. dw149@le.ac.uk

A study of the performing animals controversy that grew up in Britain after the First World War allows an investigation of the behaviour of pressure groups, the press, politicians and trade associations, as well as an analysis of the evidence presented to a parliamentary Select Committee appointed in 1921 and reconvened in 1922. Its brief was 'to inquire into the conditions under which performing animals are trained and exhibited, and to consider whether legislation is desirable to prohibit or regulate such training and exhibition, and, if so, what lines such legislation should follow'. The inquiry into performing animals also gave new emphasis to lasting areas of concern about the accommodation and transport of animals.

After legislation in 1925, resulting in regulation rather than prohibition, the controversy reduced but did not disappear. The personal papers of Edmund MacMichael, director of the Performing Animals' Defence League, have been analysed for the first time. They extend from the 1920s to the 1960s and reflect the early development of uncompromising, direct action in the fearless pursuit of a cause. The intensity of the campaign was sustained because, as in animal experimentation, the main activity under attack—in this case the training of animals—was conducted behind closed doors. And although the music hall and variety theatre had declined, performing animals remained in the circus and appeared increasingly in feature films.

Reference

Daily Herald, 3 June 1921.

O10 QUANTIFYING THE IMPACT OF INCORPORATING THERAPY DOGS IN AN AFTERSCHOOL PROGRAM: A COMPARISON OF NET CHANGE IN READING FLUENCY

Jennifer Emmert¹, Sue Gonzales²

¹The San Francisco SPCA, San Francisco, CA, USA. jemmert@sfspca.org

²E.R. Taylor Elementary School, San Francisco, CA, USA.

Overview

The aim of this study is to assess the value of including specially trained volunteer-pet reading teams to support below-level/at-risk readers in an afterschool literacy program. Using reading fluency tests we found that incorporating reading teams in afterschool programs significantly improved reading fluency in participating students over those in more traditional reading programs.

Eligibility requirements

- All participating children were enrolled in the after school program and their most recent scores in the English Language Arts component of the California Standards Test fell into the range of “below basic” or “far below basic.”
- Students could have documented learning or attention differences, but an IEP was not required.
- Students needed to be “matched” between test and control groups; e.g. comparable standardized test scores, learning/attention differences, etc.

Procedures

For three years, at the start of each term a new set of participating children were placed into either the test group or the control group. Those in the test groups had weekly fifteen-minute reading sessions with a reading team for ten weeks. Children in control groups were able to meet and greet the dogs as they arrived on campus, but did not have individualized reading sessions.

At the start and completion of a new story students in both test and control groups were given a one-minute oral fluency test, which assesses a student’s ability to read accurately and with understanding.

Conclusions

Significant improvement in reading fluency scores in test groups (n=64; net increase on average=31.3) over control groups (n=65; net increase on average=9).

Additional observations

Although there did not appear to be cross over into other academic subjects, after children were done with each session many voiced a desire to continue practice reading, even when the dog was not present.

Increased focus: ADHD children have considerable difficulty sitting still enough to read, but being able to pet a dog concurrently made it possible for them to read for fifteen minutes.

Socially, special needs children often have a hard time, but educators observed increased self esteem/confidence due to having something to share with friends.

O11 PET OWNERSHIP AND ATTACHMENT IN 9–10-YEAR-OLD CHILDREN IN LIVERPOOL, UK

Alexander German¹, Carri Westgarth¹, Lynne Boddy², Gareth Stratton², Rosalind Gaskell¹, Karen Coyne¹, Peter Bundred¹, Sandra McCune³, Susan Dawson¹

¹University of Liverpool, Liverpool, UK. ajgerman@liverpool.ac.uk

²Liverpool John Moores University, Liverpool, UK.

³WALTHAM Centre for Pet Nutrition, Waltham-on-the-Wolds, UK.

Introduction

Little is known about ethnic, cultural and socioeconomic differences in childhood ownership and attitudes to pets. The objective of this study was to describe the factors associated with living with different pet types, as well as those influencing the intensity of 'attachment' between child and pet.

Methods

1021 primary school children (9–10 yrs) from a deprived area of Liverpool were surveyed during a 'fitness fun day' as part of the SportsLinx project. The 'Child Lifestyle and Pets' survey included questions about pet ownership and pet attachment. Multivariable regression models were used to investigate factors associated with ownership of different pet types and attachment to the favourite pet.

Main Results

Dogs were most common and the species to which children were most attached. 10% of children reported living with Bull Breeds (e.g. Pit Bulls and Staffordshire Bull Terriers). Girls were more likely than boys to own most pet types (OR ranging from 1.41–12.94, $p=0.02$ – 0.06), but were no more or less attached to their favourite pet. Children of white ethnicity were more likely to own dogs (OR=0.23, 95%CI=0.13–0.39, $p<0.001$), rodents (OR=0.29, 95%CI=0.13–0.66, $p=0.003$) or other pets (OR=0.35, 95%CI=0.21–0.57, $p<0.001$), but ethnicity was not associated with attachment. Single and youngest children were more strongly attached to their pets (single coef = -9.54 , $p<0.001$; youngest coef = -3.16 , $p=0.05$) than children who were neither the youngest nor a single child. Children that owned dogs lived in more deprived areas (OR=1.02, 95%CI=1.01–1.03, $p<0.001$), and deprivation increased with number of dogs owned. Bull Breeds were more likely to be found in more deprived areas (OR=1.03, 95%CI=1.01–1.05, $p<0.001$).

Conclusions

A number of variables influence childhood ownership of pets and attachment to the pet, and should be considered in future studies into the health benefits and risks of growing up with pets.

O12 MARGINALIZATION IN THE WAKE OF DOMESTICATION; THE AISLE OF THE BARN

Judith Mazzucco

Independent Scholar, Clarksburg, New Jersey, USA. lucjean@me.com

My praxis evolved from the investigation of my life in close proximity to animals and the interspecies relationships therein. My processes focus in the area of overlap, the social, physical and the psychological interactions; a duality of the human/animal relationship that has virtually disappeared over the past two centuries.

The Aisle of the Barn is the center of our universe, our Aleph. It is also my studio. It is the confluence of domestication, interspecies relationships and creativity.

The processes emanated from the phenomenon of domestication. The feedbag, from where the feed is dispensed, being the smallest common denominator of domestication, sufficed as the basis of all my processes. Using the feedbags, shredded, pulped, woven with baling twine, imbued with hay, hair, hoof, and dirt.

The inspiration for my Aisle of the Barn Map was Jorge Luis Borges' fictional cartographers in *On Exactitudes in Science* who drew maps to scale. The Aisle Map is drawn to scale, measuring 12' × 40', the length and width of the aisle of the barn. It exposes and delivers the patterns and interconnections of the barn community. The key to the protagonists and their patterns is in the Compass Rose. While the cats and guineas travel at will, the horses are always attached to me with a halter and lead, and the dog is represented with a "morphogenic field". My intention for the map is to be viewed from "with-on," putting the viewer in a definite situation and place, on the Aisle of the Barn, my Aleph.

Oral Presentations: Thursday 12 July

O13 CONFLICTING REPRESENTATIONS OF THE TREATMENT OF DISPERSING AND RAIDING MALE BABOONS ON SOUTH AFRICA'S CAPE PENINSULA

Samantha Hurn

University of Wales Trinity Saint David, Lampeter, UK. s.hurn@tsd.ac.uk

The troops of Chacma baboons (*Papio ursinus*) on South Africa's Cape Peninsula are geographically isolated and live in close proximity to humans. This has led to high incidences of human-baboon conflict and as a result, the Cape baboons are closely monitored and managed. When an individual baboon is deemed transgressive (i.e. their anti-social behaviours escalate) then decisions have to be made regarding their future. Various options are available to managers, but with repeat offenders the typical outcome will be euthanasia. Understandably, this course of action is contentious and often leads to heated debate in the local press. These conflicting representations of baboon management were contrasted with data obtained from ethnographic fieldwork conducted with zoologists, baboon monitors and other stakeholder groups in Cape Town over a period of four years, a pilot Knowledge, Attitude and Practice (KAP) survey of Cape residents (n=28) and the outcomes of a Human-Baboon Conflict workshop held at the University of Cape Town.

The study found that representations of human-baboon conflict in the local press are frequently biased against both euthanasia, and the work of scientists whose research informs management decisions. However, the KAP survey revealed that 61% of Cape residents obtained their information about baboons and their management from the local press, thereby creating a cycle of mis-information. Moreover, the study found that the attitudes and practices of human residents are a root cause of much human-baboon conflict which ultimately leads to the death of individual baboons. The study makes recommendations for how the situation can be improved to facilitate the work of managers and disseminate a more balanced account of the series of events which culminate in euthanasia and how such an outcome can be avoided.

O14 AN ELEPHANT IN MY MIRROR: HUMAN–ELEPHANT ATTACHMENT STYLES AND THEIR IMPACT ON CAPTIVE ELEPHANT HEALTH AND WELL-BEING

Lokesh Coomar^{1,2}

¹*The Kerulos Center, Jacksonville, Oregon, USA.*

²*The University of South Florida, Tampa, Florida, USA. lcoomar@tampabay.rr.com*

Human–elephant interactions play a pivotal role in elephant conservation. On a more exclusive, individual level, the human–elephant relationship is a primary factor impacting elephant health in captivity. Recent scientific insights show that elephants share neuropsychological capacities comparable with humans. These insights open assessments of human–elephant relationships to models used to evaluate human well-being where social bonds are known to play a vital role in maintaining well-being and reducing stress. Through the lens of attachment theory and traumatology, we explore the nature and efficacy of these relationships as they pertain to captive elephant well-being. To quantitatively and qualitatively describe attachment styles across the spectrum of extant captive institutions, our study draws from three data sources: literature review comparing historical in situ elephant-human interactions in multiple human cultural settings with ex situ relationships in various captive environments; statistical analyses of relational history of 467 captive elephants derived from the International Elephant Foundation studbooks in conjunction with the Elephant Database (*Elephas maximus* n=261 and *Loxodonta Africana* n=206, male and female); analysis of caregiver/keeper interviews conducted at captive institutions with diverse philosophies and practices including zoos and sanctuaries. Our findings show that overall, in contrast to traditional in situ elephant society; captive elephants are subjected to multiple relational disruptions that correlate with diminished health and multiple psychological disorders (mean = 2.62, median = 3.4, with a maximum of 11 transfers). Sanctuary caregivers generally model a “secure attachment,” similarly adopted by human therapists to treat survivors of trauma while zoo personnel adopt insecure-ambivalent attachment styles. In addition to these results, we present: (1) a method to objectively assess psychological well-being of elephants in captivity; (2) scientific evaluation of human relationships as a tool for trauma recovery; and (3) protocol for personnel training to enhance elephant well-being in captive settings.

O15 MEASURING SPECIESISM: SCALE DEVELOPMENT AND VALIDATION

Stephanie Grayson

*California School of Professional Psychology, AIU, Los Angeles, CA, USA.
stephanie.grayson@gmail.com*

The construct of speciesism was explored through the development of a 33-item Speciesism Scale with a Likert-type 4-option format measuring the respondent's level of speciesism on a continuum. Items assessed both attitudinal and behavioural components of speciesism and were inclusive in their species focus. The scale contained such items as "Humans lead more valuable lives than other animals," "Using non-human animals as actors for movies and television shows is unacceptable," and "It is acceptable to conduct scientific research on non-human animals for the benefit of humans." Four hundred participants, age 18 and older residing in the United States, completed an online survey that included the Speciesism Scale, Satisfaction with Life Scale (Diener et al. 1985), Animal Attitudes Scale (Herzog et al. 1991), and a demographic questionnaire.

The scale yielded six factors: experimentation, food and clothing, power and law, general superiority, recreation and ornamentation, and property and domestication. The scale was shown to have high internal consistency as evidenced by a Cronbach's alpha of 0.963, good content validity as evidenced by agreement amongst a panel of experts on inclusion and wording of items, and high construct validity as evidenced by divergent validity (a strong correlation of -0.93 with the Animal Attitudes Scale) and convergent validity (a weak correlation of 0.36 with the Satisfaction with Life Scale). Exploratory analyses revealed significant relationships between level of speciesism and age, gender, political affiliation, religious affiliation, and dietary practices; specific demographic correlations are discussed.

The Speciesism Scale provides an assessment tool to empirically evaluate speciesism, and it is recommended as a linguistically and conceptually up-to-date, broader, and more inclusive self-report measure of the relationships between humans and other animals than other instruments currently provide. It is hoped that this instrument proves useful in accurately labelling, understanding, measuring, and tracking speciesism as a construct.

O16 THE ROLE OF PERSONALITY AND SEX IN OWNER–CAT BEHAVIOURS AND INTERACTIONS

Kurt Kotrschal¹, Barbara Bauer¹, Jon Day², Dorothy Gracey¹, Manuela Wedl¹

¹*Konrad Lorenz Research Station and Department of Behavioural Biology, University of Vienna, Austria, Vienna, Austria.*

²*WALTHAM Centre for Pet Nutrition, Waltham-on-the-Wolds, UK.*

kurt.kotrschal@univie.ac.at

In search of rules for interaction patterns within human–animal dyads we have collected what is, to our knowledge, the most comprehensive data set to date on owner–cat dyadic behaviours, interactions and relationships. We recruited 40 cat–owner dyads and visited each on four occasions. All cats except two, were neutered. During the visits we videotaped the behaviours and interactions of owners with their single, primarily indoor–housed cats around feeding and subsequently coded virtually all observable behaviours from these videos. In addition, we tested owner personality (Five Factor Inventory; FFI) and investigated the owners' attitudes toward their cats and cat personality traits. We found substantial inter–dyad variation. Of the 218 behavioural variables coded, 89% differed significantly among the 40 cat–owner dyads, and of the 39 most discriminating behaviours (MWU, Kruskal–Wallis >99, 18% of all variables), most were related to communication or interaction, hinting at a substantial inter–dyadic social variability. Dyads with male cats differed significantly from those with female cats in 17 of 218 behavioural variables (8%; 16 cat, 1 owner), with male cats being more expressive than females. The five personality dimensions revealed by the FFI were not independent of each other and hence could be reduced to 2 axes by PCA (I: subsuming Neuroticism versus Extroversion, Agreeableness and Conscientiousness; II: Openness). We found that owners scoring high in Neuroticism engaged in close and interactive (vocal, tactile) social relationships with their cats, whereas owners high in Openness showed much object play with cats but communicated and interacted vocally and tactilely relatively infrequently. In conclusion, we indeed found evidence for a contingency between owner personality, dyadic interaction style and expression of behaviour, and even personality traits in the cats.

Funded by Mars.

O17 DOG BREED POPULARITY IS DRIVEN BY CULTURAL TRANSMISSION, NOT BEHAVIORAL QUALITIES

Harold Herzog¹, Stefano Ghirlanda², Alberto Acerbi³, James Serpell⁴

¹*Western Carolina University, Cullowhee, NC, USA. herzog@email.wcu.edu*

²*Brooklyn College, Brooklyn, NY, USA.*

³*Stockholm University, Stockholm, Sweden.*

⁴*University of Pennsylvania, Philadelphia, PA, USA.*

Do dog breeds become popular because they possess intrinsic qualities that make them better pets? Or do breed fads, like other forms of fashion, result from imitation (cultural transmission)? Mathematical models have shown that fluctuations in purebred breed registrations over the last century are remarkably similar to shifts in forms of popular culture ranging from baby names to pop songs and internet sites. Here, we examine the role that behavioral breed characteristics play in cultural preferences for types of dogs.

Methods

Breed popularity was assessed using the number of new puppies registered with American Kennel Club each year between 1927 and 2005 (n=53,697,706 dogs from 154 breeds). Measures of breed-characteristic behaviors were obtained from the University of Pennsylvania's Canine Behavioral Assessment and Research Questionnaire (C-BARQ). These scores are based on owners' reports of their dogs' behaviors (total n=12,060 dogs). We analyzed 14 distinct C-BARQ variables related to pet quality (aggression, trainability, attachment, etc.).

Results

After correcting for multiple comparisons, there were no significant differences between the breed behavior profiles and (a) overall breed popularity (Mean $r=0.07$), (b) volatility in registrations over time (Mean $r=0.01$), (c) rate of increase (Mean $r=0.13$) or (d) rate of decrease (Mean $r=0.15$). In short, intrinsic behavioral qualities of dog breeds had little effect on their popularity. However, as was recently found for fads in baby names, among the 55 breeds with discernable growth-decline cycles, the faster a breed increases in popularity, the more rapidly it subsequently decreases ($r=0.53$, $p<0.0001$). Together, these findings provide further evidence that the collective preferences of Americans for types of canine pets are, like other forms of fashion, driven by cultural transmission and imitation.

O18 ARE THE PRESENCE OF PETS OR THE PRESENCE OF PARTNERS ASSOCIATED WITH BETTER MOODS DURING PEOPLE'S DAILY LIVES?

Erika Friedmann¹, Sue Thomas¹, Sandra McCune²

¹University of Maryland School of Nursing, Baltimore, Maryland, USA.

²Waltham Centre for Pet Nutrition, Melton Mowbray, Leicestershire, UK.

efrie002@son.umaryland.edu

Evidence suggests social support is a mediator between the stressors of daily life and psychological health outcomes. The cardiovascular health literature supports separate contributions of social support from pets and from human partners to long term cardiovascular health. Both pet ownership and human social support made independent contributions to one year survival after myocardial infarction. The mechanisms for health benefits from social support have not been established. One potential pathway is that both pets and people enhance moods which contribute to decreased sensitivity to stressors and decreased stress responses as we know negative mood is associated with negative health outcomes and positive mood with positive health outcomes. Studies that examined differences in mood between pet owners and non-owners are limited by potential confounders that may be responsible for both differences in mood and pet ownership status. We examine the contributions of the presence of a pet and of partners to moods during the normal daily lives of older adult pet owners and non-owners. A longitudinal observational study of ambulatory blood pressure (ABP) of 32 pet owners (24 dog/11 cat, 29 women) and 31 non-owners (28 women) aged 50–85 years with BP 120–150/80–100 or <150/100 mmHg with anti-hypertensive medication was conducted. Participants completed a mood and activity diary every 20 minutes for 1 day during waking hours at 0, 1, and 3 months. Diaries were used to obtain information about activity, mood, and pet/partner presence at each assessment. Mood assessment involved participants rating selected feelings on a continuum from “not at all” to “extremely” in a format adapted from Liehr and colleagues’ previous ABP studies. The placement of the mark on each item scale was measured to provide interval level data. Exploratory factor analysis using the principal components method was used to create 2 mood variables based on a combination of theoretical understanding and factor loadings on the mood items in the diary. The two factors created were distressed mood: frustrated/angry/unhappy/nervous/rushed/irritable /sad/stressed and happy mood: alert/happy/accomplishing/interested/energetic. Both scales were coded so that a higher score represented a more positive mood. 2640 observations (1–129, median:41/participant) were included in linear mixed models analyses for hierarchical data examining predictors of positive and negative mood. Dog presence ($\beta=0.3437$, $p=0.002$), cat presence ($\beta=0.1485$, $p=0.006$), pet ownership ($\beta=-0.2734$, $p=.002$) and the partner presence ($\beta=0.2298$, $p=0.002$) each significantly independently predicted greater happiness. Dog presence ($\beta=0.2169$, $p<0.001$), cat presence $\beta=0.192722$, $p=0.002$), and pet ownership ($\beta=-0.5918$, $p=0.002$) each significantly independently predicted lower distress. Presence of a cat ($\beta=-0.0084$, $p=0.872$) did not predict distress. The presence of both pets and partners has positive effects on people’s moods during their daily lives. The contributions of pets and partners are independent of each other, thus they both make separate important contributions to mood.

O19 DECONSTRUCTING THE ANIMAL IN SEARCH OF THE REAL

Giovanni Aloï

Antennae, The Journal of Nature in Visual Culture, London, UK.
[*antennaeproject@gmail.com*](mailto:antennaeproject@gmail.com)

This paper looks at the past ten years of the arts production informed by the human–animal studies agenda in order to assess what has been thus far been done and which issues may become central to the future artistic debate. The paper is divided in two main sections: the first takes into consideration four pivotal works of art created during the past decade in order to focus on the human–animal related concerns art has thus far helped to explore; the second looks instead at the future, mainly posing key questions about the representation of animals on canvas or photographed. “Is there any space for them in the new and challenging panorama outlined by human–animal studies?” This question is not so much posed in a conservative way, but it instead constitutes an invitation to reconsider the boundaries that may have so far defined the production of art within the remit of human–animal studies. This questioning leads to a discussion on the value and essence of the “commonplace” as a positive factor that we may indeed want to re-evaluate in order to make the current discourse accessible to wider audiences.

O20 MOVING BEYOND THE FIVE FREEDOMS: A NEW DEFINITION FOR THE PARAMETERS OF CARING FOR COMPANION ANIMALS

Kathryn Atema

International Fund for Animal Welfare, Massachusetts, USA. llentz@ifaw.org

The Five Freedoms are a well established baseline for the ethical treatment of animals under human care, and have been widely extrapolated to provide more specific guidelines and measurable welfare concepts for various species, including dogs and cats. However, their application to the welfare of companion animals is difficult to legislate, enforce, and teach as effective education initiatives. As a result, those striving to improve the welfare of dogs and cats have been functioning without a consistent framework for welfare that is both broadly relevant and consistently effective. The International Fund for Animal Welfare (IFAW) has identified a common baseline that establishes the welfare considerations required for dogs and cats to live well and in harmony with human populations. The term “Adequate Guardianship”, which follows the Five Freedoms but outlines specifically the needs of all dogs and cats, is defined as “the resources, environmental conditions and social interactions necessary to meet an individual animal’s physiological and psychological needs and thereby maintain an acceptable level of health and well-being.” Further extrapolated, Adequate Guardianship offers a clear goal for policymakers, enforcement officials and dog and cat owners in any community, anywhere in the world. The concept can guide the approach to improving dog and cat welfare through real-life application, ultimately leading to sustained, measurable improvements in the harmony between companion animals and human communities.

O21 OLDER AND YOUNGER ADULTS MAKE DIFFERENT ATTRIBUTIONS FOR INTERACTIONS WITH ANIMALS AND ROBOTS

Matthew Chin¹, Valerie Sims¹, Heather Lum², Shane Halse¹, Ashley Carter¹

¹*University of Central Florida, Orlando, FL, USA. Matthew.Chin@ucf.edu*

²*Penn State Erie, The Behrend College, Erie, PA, USA.*

Researchers have become interested in whether robotic entities might be suitable substitutes for companion animals (Banks, Willoughby & Banks, 2008). Although there is some evidence that interacting with robotic entities such as the Sony AIBO can be beneficial (Kramer, Friedman & Bernstein, 2009), little work has directly compared interactions with companion animals with interaction with robotic animals. Also, previous research has not looked at how age might impact these types of interactions. The present study compares older and younger adults' attributions during their interactions with a dog, cat, robotic dog, or robotic cat. Two samples were used: 30 older adults (Mean Age=71.63) and 52 undergraduate participants (Mean Age=19.50). During the experiment, participants interacted with four different entities (dog, cat, robotic dog, robotic cat) for four minutes each and then rated several attributes of each entity using 7-point scales—friendliness, approachability, trustworthiness, attentiveness, and intelligence. Attributions were examined using $2(\text{Participant Age}) \times 2(\text{Participant Sex}) \times 2(\text{Entity Type: Live or Robotic}) \times 2(\text{Animal Type: Dog or Cat})$ mixed ANOVAs. These yielded Animal \times Entity interactions for all variables except intelligence. All patterns were such that when the entity was live, dogs were rated more favorably than cats, but for the robotic entities, ratings were similar. Magnitude of differences varied as a function of attribute. For intelligence, there was a main effect for Entity, with live entities being rated as more intelligent. Additionally, participant age was a predictor (either alone or in interaction with another variable) of all variables except friendliness. Older adults made less positive attributions. For intelligence, young adults rated live entities higher, whereas the opposite was true for older adults. When considering use of a robot in place of a companion animal, we must consider the people interacting with the entity and what the goals are of the interaction.

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O22 EMOTIONAL AND BEHAVIOURAL REPERCUSSIONS IN DOGS OF TWO OBEDIENCE-SEPARATION TASKS WITH THE OWNER WITHIN SIGHT OR OUT OF SIGHT

Carla Torres-Pereira, Donald Broom

*Centre for Animal Welfare and Anthrozoology, Department of Veterinary Medicine, University of Cambridge, Cambridge, UK.
dmb16@cam.ac.uk*

Previous work by the authors has shown that dog behaviour and heart-rate are different if they have or have not done what they were told not to do. Are emotional repercussions of dog reunion with the owner after an obedience test affected by whether the owner was within sight or out of sight? Is task performance influenced by the owner's presence? The owners of 16 dogs gave the command "Sit-stay!" or "Stand-stay!" and then either left the room ("out of sight") or stayed in the same room but moved away 8 steps from the dog ("within sight"): 32 episodes, balanced within-subject and between-subject design. After 30 seconds, the owners that were outside returned to the room and the owners that were within sight walked back towards the dog (event Owner Back). Data from video recording and Polar heart-rate monitor recording were analysed with GenStat. The two commands elicited a similar obedience response and did not affect the dogs' heart-rates. The dogs obeyed in 15 out of the 32 trials, more (12) when the owner stayed in view (chi-squared=12.7, df=1, $p<0.001$). The dogs' heart-rates were higher after the event Owner Back for the 32 trials (paired t-test: $t=4.49$, $df=31$, $p<0.001$), and for each treatment ("within sight", $p<0.001$ and "out of sight" $p=0.011$). Reunion with the owner originated a similar emotional response whether the owner had left the room or had moved away but stayed in view of the dog. Heart-rates were higher in "out of sight" episodes both before and after reunion with the owner. Dog emotional responses after an obedience task are affected by own action and owner presence.

O23 ZOOPOLITAN FUTURES

Ray Hutchison

University of Wisconsin, Green Bay, USA. hutchr@uwgb.edu

The history of urbanization in the west has been marked by a divide between the city and the country, the built environment and the natural environment, with little regard for non-human animal life. Wild animals are confined to cages (in the home, or in zoos) and domestic animals are confined to the house or yard. Zoning regulations limit the presence of other species, while others are labeled as nuisance animals that may be trapped or killed. Wolsh's Zoopolis requires us to consider what is lost when animals are removed from everyday experience, while Kymlicka and Donaldson's Zoopolis argues for the rights of animals as citizens and denizens of our urban world.

The general trend of metropolitan growth in the 21st century has been the decentralization of the older urban core and continuing expansion of suburban areas. Inner city areas in the US abandoned now for several decades have seen the return of various wild species, including deer in Detroit. The expansion of cities in Australia has brought kangaroos into the suburban environment (or more appropriately, the suburbs into the kangaroo domain). As metropolitan areas expand it is likely that there will be increased contact between humans and many animal species, creating a new zoopolitan environment. But does this provide greater opportunity to reshape human animal interaction and to recognize animals as citizens and denizens?

What can we learn about human–animal interaction from metropolitan areas in other parts of the world? What of the interaction of man and monkey in cities across the Indian subcontinent? What examples of human–animal interaction in other urban environments offer a model for the zoopolitan region of the future? Or will the suburbanization of larger regions simply reproduce human–animal interactions of the present?

O24 AUTISM GUIDE DOGS AND CHANGES IN FAMILY LIFE

Marie-José Enders-Slegers^{1,2}

¹*University of Utrecht, Utrecht, The Netherlands.*

²*AAIZOO, Ammerzoden, The Netherlands. m.j.enders@uu.nl*

Autism is a neurobiological disorder that has a huge impact on the development of children. Children with autism spectrum disorders (ASD) face difficulties in social interactions (behaviour), in communication (verbal and non verbal), and in imagination. Until now autism can only be recognized on a behavioural level. It is assumed that genetic as well as environmental factors are needed to bring autism to expression. Autism is affecting not only the child with ASD, but also influences the functioning of the whole family (Berckelaer-Onnes & Hansen, 2006).

Researchers have found that companion animals can have influence on the emotional and cognitive development of children; children are more relaxed in the presence of a pet and pets can provide social support. Having an Autism Guide Dog (AGD) might help a child with ASD to develop emotional competencies and social skills to enhance a child's participation in family, community and school activities. In this study 25 children (aged 4–8 years) and their families were followed for about one and a half year. The mothers were interviewed twice, and on a regular base research forms were filled in. This process started before the Autism Guide Dog was introduced into the family.

This multi-method-design was analysed with a computer-based program for qualitative data: MAXQDA.

The results show that children with ASD enhanced their competences: this was reflected in social skills, better communication and (safer) behaviour. Tantrums decreased significantly. The autism guide dog did not only affect the child's wellbeing. The mobility of the family enhanced (more visits to parks, the woods, the shopping malls, holidays, family trips, visiting friends), the relaxation of the family grew (long walks with the dog, more social contacts) and the family atmosphere became more pleasant (less stress, more fun together). The role of the AGD will be discussed.

O25 SOCIO-EMOTIONAL EFFECTS OF A DOG IN THE CLASSROOM

Andrea Beetz^{1,2}

¹*University of Erlangen, Erlangen, Germany.*

²*University of Rostock, Rostock, Germany. andrea.m.beetz@gmail.com*

A growing number of teachers in Europe take their dogs with them into class on a regular basis. The very limited research investigating effects of so-called “school-dogs” documented positive socio-emotional effects such as reduction of aggression and promotion of social competence, attention towards the teacher, and positive social interactions among the children.

We investigated a class of third-graders (male=13, female=13), which had a school-dog present for one day per week and a control class (male=13, female=11). Before the introduction of the dog and shortly before the end of the school year the following data were collected via standardized questionnaires: social and emotional experiences in school, school-anxiety, depression, and emotion-regulation.

Analysis showed no significant effects of the dog on depression or school-anxiety, even though scores seemed to change into a positive direction in the dog-class. However, compared to the control-class, the dog-class increased in enjoyment of learning ($F=4.479$, $p=0.042$) and a positive attitude towards school ($F=10.769$, $p=0.002$) over the course of the school year. Also, the use of maladaptive strategies in regulating anxiety ($F=3.734$, $p=0.060$) or anger ($F=3.231$, $p=0.079$) declined in the dog-class. In an interview at the end of the study, all children of the dog-class reported that they liked to have the dog in the classroom. Only one child felt that the dog was a negative distraction.

Even though introducing a dog into the classroom is frequently aimed at a reduction of extreme negative attitudes or behavior of few individuals, it even has an effect on the entire class. Since a prerequisite of effective social and cognitive learning is a positive mood and attitude and an active but relaxed state, a school-dog has the potential to promote not only a positive social school environment but probably indirectly also learning.

This research was supported by the Industrieverband Heimtierbedarf.

O26 CHARACTERISTICS OF 24 CASES OF ANIMAL HOARDING IN SPAIN

Paula Calvo¹, Conny Duarte², Antoni Bulbena¹, Jaume Fatjó¹

¹*Department of Psychiatry and Forensic Medicine (Universitat Autònoma de Barcelona), Barcelona, Spain. pcalvoetologia@gmail.com*

²*ANAA (Asociación Nacional de Amigos de los Animales), Fuente el Saz de Jarama (Madrid), Spain.*

Introduction

Animal hoarding is considered an under reported problem, which affects the welfare of both people and animals. Few published studies on animal hoarding are available in the scientific literature, particularly outside North America.

Objectives

A study was designed to obtain data on animal hoarding in Spain, with a particular interest on animal welfare issues.

Materials and Methods

Data was obtained retrospectively from 24 case reports of animal hoarding involving a total of 1208 dogs and cats and 25 hoarders. All cases were collected from 2002 to 2011 by a Spanish humane society as result of legal interventions.

Results

Fifty-two per cent of hoarders were female and 48% male. Fifty-three per cent of hoarders were older than 65 years old. Most cases presented a chronic course longer than 5 years of animal hoarding and 45% included object hoarding as well. Most hoarders (83%) lived alone. The average of animals per case was 50 and most animals were dogs (82%). Fourteen cases involved only dogs, 5 cases only cats and 5 cases dogs and cats. Most men (11 out of 13) hoarded dogs almost exclusively. In 75% of cases most rescued animals showed indicatives of poor welfare condition, including a poor body condition, wounds, parasitic and infectious illnesses. Aggression and social fears were the most commonly reported behaviours. In 14 out of 20 cases the hoarder actively opposed to animals removal.

Conclusions and Future Directions

To the authors' knowledge, this is the first report on animal hoarding in Spain and one of the few available in Europe. Animal welfare seemed to be compromised in most cases. Further studies are needed to fully elucidate the epidemiology, cross-cultural differences and aetiology of this under-recognized public health problem.

O27 CANINES AND CHILDHOOD CANCER: EXAMINING THE EFFECTS OF THERAPY DOGS WITH CHILDHOOD CANCER PATIENTS AND THEIR FAMILIES

Molly Jenkins, Ashleigh Ruehrdanz, Amy McCullough, Katherine Casillas, John Fluke

American Humane Association, Denver, CO, USA. molly.jenkins@americanhumane.org

American Humane Association is conducting a rigorous study to examine what physical, behavioral, and psychosocial effects animal-assisted therapy may have for children with cancer and their families. The first step in this important work involved conducting a comprehensive literature review of the current state of pediatric oncology and human–animal interactions to understand the potential benefits these interventions may have for this population.

Although the researchers acknowledge that more rigorous research in the field of human–animal bond is needed, this critical review yielded important findings. First, it was discovered that childhood cancer has changed dramatically over the last 20 years in terms of improved treatments and survival rates. However, new challenges regarding the long-term, psychosocial effects of cancer treatment for children and families have arisen. Second, in examining human–animal interactions, it was found that for many families, animals take center stage in their daily lives, offering companionship, joy, and kinship. Greater attention has recently been given to the roles that animals can play in supporting the health and emotional well-being of people in need. This review identified numerous research studies which have provided promising evidence that involving animals in therapeutic interventions provides benefits for many populations, such as opportunities for exercise; stress reduction; distraction from pain or worry; unconditional acceptance; enhanced self-esteem; and increased motivation to participate in the healing process (Fine, 2010; Friedmann, Son, & Tsai, 2010; McCardle, McCune, Griffin, Esposito & Freund, 2011; Nimer & Lundahl, 2007; Serpell, 2006; Tsai, Friedmann, & Thomas, 2010; Wells, 2009).

Findings from this literature review provide compelling evidence that the implementation of a replicable animal-assisted therapy program within a pediatric oncology setting may enhance the lives of children and families coping with the diagnosis of childhood cancer by addressing the complex psychosocial, physical and behavioral issues that these children and families commonly face.

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O28 MEASURING BENEFITS TO SCOTTISH MALE YOUNG OFFENDERS IN THE FIRST PRISON-BASED DOG TRAINING PROGRAMME IN THE UK

Rebecca Leonardi, Hannah M. Buchanan-Smith, Gill McIvor, Sarah-Jane Vick

University of Stirling, Stirling, UK. rebecca.leonardi@stir.ac.uk

The most common type of human–animal interaction programme used in prisons involves prisoners caring for and training unwanted dogs taken from rescue shelters, to prepare the dogs for adoption into the community as ‘paroled pets’. These programmes have seen increasing popularity in N. America, Europe and Australia. Such programmes are reported as successful in improving emotional, social and practical outcomes for young male offenders. Given the rising numbers of Scottish male young offenders in custody and high recidivism rates, interventions which improve their future are a priority. Interventions which improve social skills and problem solving abilities, increase self-esteem and social support, and develop skills relevant to future employment may be particularly effective in improving such outcomes.

We report on the pilot stage of the first prison-based dog training programme in the UK that aims to meet these goals. Known as ‘Paws for Progress’, this collaborative project involves the Scottish Prison Service, Dogs Trust and the University of Stirling. Based at HM YOI Polmont, the voluntary sample consists of 12 male young offenders who completed the course. Thematic analysis was applied to semi-structured interviews conducted pre- and post-participation. Preliminary findings suggest the young men benefit in many ways, for example increasing their patience and confidence, improving their social interactions as well as gaining a qualification. Most of the dogs (including some long-term Dogs Trust residents) have been rehomed, giving them better futures. Positive evaluations of such programmes in prisons are often weakened by reliance on anecdotal evidence, sampling bias, lack of pre-test/post-test conditions and control groups. Taking into account the constraints of conducting research in an applied context, the pilot stage is reviewed and discussed in relation to the subsequent development of both the intervention and of innovative and appropriate methods of assessment for research in this field.

O29 UPON THE DEATH OF A DOG: THREE WOMEN ARTISTS AND WORKS OF LOVE AND LOSS

Kathleen Vaughan

Concordia University, Montreal, Quebec, Canada. kathleen@akaredhanded.com

The author/artist's research explores the thematics, aesthetics and socio-cultural implications of the creative projects of three contemporary women artists, who commemorate the deaths of their dogs in works of mourning (Derrida, 2003). The author interprets Eija-Lisa Ahtila's multi-channel video installation, *Hour of Prayer* (2005), dog paintings (2010) by Susan Rothenberg, and of her own graphic novel *Made Flesh: Art as Resurrection after Auggie's Death* (2010–): all three artists' works engage ethical issues of relationality, dependence, love, loss, and pain, and suggest the possibility of redemption through grief and creative practice.

The proposed illustrated paper's discussion is based in theories of mourning and loss as well as modes of visual analysis. Further, the paper considers creative practice itself as a form of research (Smith & Dean, 2009), in these instances, into questions of relational ethics. The author proposes that the artists in question represent their canine subjects with an exceptional degree of respect and tenderness despite the artists' ambivalence towards their own implication in these creatures' lives and deaths and the embedded pain. The author proposes that in this way, then, the complex and deeply felt relationships embodied in the artworks can model an ethics of relation and ethics of care that seem increasingly vital in our complex, cosmopolitan world—and so suggests that such artworks can serve a pedagogic ethical function.

As well as discussing the work of Ahtila and Rothenberg with theories of contemporary art practice in video installation and painting, the author/artist situates her own artistic research within comics traditions linked to urbanity and collage. "Made Flesh" was begun after the death of the author's beloved standard poodle, Auggie (1998–2009).

O30 INCREASING OUR UNDERSTANDING OF THE ROLE OF OXYTOCIN IN DOG–HUMAN BONDING

Jessica L Oliva¹, Linda C Marston², Jean-Loup Rault³, Belinda Appleton⁴, Alan Lill¹

¹*School of Biological Sciences, Monash University, Melbourne, Australia.*

²*School of Psychology and Psychiatry, Monash University, Melbourne, Australia.*

³*Animal Welfare Science Centre, University of Melbourne, Melbourne, Australia.*

⁴*The Department of Genetics, University of Melbourne, Melbourne, Australia.*

jessica.oliva@monash.edu

Although the majority of dogs are owned today with the primary aim of providing companionship we have only recently begun to explore the mechanisms that determine how this relationship is established and maintained. The consequences of a poor human–canine relationship may lead to the relinquishment of the dog to a shelter and an uncertain future [1]. When describing their ideal dog, people want sociable animals that enjoy positive physical interaction, such as petting [2]. This review examines the importance of the oxytocinergic system in the formation of the human–dog bond. Oxytocin has been implicated in bonding in many species, including socially monogamous prairie voles [3] and humans [4–7]. This hormone is also involved in inter-species bonding with levels of oxytocin in plasma [8; 9] and in urine [10] rising significantly in pet dogs following interaction with their owners. Differences in oxytocin receptor distribution has been shown to influence bonding behaviour in vole species [11] and variations in this receptor gene has been associated with the social deficit disorder, Autism [12], and in reduced sensitivity to the emotional status of others [13–14]. It is likely that oxytocin receptor distribution as well as variants of the canine oxytocin receptor gene may affect how a dog will act socially and how well it might bond with a human owner. Identifying such variation could have an impact in selecting dogs with high ability to bond with people for breeding as companions and may have particular relevance when selecting dogs to perform service roles for people with social disorders such as Autism. Logically, dogs with greater ability to bond with their owners could make better companions and this might translate into decreasing numbers of dogs being relinquished to shelters.

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O31 ANIMAL ASSISTED THERAPY AT THE U.S. ARMY AIR FORCES CONVALESCENT CENTER AT PAWLING, NEW YORK: AN IDEA THAT BARELY FOUND A PLACE IN MEDICAL HISTORY

Helena Pycior

University of Wisconsin-Milwaukee, Milwaukee, Wisconsin, USA. helena@uwm.edu

Current literature highlights the U.S. Army Air Forces Convalescent Center (USAAFCC) at Pawling, New York, as a pioneer in animal assisted therapy. Relying on *A World to Care For: The Autobiography of Howard A. Rusk, M.D.* (1972), the literature offers little information on the center. This study reconstructs the history of the USAAFCC, with attention to interactions between convalescents and nonhuman animals, and analyzes the strong voices for and silences on animal therapy in the surviving Pawling records. Interrogating Rusk's autobiography and new sources (manuscripts, veterinary literature, and Fairfax Downey's *Dogs for Defense* of 1955), the study concludes that animals were integral to the USAAFCC's therapeutic program. Convalescents and animals interacted through farming, fishing, nature study, horseback riding, and dog-keeping.

A ringing defense of canine therapy came from Downey. Writing on behalf of the American dog world, Downey suggested the Pawling dogs had "helped wounded men find themselves." The convalescent-dog relationship started with the airman's training of the dog, which Downey (like Donna Haraway) saw as mutually transformative. Dogs moreover served as companions during physical exercises, intermediaries with other people, etc. As he moved from a manuscript account to his autobiography, Rusk minimized the significance of animal therapy. He narrated one success story-the airman who received the first Pawling dog-and added that this dog led to "an amusing complication," many convalescents wanted dogs. Inability to classify animal therapy (neither medicine nor recreation), lack of objective verification of therapeutic effectiveness, and other factors explain Rusk's reluctance to promote animal therapy. In 1945-1946 there was a push for a New York bill outlawing vivisection of dogs based on canine war service. Rusk described the Pawling dogs as "a helpful therapeutic adjunct" but declared he had never heard an airman speak against vivisection. Avoiding animals who problematized the human-animal binary, Rusk later promoted horticultural therapy.

O32 DEVELOPMENT OF THE SPANA CARING FOR ANIMALS QUESTIONNAIRE

Stephen Albone¹, Nigatu Aklilu², Diana Hulme¹

¹*Society for the Protection of Animals Abroad, London, UK. stephen@spana.org*

²*Addis Ababa University School of Veterinary Medicine, Debre Zeit, Ethiopia.*

Established in 1923, SPANA is an international animal welfare organisation providing educational and veterinary services in countries with large populations of working animals. SPANA's education programmes are intended to promote positive attitudes and develop empathy in children with respect to animals. In order to evaluate the effectiveness of its education programmes SPANA has developed a "caring for animals" questionnaire.

The questionnaire was piloted between the 26th May and the 6th June 2011 in three schools in Ethiopia. Data were gathered for 151 items from a total of 699 children in Grades 2 and 5 (aged 8+ and 11+ years respectively). The data were analysed using a Rasch modelling approach which revealed a high item reliability (0.97) and a modest person reliability (0.62). A consideration of model fit provided evidence for a unidimensional latent trait. The data were then interrogated for invariance in the latent trait by comparing the magnitude of the item measures derived independently from persons with above and below average scores. Items that were found to differ were rejected for inclusion in future versions of the questionnaire.

Following a careful review of the data a revised version of the questionnaire was presented to 1087 children across six Ethiopian schools in October 2011. Data were gathered on 108 items. The revised questionnaire had improved item reliability (0.99), unidimensionality and invariance. However there was a decrease in the person reliability (0.52). Possible reasons for this apparent paradox and its implications for the evaluation of the SPANA education programme will be discussed.

O33 OTHER VOICES: HUMAN AND ANIMAL VOCAL ENTANGLEMENTS IN PERFORMANCE

Austin McQuinn

University of Roehampton, London, UK. austinmcq@eircom.net

This paper focuses on the digitalization of the animal for creative purposes where the nonhuman animal voice is being encrypted in ways that have produced radical re-engagements with the interior animal body in contemporary art and performance culture.

This paper raises questions about the increasing technological appropriation of animal vocalization as a tool of creative and economic gain and contrasts this development with the recent work of artists engaging with the animal voice as a medium of performance. Marcus Coates, Alexander Rastakov and Celeste Boursier-Mougenot are among a generation of art, music and performance artists that have interrogated the animal body as a site of vocal expression with a rigour that counters the generic in the mediation of animals through technology.

The disappearance of nonhuman animals from urban life has become one of the definitions of modernity (Berger, 1980). The range of recorded animal 'stock' material available to the creative industries is expanding in direct relation to the diminishing experience of actual nonhuman animals in contemporary culture. Dogs, grasshoppers and birds in particular are providing an online acoustic menu of atmospherics and emotive signifiers that could only be afforded by technological advancement. Following Akira Mizuta Lippit's (2000) study of the union of animals and technology in cinema the metaphorical animal, or animetaphor, occupies this frame as a digitally accessible medium and functions as a trope of mourning for the absence of nature in urban culture.

Within the multiple sound-banks available, there is an increasing attention to the variety of expressions of the individual animal voices that are for sale—anger, threat, fear, pain, wariness, panic and so on. Even though animals are presented on an equal platform with all the inanimate sound effects on offer—automobiles, airplanes, military weapons, office machines—there is a categorizing of sentience in the recorded voices which is in itself an interesting reflection on changing interpretations of animal vocality.

In direct contrast to this activity, the artists identified in this paper are involved in the creation of a new archive of the animal voice that rejects available digital mediation of animality. Working against the grain of the technologically disembodied animal voice and body that is separated from its material source, these practitioners both use and usurp technology to reveal challenging concepts of human–animal co-experience through the medium of performance.

O34 DESIGNING PLAYFUL ENCOUNTERS BETWEEN FARM ANIMALS AND HUMANS TO RESHAPE THE INTERFACE BETWEEN ANIMAL SCIENCE, PHILOSOPHY AND ETHICS

Clemens Driessen

Utrecht University, Utrecht, The Netherlands. c.p.g.driessen@uu.nl

Many believe that animals are granted moral status based on their cognitive abilities. Some species are thought of as more intelligent and therefore more deserving of our respect and more likely to be able to suffer in ways that are meaningful to us humans. At the same time, most people take the well-being of particular animals into account depending on their personal relationships with them. These relations emerge in cultural practices that are largely the product of contingent historical processes and practical convenience. This paper proposes a new mode of intervening in and researching human–animal relations, animal welfare and animal ethics, namely by technological design. Thereby attempting to integrate the arts and sciences of human animal interaction. It will explain how initiating a design project to make farmed pigs as well as fish playfully interact with humans mediated by specially developed interfaces offers a different way to explore questions such as ‘what are our duties towards the animals we consume?’, and ‘is the life of an intensively farmed animal worth living?’ The interactive design process allows not only for a wide public to have a more active, experimental and immersive mode of involvement with these questions, it also offers a way to connect these ethical questions to philosophical and scientific ones: on the similarities and differences between humans and animals; on the nature of animal minds and how to take animals seriously (DeGrazia 1996); on the meaning of ‘intelligence’, awareness and sentience (cf. Broom 2007); on how to communicate without language (Bekoff & Allen 1998), and how boredom involves suffering (cf. Wemelsfelder 1994). Thus, this paper will explain how developing interspecies interactive video games may offer a way to explore the ‘inextricable connection’ between science and ethics (Fraser 1995).

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O35 FROM GATE TO PLATE: PERSPECTIVES ON CONTEMPORARY FOOD PRODUCTION AND ANIMAL WELFARE

Nik Taylor¹, Tania Signal²

¹*Flinders University, South Australia, Australia.* nik.taylor@flinders.edu.au

²*CQ University, Queensland, Australia.*

How we farm what we eat is becoming of increasing interest worldwide. Public interest in both food and farming practices has led to numerous documentaries and research about healthy lifestyles, food production (e.g. Food Inc, 2008) and animal welfare practices (e.g. Four Corners Australian Broadcasting Company, 2011). However, research suggests that while some consumers express a willingness to pay (WTP) more for animal-based food products that meet higher (generally legislated) animal welfare standards, a significant proportion of consumers do not. Similarly, WTP for welfare friendly food is not necessarily linked to knowledge about food processes or about animal welfare science (e.g. Signal & Taylor, 2007). The definition of what counts as 'good welfare' is complex and differs among (sub)cultures i.e., what consumers see as a 'benchmark' for good welfare may not be what animal welfare scientists/policy makers, producers or activists see as good welfare. With this disconnect it is extremely difficult, if not impossible, to derive animal welfare standards that are acceptable to all and so animal health and welfare remains a contentious issue in many cultures.

The current paper, utilising data from focus groups with over 35 participants, presents results from research which investigated different conceptions of what constitutes animal welfare and consequences of such differing perceptions. Additionally we explored some of the issues involved in measuring knowledge of, and attitudes towards, farmed animal welfare and food production. We argue that without an agreed upon definition consumers are less likely to pay for welfare initiatives (i.e. by purchasing more costly food items) which, in turn, puts the burden for animal welfare back onto the farmer without offering any financial aid or incentive to improve welfare standards. As a result animals may suffer and farmers become increasingly stressed and over-burdened and less likely to comply with increasing welfare standards.

O36 EFFECTS OF AN ANIMAL-ASSISTED INTERVENTION FOR CHILDREN WITH AUTISM SPECTRUM DISORDER AND THEIR PEERS IN A CLASSROOM SETTING

Marguerite O'Haire¹, Virginia Slaughter¹, Samantha McKenzie¹, Sandra McCune²

¹The University of Queensland, Brisbane, Australia. maggie.ohaire@gmail.com

²The WALTHAM Centre for Pet Nutrition, Leicestershire, UK.

Introduction

The classroom can be a stressful and challenging environment for children with autism spectrum disorder (ASD) due to the fact that a major feature of the disorder is impairment in social interactions. One viable addition to current classroom practices may be the implementation of an animal-assisted intervention (AAI). The aim of this study was to assess the impact of an AAI with guinea pigs for children with ASD and their typically developing peers in a classroom setting. It is the first study to include a control condition (a baseline, pre-intervention phase) for a classroom-based AAI and includes a larger sample size than previous research.

Methods

Participants included 150 children (50 with ASD and 100 typically-developing) aged 5–12 in inclusive schools. In each classroom, one child with ASD and two randomly assigned typically developing peers formed a participant group for assessment during an 8-week baseline period (no intervention) followed by an 8-week AAI. During the AAI, two guinea pigs were housed in the classroom and each participant group received two 20-minute AAI sessions per week. Outcome measures included a questionnaire administered to parents and teachers, including the Pervasive Developmental Disorder Behavior Inventory (PDDBI; Cohen et al 2003) and the Social Skills Rating System (SSRS; Gresham and Elliott 1990).

Results

Paired samples t-tests indicated significant increases in PDDBI Social Approach Behaviors ($t(48)=2.49$, $p=0.016$) and SSRS Social Skills ($t(49)=2.53$, $p=0.015$) as well as decreases in PDDBI Social Withdrawal Behaviors ($t(49)=-2.98$, $p=0.004$) from pre- to post-intervention for children with ASD. Analysis of results for typically-developing children is currently underway, with initial trends following the same pattern of improved social functioning. No significant changes were found during the baseline, pre-intervention phase (all $t_s(31)<1.25$, all $p_s>0.222$).

Conclusions

The implementation of a classroom-based AAI with guinea pigs increased teacher- and parent-reported social functioning in children with ASD, above and beyond natural developmental changes over the course of the school year. It appears that this AAI may provide a relatively simple and cost-effective means of helping educators and families to improve the social functioning of children with ASD.

O37 EQUINE GATEKEEPERS: THE ACTIVE ROLE OF HORSES IN FOXHUNTING AND FIELDWORK

Alison Acton

Independent Scholar, Essex, UK. alison.acton@hotmail.com

Firstly, this paper analyses the dynamic between horse, rider, foxhunting culture and landscape. Secondly it considers non-human animals as actants in the research process.

My fieldwork involved seven years of ethnographic research into foxhunting culture. This was unique in that no other overt, in-depth, long-term participant observation has been conducted from the position of a rider within mounted foxhound packs in Britain. The equine focus emerged unexpectedly as I originally participated as a rider/ethnographer in order to understand the nexus between foxhunting culture and the landscape. However, I was inadvertently drawn into a collaboration with an unanticipated character in this network; the “made hunter,” a horse seasoned for hunting. These animals acted as my equine gatekeepers literally incorporating me into this alien world.

I conclude that social science can incorporate epistemic and often ancient elements of cultures that draw upon animals as co-actors. Understanding traditional modes of social action, such as hunting, which are centred upon human–animal interaction, can enable us to recover more-than-human views of the world and can lead to an enhanced understanding of a super-human experience with space. Additionally, the unexpected contribution of these horses to my research process leads me to suggest that there is scope to recognise animals, not simply as objects or subjects to study, but to adopt an ethnographic approach which acknowledges and utilises their role as co-participants in relation to our embodied relationship with space.

O38 BREED IDENTIFICATION OF DOGS: AN ILLUSION

**Victoria Voith¹, Rosalie Trevejo¹, Seana Dowling², Colette Chadik¹,
Amy Marder², Vanessa Johnson¹, Kristopher Irizarry¹**

¹*Western University of Health Sciences, Pomona, CA, USA. vvoith@westernu.edu*

²*Center for Shelter Dogs at the Animal Rescue League of Boston, Boston, MA, USA.*

Over 900 people in dog related activities viewed video-clips of 20 dogs of unknown parentage that had been randomly selected from a pool of dogs volunteered by their owners to participate in the study. The dogs had been adopted from 17 different locations. All had permanent canine teeth and ranged in weight between 4.5 kg and 35.8 kg. There were 12 spayed females, 1 intact female, and 1 castrated male. Ancestral breeds contributing to at least 12.5% of each dog's genome were identified with DNA analysis by the MARS VETERINARY laboratory, Lincoln Nebraska, USA. None of the dogs were identified as purebreds.

The study participants were asked if each dog was probably a purebred or a mixed breed and what breed or breeds they thought the dog was. Seven dogs were identified as purebreds by 10–25% of the respondents. For only 6 dogs did more than 50% of the respondents' visual identifications match the DNA breed identification. For only 7 of the dogs, that were identified as mixed breeds, did more than 50% of the respondents agree what were the most predominant breeds of those dogs and in 3 of these cases the visual identifications did not match the DNA identification.

These results raise questions regarding public and private restrictions pertaining to dog breeds, particularly those that rely on visual breed identification.

Oral Presentations: Friday 13 July

O39 QUALITY MANAGEMENT IN AAI: ARE ORDINARY PEOPLE AS OBSERVERS ACCURATE RATERS?

**Birgit U. Stetina¹, Lisa Maria Glenk², Natascha Stejskal³,
Esra Schroffenegger³, Ursula Handlos³**

¹Webster University, Vienna, Austria. stetina@webster.ac.at

²Veterinary Medicine University, Vienna, Austria.

³Research- and Training Practice, Faculty of Psychology, University of Vienna, Vienna, Austria.

AAI is established in a growing number of institutions. The number of studies on the effects is growing as well. But few studies examine the effects concerning the determining interaction-partner, the animal. Also measurements for assessing the well-being of all individuals (including the animals) participating in AAI are rare. In order to fill this gap, the aim of this study was to assess the interactions in AAI with dogs using behaviour observation from psychological and biological points of view as well as endocrine measures.

Four recorded AAI sessions, standardized using a shooting schedule, served as basis for assessment. To gain information for the improvement and modification of the relevant aspects, a qualitative pretest (n=10) was conducted. Based on this feedback the items and the response format were adjusted. Observers were recruited by using snowball-sampling (n=136). The data collection was conducted with small groups of participants (n<10). One of the four videos was shown randomly and following the observation protocol, a demographic survey and the Pet Attitude Scale modified (Templer et al., 1981) were handed out.

For the analysis of the protocol exploratory factor analysis and reliability analysis were computed. Meaningful factors for the interaction (Cronbach's $\alpha=0.742-0.888$) and two factors for the attitudes towards the dog (Cronbach's $\alpha=0.794-0.819$) were found. Although there were differences between the ratings of pet-owners and non-pet-owners (likewise between dog-owners and non-dog-owners) the stress level and emotional status of the dog as well as of the trainer and participant was observed accurate in comparison with their psychological testing and endocrine samples.

Working with interested ordinary people can enhance the quality of AAT and AAI. This finding might be a step in the direction to a common agreement on the concurrent categories and viewpoints of qualitative interventions.

O40 EYE MOVEMENTS, EXPERTISE AND ANIMAL TYPE AS PREDICTORS OF ANIMAL CONTENTMENT ATTRIBUTIONS

Valerie Sims¹, Matthew Chin¹, Heather Lum², Mary Richards¹, Ashley Carter¹

¹University of Central Florida, Orlando, FL, USA. vs1ms@gmail.com

²Penn State Erie, The Behrend College, Erie, PA, USA.

The “Blink” phenomenon asserts that experts can interpret social stimuli even when presented for a very short time (Gladwell, 2005; Curhan & Pentland, 2007; Rule & Ambady, 2007). Sims, Chin, Lum, & Richards (2010) showed this phenomenon extends to expert animal keepers assessing the contentment of an animal. In this study, twelve animal keepers from local zoos (Average expertise=12.92 years, SD=3.55) and matched novices examined short videos (4–10 seconds not made at keepers’ place of work) of twelve animals—giraffe, mandrill, oryx, tapir, goat, elephant, cougar, rhinoceros, chimpanzee, orangutan, dog, and meerkat. Participants wore head mounted eyetrackers as they examined the videos and rated the contentment of the animal. Eye tracking data were analyzed for the number of fixations per second and average duration of fixation for each video clip.

A 2(Expertise) × 12(Animal Type) mixed ANOVA was calculated for each of the six dependent variables: Number of Fixations, Duration of Fixations, Emotion Attribution, Confidence, Number of Words used, and number of emotional terms. For every variable, there was a main effect for animal type. The giraffe and the elephant received the most fixations per second, and the duration was longest for the elephant and the goat. For all variables except confidence and word count, there were main effects for Expertise. Interactions were present for number of fixations, duration of fixations, and word count. Further analysis showed that duration of fixations was positively associated with higher confidence in ratings for both experts and novices. Experts may take in more information from more different places. Familiarity is important, as experts and novices did not differ in the number of fixations or their duration when assessing a common animal, the dog. This finding is in line with research that expertise is highly domain specific—even at the level of eye movements.

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O41 THE ROLE OF PETS IN THE FAMILY SYSTEMS OF CHILDREN FROM DIVERSE CULTURES IN THE US

Brinda Jegatheesan¹, Jennie Warmouth¹, Emma Elliott¹, Soleil Boyd¹, Aishah Jalani², Sayaka Omori¹, Sandra McCune³

¹*University of Washington, Seattle, Washington, USA.* brinda@uw.edu

²*Medina Academy, Seattle, Washington, USA.*

³*WALTHAM Centre for Pet Nutrition, UK.*

Human–animal interactions that occur within families represent dynamic and reciprocal relationships that are influenced by local cultural values. The theoretical frameworks used in this study were Vygotsky’s socio-cultural theory and the family systems theory. Using an innovative methodology, the study examined the roles of pets in the family systems of diverse children in the US.

Participants were 90 children, aged 7–11 years from 6 cultural groups.

A family and pet demographic survey was completed by parents. Audio-recorded interviews were conducted with the children using the Draw and Tell interview method (Rubin, 1984). Children were invited to draw and talk about their pets. Analysis was done using the grounded theory method. The interview transcripts were coded by researchers who had emic (insider) and etic (outsider) perspectives.

Children’s description and conceptualization of the role of their pets in were rooted in their family life and cultural beliefs. For example, the strong emphasis of familia in Latino Americans, the Islamic concept of amanah and hence the pet is a family member to be cared for, the cultural concept of amae (indulgence) and omoiari (empathy) among Japanese and culture of individualism in European Americans were highly evident. Pets played the roles of teacher, guide, protector, playmate in the lives of African and Native American children. For these children the role of pets was described in relation to the ‘special ways’ they interacted with them. Native American children formed emotional attachments with their reservation (‘rez’) dogs to help them cope with stress when parent support was inconsistent due to separation or impaired parenting. Latino, Japanese, African and European American families predominantly had more dogs and non-mammalian pets (fish, frogs) whereas Muslim families predominantly had cats.

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O42 THE USE OF LIVE INSECTS IN ART AND ENTERTAINMENT

Rick Gibson

Independent Scholar, Vancouver, BC, Canada. rick@rickgibson.net

Many contemporary artists work with new media. A growing area of practice is the use of live biological materials. This is giving rise to the growing field of “bio-art”. Besides recombining DNA to create new species, artists are also utilizing existing life forms, that have not previously been used in art works. This paper surveys a wide range of literature to summarize how live insects have been used in works of art, and as forms of popular entertainment since 1800.

Living dogs, horses, lions, elephants and a variety of other animals have been used in art and entertainment for millennium. However, over the past couple of centuries, there has been a growing use of live insects in art and entertainment. This became very prominent with the advent of motion pictures, beginning with Smith in 1910 [1]. Although Klein has written two articles on the use of live insects in contemporary art [2, 3], this study looks at the topic from an historical perspective across all medium, including motion pictures. From this vantage point, this research describes how insects are depicted within specific distribution channels. For example, insects and arachnids are typically portrayed as benign and amusing in live theatrical performances such as bee beards and flea circuses, whereas they are universally portrayed as dangerous and horrific in motion pictures. This article proposes that some of the reasons for these differences are that live theatrical performances need to assuage our fears of insects in order for the audience to view them up close, whereas the safe detachment of enlarged motion pictures can play to our fears of swarming, stinging and biting creatures. It is also proposed that, because of the detached world of cinema, insects have traditionally been treated much more recklessly during filming, than when used in live entertainment shows.

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O43 THE ART OF NAMING CATS: CROSS-CULTURAL STUDY CONTINUED

Penny Bernstein¹, Gabriela Sauciuc², Emmaleigh Given¹

¹*Kent State University at Stark, North Canton, USA. pbernste@kent.edu*

²*Lund University, Furuviik, Sweden.*

Previous studies suggest that cat owners in the United States are more likely to give their cats human names such as Bob than cat-related names such as Tiger, whereas Belgian owners are more likely to use cat or other non-human names (Bernstein et al 2010). The current study sought to compare a large, new dataset from the United States with data from Sweden. Since Swedish cat owners, like U.S. Owners, are known to regard their cats as family members (77% of all Swedish owners, Apoteket 2009), we hypothesized that Swedish cat names were more likely to be human-related.

Two large inventories were used: Banfield Animal Hospitals, United States (n=424,638 cats), and Agria Djurforsakring, Sweden (n=119,713 cats). These were compared for distinctiveness of names (repeated vs unique to only one cat) and categorization was performed on the top ranked names (used at least 1000 times) for human vs cat vs “other” (non-human, non-cat).

Swedish names were generally repetitive, with many cats having similar names. Only 2673 distinct names were found, and no name was unique. American cats, in contrast, had 55,797 distinct names, and 64% were unique (35,845 cats). These data also reflect repetition, since only 20,000 names were used for most of the cats (n=388,793). Fifteen names were most frequently used in Sweden (at least 1000 individuals each; 20.3% of the sample). Of those, 10 (67%) were human. The U.S. database had 49 names used at least 1000 times (19% of the population); 54.1% of these were human.

The larger data pool still reflects a human-name bias for U.S. cats, and a penchant for unique names. Swedish cat names, while less unique and varied than U.S. names, did show a human-name bias, as predicted from Swedish owners regarding their pets as family members.

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O44 COMPANION DOGS ACT AS PSYCHOLOGICAL ASSETS FOR SUCCESSFUL PROFESSIONALS

Jordan Schaan¹, Pauleen Bennett²

¹*Monash University, Clayton, Victoria, Australia. pauleen.bennett@latrobe.edu.au*

²*La Trobe University, Bendigo, Victoria, Australia.*

Existing theoretical models attempting to account for putative benefits associated with companion animal ownership typically focus on the capacity of pets to alleviate psychological distress associated with issues such as social isolation and anxiety. Yet, in many Western countries, a large proportion of the population chooses to live with pets. Does this indicate that millions of people worldwide are deficient in some way, or might we be missing something critical about the value of companion animals? To investigate this possibility we conducted a qualitative, phenomenological study, in which we interviewed 37 adult dog owners, selected because they were well-educated and highly successful in their professional and personal lives, but nonetheless reported having a strong psychological bond with at least one dog. Four main themes emerged from analysis of the interview transcripts. First, our participants perceived that their relationship with the dog comprised psychological intimacy dimensions usually attributed only to very close relationships between people. Second, the dogs were reported to offer opportunities for their owners to experience meaning, engagement and pleasure—key ingredients of personal happiness. Third, the owners felt unconditionally loved by their dogs and perceived this as a psychological asset rarely, if ever, met in their relationships with people. Fourth, the dogs were perceived by their owners to possess virtue qualities which are universally highly esteemed in people. For some participants, the dog appeared to play a role in the owner's self-actualisation process through role modelling these qualities. Some of these dimensions of the human–dog relationship have not previously been described and are visible only when the relationship is viewed from a psychological benefits perspective, rather than from a deficits perspective. Our research confirms that pets enrich even very successful lives and has substantial implications for policy development in a number of areas.

O45 GUIDELINES FOR DOG-ASSISTED INTERVENTIONS IN INSTITUTIONS

Christine Olsen

The Norwegian Centre of Anthrozoology, Ås, Norway. christine@azs.no

The influx of training courses in animal assisted intervention (AAI) is large. As a result of an exploding interest for AAI with dogs in institutions The Norwegian Directorate of Health saw the need for guidelines, giving qualified advice for health personnel. The Directorate wanted to increase knowledge about the use of AAI, and thereby have a basis to develop frameworks. The Norwegian Center of Anthrozoology (AZS) elaborates and provides AAI for different user groups. AZS also works in the field of research, and is responsible for ensuring that health professionals who work within AAI have sufficient expertise and that the dogs used are controlled and suitable for such use. Research results together with earlier experiences, contributed as basis for developing a guiding brochure financed by The Directorate. The guidelines emphasizes that dogs used for AAI should be evaluated by an ethologist with qualifications in the AAI-field to ensure that the dog is mentally suited for this kind of work, as well as being fully examined by a veterinarian. Dogs should as minimum be past their physical and psychological maturation. The Norwegian Kennel Club together with AZS is responsible for qualifying dogs and handlers for animal-assisted activities. The course consists of both theory and practice, and the team has to pass a final test before visiting institutions. For dogs working in animal-assisted therapy/animal-assisted pedagogy the handler has to pass a continuing education on university level to gain knowledge about animal-assisted interventions, ethology, learning theory, risk management etc. The course gives 15 credits. The dog has to fulfill a training program adjusted to the tasks required for the intervention, and both dog and handler should perform an unknown task related to the handler's profession.

O46 UNDERSTANDING PAST AND PRESENT OBJECTIONS TO GREYHOUND RACING IN THE UNITED STATES: A REVISED VIEW

Gwyneth Thayer

Tennessee State Library and Archives, Nashville, Tennessee, USA.
gwynn.thayer@gmail.com

In contrast to a broad variety of published studies on the role of animals in entertainment (horse racing, animal fighting, circuses, etc.), a paucity of scholarly work on organized greyhound racing is evident in the field of anthrozoology (Atkinson and Young, 2005). This gap has contributed to a lack of knowledge about the history of the sport (as it was practiced in America) in scholarly and animal protection circles as well as in the general population.

Because of this oversight, animal advocates and other scholars in the United States often operate under erroneous assumptions about past objections to greyhound racing. Early objections were often based on the welfare of the hare used in training; concerns about the well-being of the racing greyhound only emerged with vigor in the 1970s (Thayer, 2010). Indeed, even though recent publicity generated by anti-racing groups has seriously tarnished the sport's image, animal protectionists did not single-handedly orchestrate the sport's decline. A strong argument can be made that a changing entertainment market damaged the industry quite profoundly (Christianson, 1986).

Attitudes towards greyhound racing need to be analyzed through a wider historical lens. Early objections to the sport occasionally pertained to animal welfare, but early criticism about dog racing in the United States was largely based on its inevitable association with gambling, especially in venues that were believed to attract the lower classes. Broadly speaking, when the public first discovered greyhound racing in the 1920s and 1930s, concerns were raised because of its (perceived or real) connections to organized crime, political corruption, moral debasement, and other social problems (Thayer, 2010). These class implications have been overlooked in American scholarship and demand further consideration, although class issues have not gone unnoticed by scholars examining British greyhound racing (e.g., Huggins, 2006; Baker, 1996).

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O47 HUMAN CLASSIFICATION OF CONTEXT-RELATED VOCALISATIONS EMITTED BY KNOWN AND UNKNOWN DOMESTIC CATS (FELIS CATUS)

Sarah Ellis, Vicky Swindell, Oliver Burman

University of Lincoln, Lincoln, UK. sellis@lincoln.ac.uk

Previous research has shown that human classification of audio-playback of unknown domestic cat 'meows' is relatively poor in terms of the context in which they were emitted. The objective of this study was to investigate whether such classification improved when the recorded "meows" belonged to participants' own cats. Ten cat owners were asked to listen to four separate audio-playback clips of a single meow emitted from their own cat in one of four possible scenarios/contexts (food preparation, food-withholding, physical separation, verbal attention solicitation with the cat, adapted from Nicastro & Owren, 2003) and identify which context related to which call.

The same procedure was repeated using vocalisations from unknown cats and was completed by 8 of the 10 participants. Binomial calculations revealed that correct identification of either 3 or 4 of the contexts could be considered to occur for reasons above chance ($p < 0.05$). This was the case for 40% of the participants when the vocalisations belonged to their own cat but never occurred when vocalisations belonged to an unknown cat. Thus, a Wilcoxon signed-ranks test comparing number of correct responses revealed that owners were significantly better at identifying the contexts when the vocalisations belonged to their own cat in comparison to an unknown cat ($Z = -2.226$, $n = 10$, $p = 0.026$). Furthermore, analysis of acoustical properties of the meows revealed no significant differences between contexts for call duration ($\chi^2 = 5.571$, $df = 3$, $p = 0.134$) or mean fundamental frequency ($\chi^2 = 1.186$, $df = 3$, $p = 0.756$) suggesting meows from a range of cats do not share common characteristics within a context. These results suggest that human classification of cat meows is dependent on learning an individual cat's vocalisations in response to different contexts rather than learning a common rule across cats for each context.

O48 “THE WOMAN WITH THE DOG”: ISSUES OF INDEPENDENCE AND IDENTITY FOR GUIDE DOG OWNERS

Ruth Butler

University of Hull, Hull, Humberside, UK. r.e.butler@hull.ac.uk

Academic literature on the work of assistance dogs supports Guide Dog Schools' assertions about the invaluable nature of the independence that such dogs can bring to their owners. In general the literature focuses on the range of tremendous benefits the dogs can offer. However, literature has also noted, to a lesser extent, that there can be disadvantages to assistance dog ownership. These can include practicalities involved in the care and management of a dog, but perhaps more often the independence they have the potential to provide can be restricted by discriminatory social and cultural barriers that can arise from someone being accompanied i) by a dog, and ii) by a highly visible symbol of impairment.

Despite the literature's general awareness of the impact the stigma of disability and cultural beliefs about dogs can have on the daily lives of Assistance Dog owners, qualitative sociological research into the nature of social and cultural understandings of, and responses to Assistance Dogs is significantly lacking. Most of the academic literature has been conducted by psychologists. The subject has been somewhat neglected by sociologists and other Social Scientists.

After firstly considering what is meant by 'independence', this paper explores the nature of the differing cultural and social constraints which can limit it for Guide Dog owners'. After reflecting on the potential value of the dogs over and above other forms of assistance to visually impaired individuals in their desire for independence the paper considers the socially constructed nature of the identities of visually impaired people, dogs, and guide dogs, and how these combine in practice to create the experiences of Guide Dog owners. The points raised will be illustrated by drawing upon my two month auto-ethnographic fieldwork diary as a UK Guide Dog owner.

O49 CHILDREN'S ATTITUDES TO FARM ANIMALS

Nelly Lakestani¹, Virginio Aguirre², Agustin Orihuela²

¹*University of Lincoln, Lincoln, UK. nlakestani@lincoln.ac.uk*

²*Universidad Autonoma del Estado de Morelos, Mexico, Mexico.*

This study aimed to build a preliminary farm animal attitude questionnaire for primary school children.

The participants were 122 children (50 boys and 72 girls) aged 8 to 10 years old, attending 2 different schools in the semi-rural town of Tepalcingo, Mexico. The questionnaire was composed of 13 questions on farm animals with a 5 point Likert scale. This study was part of a larger study evaluating the effectiveness of an animal welfare education programme. The questions were therefore focused on the animals that were present in the education programme (cows, chickens, pigs, sheep) and 3 questions on farms in general were also included. The children were asked to fill out the questionnaire silently in their classroom during a normal school day, at two weeks interval.

Test re-test reliability of the questionnaire was carried out on 70 children by correlating their answers at two different time points. Out of 13 items, 8 were significantly correlated at the two time points, indicating that those questions were valid in testing children's views on these items. These investigated children's views on: chickens (2 items), cows (1 item), sheep (1 item), pigs (1 item) and farm animals in general (3 items). A 1 to 5 attitude score was created, with higher numbers indicating more positive attitudes. Children generally had a positive attitude to farm animals (mean=3.22, n=122). When asked which of the 4 was their favourite animal 44% responded sheep, 30% cows, 20% chickens and only 3% responded pigs. No significant difference was found between boys and girls.

The attitude scale created in this study may be used as a basis for developing a more sophisticated and universal scale. Having such a scale may be useful for animal welfare education programmes, in particular to assess their efficacy in changing children's attitudes to animals.

O50 FACTORS THAT PREDICT OWNER ATTACHMENT TO PET DOGS

Christy L. Hoffman¹, James A. Serpell², Pan Chen¹, Kristen C. Jacobson¹

¹*University of Chicago, Chicago, IL. hoffmanc@uchicago.edu*

²*University of Pennsylvania, Philadelphia, PA, USA.*

This paper explores whether dog behavioral characteristics, as measured using a validated questionnaire (the Canine Behavioral Assessment and Research Questionnaire; C-BARQ), predict the strength of owner attachment to pet dogs, and whether relations between dog behavior and owner attachment are moderated by gender, age class, and race/ethnicity. Seventy-eight children between 11 and 18 years and 49 adults (i.e., primary caregivers of the children) between 30 and 57 years completed questionnaires about their attachment to their pet dog, their level of responsibility for that dog, and their general attitudes toward pets. Participants also completed the C-BARQ to rate their dogs on observable behavioral characteristics. C-BARQ subscales examined include: trainability, stranger-directed fear, stranger-directed aggression, separation-related problems, excitability, and attachment/attention-seeking. Multi-level modeling tested relations between canine behavioral characteristics and owner attachments after controlling for owners' age class, gender, race/ethnicity, general attitudes toward pets, and dog caretaking responsibilities. Results indicate that owner attachment to dog was positively associated with dog trainability ($\beta=0.15$, $SE=0.07$, $p=0.03$). Furthermore, relationships between certain dog characteristics and owner attachment were moderated by owner characteristics: For Caucasians but not African Americans or Hispanics, dog excitability was negatively associated with owner attachment ($\beta=-0.24$, $SE=0.09$, $p<0.001$); and for adults but not children, dog attachment/attention-seeking behavior was positively associated with owner attachment ($\beta=0.34$, $SE=0.10$, $p<0.001$). Gender did not moderate relations between dog characteristics and owner attachment. These results suggest that certain canine behavioral characteristics do indeed predict the strength of owners' attachments to their dogs, but that owner race/ethnicity and age class influence the types of canine behaviors that owners find desirable. Given that emotional attachments to pets likely mediate the effects of pet ownership on owner well-being, this study provides insights into factors that may affect whether the human–dog relationship confers psychological and/or health benefits on dog owners.

O51 CAN THEY SUFFER? FACING ANIMAL SUFFERING IN JACQUES DERRIDA AND PRIMO LEVI

Damiano Benvegnù

University of Notre Dame, Notre Dame, Indiana, USA. dbenvegn@nd.edu

In his essay entitled *The Animal Therefore I Am*, the French philosopher Jacques Derrida interrogates western philosophy and its use of the concept “Animal” in order to create a supposedly clear divide between what is properly human and what is not. Derrida claims that even our modern industrial, and somehow violent, treatment of animals derives from such a philosophical premise, and that only rejecting it might free us from our own humanistic hubris. However, he arrives at this conclusion through his own experience of being seen by his own cat: being subjected to the gaze of the cat, and the consequent double feeling of shame and alienation that he felt, led him to ask if the very ethical question, when it comes to our relation with animals, is not, “Can they reason? nor, Can they talk? but, Can they suffer?”

The alienating experience in Auschwitz of the Italian writer Primo Levi might seem to be exactly the opposite of what Derrida suggests. Being seen like an animal, rather than by an animal, meant for him being subjected to a gaze and an alienation that tried to destroy his own humanity—a humanity that instead he tried to maintain throughout the horror of the Nazi Lager. Nevertheless, Levi’s literature and interest are filled with animals, and he dedicated several pages to non-human creatures. Particularly, in one of his essays, he comes to the same conclusion drawn by Derrida: suffering is the only ethical factor when the human/animal relationship is at stake.

My paper investigates a possible comparison between the post-humanistic animal philosophy of Jacques Derrida and the hyper-humanistic animal writing of Primo Levi, particularly when both directly face the issue of animal suffering and its ethical challenge.

O52 COMPANION ANIMAL ATTACHMENT AND GENERAL WELL BEING IN OLDER ADULTS, LIVING IN THE WESTERN REGION OF PUERTO RICO

Yahaira Segarra Gonzalez, Ines Canabal

*Interamerican University Of Puerto Rico, San German, Puerto Rico.
ysegarra@gmail.com*

The purpose of this study was to examine if there is a correlation between companion animal attachment and general well being in healthy older adults; between time of companion animal guardianship and attachment, and also between the age of the companion animal guardian and the level of attachment. Acknowledging the need for culturally sensitive instruments that help in the measurement of the human–animal bond, more specifically companion animal attachment, a summary of the translation into Spanish for the Owner-Pet Relationship Scale (OPR), originally developed by Winefield & Chur-Hansen, 2006, and its adaptation process for the healthy older adults population (60+ years) in Puerto Rico is presented. The OPR (2006) was originally developed and based on Bowlby's attachment theory (Bowlby, 1969). An adaptation of Brislin's method (1970) for cross-cultural research was used (translation, back-translation, and pilot study). For the general well being measure, it was used the Escala de Bienestar General (ERDM), (Alegria, 1982). The ERDM is the adaptation of the General Well-being Schedule developed by Dupuy, 1977, for Puerto Rican adults. For the data analysis, Spearman Correlation Coefficient, Mann-Whitney Test, Kruskal-Wallis Test and Chi-Square Test were used to examine a sample of 100 older adults in the Western region of Puerto Rico. Findings revealed that there is no correlation between companion animal attachment and general well-being $r_s=0.029$ ($p=0.773$), no correlation between time of guardianship and companion animal attachment $r_s= .054$ ($p=0.597$), and no correlation between guardian age and companion animal attachment $r_s=0.111$ ($p=0.272$). Nevertheless, when the sample was divided between the older adults that were members of a day care center and those that were not members, there was a significant positive correlation between companion animal attachment and general well being in those that were not members of the day care centers, $r_s=0.504$ ($p=0.002$), and a negative significant correlation in those that were members $r_s=-0.381$ ($p=0.002$). The findings in this study suggest a need for further qualitative research to have a better understanding of these relationships.

O53 THRILL KILLING

Karen Dalke, Ray Hutchison

University of Wisconsin, Green Bay, WI, USA. dalkek@uwgb.edu

The scholarly literature on thrill killing and the abuse of wild animals is a relatively new area of inquiry. Our study, supported by the State of Wisconsin Department of Natural Resources (DNR) following several highly publicized cases of thrill killing, is among the first to systematically study this issue.

Multiple methods, including a review of existing DNR statistics, personal interviews (n=8) with persons charged (n=41) in thrill kill incidents, surveys of comparable control group of students at a local university (n=476), and surveys of DNR Wardens who deal with these incidents. Our Animal Treatment Survey is based upon the Cruelty and Animals Inventory (CAI), a brief self-report inventory based on the Children and Animals Assessment Instrument. The survey of DNR wardens presented six scenarios (five based upon the cases identified as thrill killing by the DNR). The results demonstrate that there are inconsistencies in the definition of thrill killing among our research groups.

This study tells us less about a unique form of animal abuse and more about the complex nature of human and wild animal interactions. While there is a working definition of “thrill killing” employed by DNR wardens, this definition coexists with a morass of laws and regulations regarding hunting on public-private lands, killing of nuisance species, and the like. Thrill killing has been used to describe the abuse and killing of wild animals, but the term has not been used to describe similar treatment of domestic animals, the killing of nuisance species, or licensed game farms where one may kill trophy animals.

O54 SEEING THE OTHER – ANIMAL IDENTITIES THROUGH CHILDREN’S EYES

Wouter Servaas

*University of Sheffield, Dept. of Sociological Studies, Sheffield, UK.
w.servaa@sheffield.ac.uk*

Rural studies are often dominated by agricultural and economic issues. Children’s experiences and aspirations concerning living in rural areas are less covered. I explored populist assumptions on ‘the rural’ and compared those with children’s perceptions of ‘the rural’ and children’s daily lives in rural areas in Belgium and the Netherlands.

In October 2007–May 2008 I visited 3 Belgian and 3 Dutch schools and had 329 children (157 girls and 172 boys) filling in a questionnaire. From these 329 children, 180 children (99 girls and 81 boys of 7–12 years old) participated in focus group interviews, and 23 children (13 girls and 10 boys) participated in classroom discussions.

Animals—and caring for animals—are indispensable parts of children’s notions of ‘the rural’. All interviewed children distinguished pet animals, farm animals and wild animals. Whether children consider animals as pets depends on children’s emotional ties with animals. As such, animal identities become blurred, as children also considered ponies, horses—and even cows—as pets. This suggests that emotional bonds with animals become more important than economic values.

These changing positions of animals in Western societies become most clear when talking about (the care for) horses. Whereas horses used to be a vital part of pre-industrial agriculture, emotional ties are more dominant. Children still mention ‘owning an animal’, but this ownership comes with a sense of responsibility for animals’ well-being. At the same time children undermine concepts of ownership by referring to animals as family members.

Epidemics like FMD and BSE led to questions on the well-being of animals in Western societies and to a desire for a diverse rural economy where animal well-being is more important than economic gains. By redefining animal identities, children contribute to a new societal understanding of animals and animals’ positions in society.

O55 POSTHUMENEUTICS AND THE ANIMAL AVANT GARDE: DIGITAL EXPERIMENTS IN INTER-SPECIES TRANSLATION

Thomas Doran

*University of California Santa Barbara, Santa Barbara, CA, USA.
thomasdoran@gmail.com*

As an inter-discipline, animal studies needs to embody the mixture and complexity it often theoretically embraces. My work is specifically inspired by nontraditional hermeneutics in the digital humanities and poetics, which I propose are crucial to animal studies because of how deeply entwined human and animal cultures have become. As we delve deeper into questions of animal agency in human culture, we need to consider what we are not representing.

In the past I have attempted to develop a deformative practice of poetic analysis that considers different ways of seeing a poem. I seek a similar approach in my current project, as I attempt to recast poetry in ways that consider animal consciousnesses. I ask: Are animals interested in our culture, and how can we engage and present their responses to it and blend them with our own responses? Should we consider images of cats on laptops more than metaphors for the entanglement of human–animal culture? How can we translate what it is that animals see when they see our culture? How might we translate our culture for other species given their unique material cultures and forms of reflexive thought? And what do all of these mixed perspectives do to our own critical practices?

My project is about exploring the theoretical underpinnings of the above possibilities, conducting hermeneutic experiments, and presenting my work through hybrid forms of digital writing. I am currently engaged in labor-intensive collaborations with machines in the construction and deployment of prototypes for nonconventional posthumeneutics, which often involves doing work that no software exists to facilitate—or being a bricoleur with existing software. So, I seek strange, creative, and balanced collaborations with the scientific disciplines and will also discuss how future cross-disciplinary collaborations might produce tools and software designed to repeat and expand upon this project.

O56 THE CHANGING HUMAN–FELINE RELATIONSHIP IN BRITAIN C.1900–1950

Hilda Kean

Ruskin College, Oxford, UK. hildakean@hotmail.com

Objectives

The paper has three objectives. Drawing on veterinary accounts, archives of animal charities, and contemporary diaries and journals this paper will first argue that the feline-human relationship that existed in Britain at the turn of the C19th–C20th was different to that of some 50 years later. Secondly, it will explore the concept of researchers such as Marc Bekoff or Jonathan Burt that both humans and animals change because of their relationship to each other. Thirdly, drawing on debates within Animal Studies on representation, it will consider critically the extent to which existing materials emanating from humans can enable us to explore such changes.

Methods

I have already undertaken extensive research using archival materials including diaries, reports and surveys held in: the Mass Observation Archive, Sussex; Imperial War Museum; TNA; RSPCA, Battersea Cats and Dogs Home, Cats Protection. I have consulted printed materials including cat manuals and the Veterinary Record. I will also draw on conceptual material from Animal Studies and Historiography.

Conclusions

At the start of the C20th cats were often seen in purely utilitarian ways. They received rudimentary attention from the veterinary profession. Regularly abandoned outside the houses of the middle classes whilst they went on holiday, given poor health provision and treated in brutal ways nevertheless their role started to change. Increasingly during the late 30s and 40s they were both treated as a disposable ‘animal’ while contradictorily also being seen to be part of a ‘family’. Although the materials used emanate from humans there are nevertheless sufficient feline traces for it to be concluded that cats and humans both changed in their relationship to each other.

O57 TEACHER ATTITUDES TO ANIMALS IN PRIMARY EDUCATION IN ENGLAND

Diahann Gallard

Liverpool John Moores University, Liverpool, UK. d.c.gallard@ljmu.ac.uk

As part of an ongoing current research project which looks at the status quo of animal experiences in the Primary curriculum in England, teacher attitudes have been considered. Ten in-depth interviews were conducted with teachers who have current class teacher responsibilities in the Primary age phase in the Merseyside area. These teachers were situated in different Primary school contexts with variation in socio-economic status, management technique, resources and level of parental involvement. This qualitative research aimed to explore the findings of earlier research that attributed health concerns (allergies) and time/situation demands to a reduction in the provision of animal experiences in Primary school settings. Although the research did provide support for the previous research findings, the core theme that emerged in this research study was that there is a very low awareness in teachers of the benefits and positive developmental outcomes for young children through their engagement in direct animal experiences. There also appears to be negative attributions formed by teachers through feeds of information from the media and a lack of access to contrast views and engagement with robust research to support a critical viewpoint to overcome this. Further, there appears to be a significant need for a well-designed and engaging continuing professional development programme to address this.

O58 THE FALL AND RISE OF ANIMALS IN FICTION

Gabrielle Regney

Curry College, Milton MA, USA. gregney0603@curry.edu

Intro/objectives

When and why does animal fiction falter? Poetry, with its radical language capacities, may be the genre most capable of transforming our notions of species and their boundaries. However, the fact that poetry is less read than fiction (National Endowment for the Arts 31) leads us to hope that fiction might have something to say/do as well. Indeed, both imaginative and scholarly literatures suggest we now may be validating the interdependence of species and reconfiguring the place of all animals.

Methods/theory

My study maps significant animal-infused imaginative literature (in English) over the last roughly one-hundred years. By “significant” I mean: complex, innovative, widely read, and critically acclaimed. These categories are empirically supported by numbers of references in key databases such as the MLA bibliography. Then, I investigate poetry. Finally, I rely on performance theories and Haraway’s understandings of “companion species,” applying them to 21st century texts such as Auster’s *Timbuktu* (2000), Martel’s *The Life of Pi* (2001), Parkhurst’s *Dogs of Babel*, Haddon’s *Curious Incident of the Dog in the Night-Time* (2004), Stein’s *The Art of Racing in the Rain* (2008), Millet’s *Love in Infant Monkeys: Stories* (2009), and Gordon’s *Lord of Misrule* (2010).

Findings

In modernist fiction, major writers (London, Twain, Faulkner, Hemingway, Steinbeck, Wright, Orwell) featured interspecies relations in their stories. Then, animal fiction experienced a blaring silence in the second half of the 20th century. Contrarily, animal poetry has always survived. One need only think of Bishop, Jeffers, Hughes, Snyder, Kinnell, Oliver, Harjo, and Doty, to realize that poets who foreground animals abound, even during the period of quiet in fiction. Finally, the overwhelming presence of contemporary imaginative texts featuring animals, and their artistic treatment of those interspecies relations, suggest we are entering a new period. Scholars from multiple disciplines (Franklin; Balcombe; Huggan and Tiffin) support this conclusion.

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Poster Presentations

P1 A BRIEF REVIEW OF DOG RELATED ARTICLES IN BRITISH NEWSPAPERS AND ASSOCIATED FACTORS

James Oxley, Andrew Tibbott

The Kennel Club, London, UK. james_oxley1@hotmail.com

Few studies have reviewed media coverage of dogs and, of those that have, only specific areas have been focused on such as dog bites/attacks. Therefore, the aim of this study was to review the occurrence and types of dog related reports in British newspapers and determine how dogs are represented in the British press. This review covered five main British newspapers (Monday–Sunday) over a period of six weeks (01/12/2011 to 12/01/2012). Once all recorded reports were gathered they were categorized according to their topic. In addition, for each article various factors were recorded including; the number of papers the story was published in, size/length of article, photographic occurrence and content and dog related factors (age and breed of the dogs involved). More specific information was gathered for dog bites/attacks, including dog breed, number of dogs, age of dog and victim, sex of victim, extent of injury and place of occurrence (e.g. owners home). Overall, of the 210 reviewed papers a total of 35 articles were gathered. Of these, seven (20%) were related to ‘cruelty’, six (17.1%) ‘dog health’, four (11.4%) ‘breeding’, four (11.4%) ‘dog bites/attacks’, 3 (8.5%) ‘dog law’, 2 (5.7%) dogs ‘deterring thieves/saving lives’, three (8.5%) ‘charity campaign/assistance dogs’, and one (2.9%) ‘scientific research’. The remaining 5 (14.3%) articles were categorised as ‘other’. Of the three bite articles which were reported all were female with the age of victim ranging from 2 months to 52 years old. In conclusion, it is clear that not only are dogs frequently in newspapers for a variety of reasons but stories relating to dogs are both positive and negative.

P2 A REVIEW OF FEARFULNESS OF HUMANS IN LAYING HENS

Andrew Tibbott, James Oxley

Writtle College, Essex, UK. james_oxley1@hotmail.com

Laying hens are more flighty than commercial broilers (Keer-Keer et al., 1996) and withdrawal behaviour and attempts to escape from humans is common. A fear of humans has previously been shown in dairy cows (Breuer et al., 2000) and pigs (Hemsworth and Barnett, 1992) and fearfulness has been shown to reduce production. Hens' responses to humans are unaffected by variations in sex, height and presence of spectacles but crouching and escape postures, indicative of fear, were seen when experimenters wore unfamiliar overalls compared to casual clothing (Barnett et al., 1993).

Graml et al. (2008) suggested that high levels of fear of humans can affect welfare and productivity in laying hens. Stress and frustration can cause feather pecking in laying hens (McAdie and Keeling, 2002; Rodenburg et al., 2004). Reports of increased fearfulness in top-tier birds were confirmed in Jones (1987) who found an increased avoidance of a novel stimulus. This was confirmed in Hemsworth et al (1993) who showed significant effects of tier level in multi-tier battery-cage systems on withdrawal responses of birds to an approaching experimenter. Withdrawal responses had a tendency to increase in birds in tier 3–4 compared to tier 1–2. Also, birds in tier 3 (top tier) were more frequently ($p < 0.01$) observed in the front 20 cm of the cage as the experimenter approached the bottom tier, whereas birds in tier 4 (top tier) were observed less frequently ($p < 0.05$) in this area as the experimenter approached.

Stockmen should be made aware of the affects of fearfulness of humans in laying hens and its effects on welfare and production, especially with the future ban of caged systems and the increased risk of feather pecking in non-caged systems.

P3 A PILOT PARTICIPANT OBSERVATION STUDY OF THE CAMPUS CANINES PROGRAM AT THE UNIVERSITY OF PITTSBURGH

Nicole Camaioni

University of Pittsburgh, Pittsburgh, PA, USA. nic10@pitt.edu

Introduction

The Campus Canines Program (CCP) at the University of Pittsburgh offers a unique animal-assisted activity experience by providing the University of Pittsburgh's community with the opportunity to interact with registered Canine Good Citizen dogs. My objective was to observe and describe the CCP. The key question guiding this research is - what happens during an animal-assisted activity program that is carried out at a major university?

Methods

This study used a case study approach. In this study, a single case was explored of the CCP at the University of Pittsburgh. Data was collected through participant observation. This program was observed for five weeks to determine what happens during the CCP. This data was then transferred, coded, and classified using the NVivo software. Prior to this study, the population was unknown.

Results

Population: The population of this program includes participants (students, faculty and staff), volunteers (dog handlers), and canines. The number of participants ranges between 30–60 each week. The number of volunteers ranges between 10–15 each week. The canines are various breeds, sizes, activity levels, and ages. There are between 7–15 dogs per session.

Activity: The participants travel between the various therapy dog/volunteer teams. The dog elicits participation by soliciting the participant to sit, pet the dog, and join the dog/volunteer team and other participants. Once the human joins the group, the human-to-human connections occur through the sharing and taking of photographs of the therapy dogs and through shared personal pet stories.

Implications

This study provides that the therapy dogs in the CCP serve as both solicitor and connector. The CCP may aid in establishing and maintaining participant connections with other participants, volunteers, and family members. This program may help to serve a need in creating social connections for students in higher education.

P4 PRE-SERVICE TEACHERS' OPINIONS ABOUT THE REINTRODUCTION OF THE WILD GOAT, BROWN BEAR AND IBERIAN LYNX IN PORTUGAL

António Almeida¹, Clara Vasconcelos²

¹*Lisbon Higher School of Education/Center of Geology, University of Porto, Oporto, Portugal. ajcalmeidageo@gmail.com*

²*Center of Geology, Faculty of Sciences, University of Porto, Oporto, Portugal.*

Three of the most emblematic Iberian mammals, the wild goat (*Capra pyrenaica*), the brown bear (*Ursus arctus*) and the lynx (*Lynx pardinus*), had a different destiny in Portugal. The Portuguese wild goat subspecies became extinct near the end of the XIX century. However, a successful reintroduction of 18 individuals of another subspecies in Galicia in 1992 allowed an increasing population in Gerês Mountains, estimated now in 400 individuals. However, consanguinity is a threat to its survival and new reintroductions are considered important. The brown bear became extinct in the XVII century, perhaps with some incursions till the beginning of the XX century. Recently, its presence was detected near the northern Portuguese border due to the protection measures implemented in Spain. The Iberian lynx is in a great danger, present in three small nuclei, two in central regions continuous with Spain and the third isolated in the remote southern mountains, totalling 50 individuals. This study aimed to verify the opinion of pre-service teachers about future reintroductions of these three animals. The sample (n=101) was divided in two groups: Basic school (n1=71) versus Higher school future teachers (n2=30), based on weak versus strong preparation in Ecology in their curriculum. For that purpose, a questionnaire was applied and a chi-squared test was used to test the homogeneity between groups. The results showed that future teachers of the 1st group, with less ecological preparation, were more favorable to the reintroductions; in the 2nd group the majority of the inquired teachers was even against bear reintroduction ($p < 0.01$). However, in both groups, ecological reasons were the most mobilized to defend positions against or to support the reintroductions. These results suggest the inclusion of more concrete situations in the Ecology syllabuses, including the discussion of the ecological viability of some animal reintroductions.

P5 READING WITH MAGGIE: THE EFFECT OF THE PRESENCE/ABSENCE OF A CLASSROOM PET DOG IN A READING INTERVENTION PACKAGE

Laura Bassette¹, Teresa Taber-Doughty²

¹*SUNY College at Old Westbury, Old Westbury, NY, USA. bassettel@oldwestbury.edu*

²*Purdue University, West Lafayette, IN, USA.*

Upper elementary students with emotional/behavioral disabilities (EBD) struggle with reading and lack motivation and efficacy regarding reading activities. For students who have difficulties with reading, anecdotal reports indicate “reading to dog” programs increase confidence and motivation; yet, no empirical study to date examined this type of program on students with EBD. Therefore, the purpose of this study was to examine if the presence/absence of a classroom pet dog impacted reading skills in students with EBD.

The participants included four male, 5th grade middle school students (ages 10–13), diagnosed with a behavioral disability, and an 11-year-old yellow, female, Labrador retriever owned by the classroom teacher. A single-subject alternating treatment design was used to assess the reading measures in students. A reading intervention package was implemented in two conditions: dog present condition (dog and researcher) and dog absent (researcher only). In both conditions students read readability level matched passages. The reading intervention consisted of repeated readings (passage read three times), error correction (correction for words the student could not read), and performance feedback (review of scores between sessions). In the dog present condition all error correction and feedback was given from the dog’s perspective and in the dog absent condition the error correction and feedback was given from the researcher’s (human) perspective.

Using an alternating treatment design, results from visual analysis and confirmed with the Wilcoxon Matched-Pairs Signed-Ranks, found all participants improved their reading performance during intervention compared to baseline. Improvements on reading measures were observed across participants in both treatment conditions; however during social validity interviews, three students indicated they preferred the dog present condition and the fourth indicated he equally enjoyed both conditions. The results indicate students were responsive to the intervention, motivated to read to the dog, and had increased self-efficacy in reading abilities following intervention.

P6 UNDERSTANDING GREYHOUND RACING IN THE UNITED STATES: THE PROBLEM OF DATA AND SOURCES

Gwyneth Thayer

*Tennessee State Library and Archives, Nashville, Tennessee, USA.
gwynn.thayer@gmail.com*

Even though the welfare of tens of thousands of racing greyhounds in the United States is rigorously debated, there are too few data available to make solid claims about many aspects of their lives. The industry only publishes breeding statistics (litters and individual pups registered per year), and one anti-racing group, GREY2K USA, publishes track injury reports from selected states. No central authority has ever effectively tracked national adoption rates or the number of premature deaths (by euthanasia, culling, abandonment, etc.), so most “statistics” are largely speculative.

Despite the paucity of hard data, numbers are cited in professional journals as if they were reliable and scientifically acquired (e.g. Jackson, 2001; Bennison, 2012). Data cited to justify an anti-racing platform are usually compiled and distributed by animal protectionists. While this information may be highly effective in casting doubt on the ethics of racing, can it also be trusted to support arguments and ideas in academia? Anthrozoologists rely too much on data generated by animal advocacy organizations that are not always interested in objectivity (e.g., Bennison, 2012 and Netboy et al. 2002). These data, although tremendously useful in promoting an agenda—even one widely accepted as admirable—obscures our understanding of the system of greyhound racing in America. Scholars need to broaden their research methods when tackling this complicated subject.

A compounding problem is that historical repositories rarely see the importance of preserving materials documenting the history of animal advocacy. Animal protection agencies are understandably taxed by day-to-day operations and are usually unable to preserve their own historical records. As a consequence, the materials that document animal protection (and, by association, animals in entertainment) are, at best, unavailable for study, and more seriously, at risk of being permanently lost (Thayer, 2010).

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P7 PERCEPTIONS OF DOG COGNITIVE ABILITIES VARY WITH DOG OWNERSHIP AND DOG-OWNER RELATIONSHIP

Tiffani Howell¹, Samia Toukhsati¹, Russell Conduit¹, Pauleen Bennett²

¹*School of Psychology and Psychiatry, Monash University, Melbourne, Victoria, Australia.*

²*School of Psychological Sciences, La Trobe University, Bendigo, Victoria, Australia.*

tiffani.howell@monash.edu

Dog cognition research is expanding, but research exploring human perceptions of specific dog cognitive abilities is rare. The aim of this study was to examine peoples' opinions of dog cognitive skills, and to determine whether attachment to dogs correlated with these beliefs. We developed an online questionnaire and analysed results from 645 participants. All respondents reported demographics and dog cognition ratings for specific cognitive domains, and dog owners also provided emotional closeness ratings. Non-owners were significantly more likely than owners to believe that dogs can easily generalise commands to areas other than where they learned them ($p=0.001$), and to believe that punishing a 'mishap' is the best way to housetrain a pet dog ($p<0.001$). Owners, however, were more likely than non-owners to agree that dogs quickly learn to associate certain actions with certain consequences ($p=0.005$), that they can learn to understand when humans are paying attention to them ($p=0.023$), and that they are generally more intelligent than humans ($p=0.024$). Many respondents (43.9%) thought a dog's mental ability was equal to that of a 3- to 5-year-old child, and 25.9% believed a 1- to 2-year-old child was most accurate. With few exceptions, owners who were more emotionally close to their dogs were more likely to believe their dogs possess higher cognitive skills than owners who were less close to their dogs. These findings suggest that in some situations, dog behaviour could be perceived as disobedient, rather than simply representing the limit of their cognitive capacity. Given that behaviour problems are a common reason for relinquishment of dogs to shelters, alignment of owner expectations and actual dog cognitive abilities is crucial. More experimental research is needed so that owners can develop realistic expectations of their dogs' behaviour and cognitive abilities.

P8 THE NEED FOR BETTER INFORMATIONAL PROGRAMS ABOUT GUIDE DOGS FOR PEOPLE WITH VISUAL DISABILITIES

Mariko Yamamoto¹, Lynette Hart¹, Koji Matsumoto², Nobuyo Ohtani², Mitsuaki Ohta²

¹School of Veterinary Medicine, University of California, Davis, CA, USA.

²School of Veterinary Medicine, Azabu University, Sagamihara, Kanagawasa, Japan.

mariko_yamamoto@hotmail.co.jp

A high demand for guide dogs is reported in Japan. However, fewer than 200 people actually apply for guide dogs each year. This study focused on the knowledge about guide dogs among people with visual disabilities and the programs offered by guide dog organizations to give experience in working with guide dogs. We investigated how the available information and programs relate to people's understanding of guide dogs. We conducted a survey through groups serving people with visual disabilities in Japan.

Among 295 respondents, 45 people (15.3%) hoped to have a guide dog. Concerning the available information related to guide dogs, 69.5% had acquired enough or a certain amount of information. Moreover, 77.3% were familiar with programs where they could experience working with a guide dog; 36.9% had participated in these. Four out of 45 people aspiring to have a guide dog were on the waiting list to acquire one. The remainder raised some reasons why they had not applied. Four people reported reasons that revealed their misunderstandings based on inaccurate information: "I cannot apply for a guide dog with my level (severity) of disability," and "My apartment prohibits keeping a dog." They answered that they had not received enough information about guide dogs. Those concerned about their level of disability had never joined the informational programs. In addition, some reasons were raised by both people who had joined (10 people) and had not joined (7 people) in the informational programs: the length of team training of the handler with the dog, challenges of taking care of a dog, likely problems with other family members, and the space requirements. The informational programs may help people to understand guide dogs, but they do not sufficiently solve or alleviate people's problems or anxieties concerning living with a guide dog.

P9 ANALYSIS OF THE ANIMAL EFFECTS ON HUMAN FUNCTIONS WITH THE FUNCTIONAL NEAR INFRARED SPECTROSCOPY

Nobuyo Ohtani, Ai Kobayashi, YenPo Lin, Teppei Maruko, Eriko Nagata, Masafumi Takeno, Kasumi Kaname, Mitsuaki Ohta

Azabu University, Sagamihara, Japan. ohtani@azabu-u.ac.jp

Introduction & Objective

Functional near infrared spectroscopy, fNIRS, is a non-invasive neuroimaging technique used since the early 1990s (Villringer et al., 1993) to investigate hemodynamic brain activity. The fNIRS measures the changes of oxygenated hemoglobin (HbO) and deoxygenated hemoglobin (HbR) occurring in the cerebral cortex. The aim of this study was to investigate the effect of the interaction with animals on human brain, especially prefrontal cortex (PFC), using the fNIRS. The PFC is implicated in planning complex cognitive behaviours, personality expressions, decision making and moderating correct social behaviours (Young & Raine, 2009). Heart rate was also measured to analyze the autonomic nerve activity as confirmed indices.

Material & Methods

Ten healthy students at the Azabu University (age: 20–25, male) participated after providing informed consent. Each participant was seated in a chair placed inside a quiet room and attached the apparatus of NIRS (OEG-16, Spectratech Inc., Japan) with 16 channels on the forehead and the sensor of a heart rate meter (RS800CX, Polar Electro, Finland) on just below the chest muscle in the midst of body. The control status was kept eyes closed for two minutes and the stimuli were watching a cat/dog/pony and touching a cat/dog/pony for one minute.

Results & Discussion

Some participants showed decreased blood flows of PFC by watching animals, the others increased. On the other hands, touching animals, especially a cat, triggered increases of blood flows on PFC. Although there was a wide range of variation in responses of PFC depending on individuals, it was shown that even watching animals have an impact on human. As it was suggested that each animal preference might be one of the factors of such variation, further studies have been done. This study showed that NIRS is one strategy for proving the effect of animals on human functions.

P10 CHILDREN PREFERENCES FOR INFANT FACIAL FEATURES IN PET DOGS AND CATS

Marta Borgi, Francesca Cirulli

*Istituto Superiore di Sanità, Department of Cell Biology and Neurosciences, Rome, Italy.
marta.borgi@quest.iss.it*

The same mechanisms through which humans become attracted to infants of their own species appear involved in human's attraction and interest towards other species, particularly those which have retained infant features into adulthood, such dogs and some breeds of pet cats (neotenic features). A very recent study (Archer and Monton 2011) has shown the attractiveness of infant features in the faces of dogs, cats, teddy bears and human infants, as rated by adult women and men. We used this same set of pictures to assess children's preferences for human infants, adult/infant dogs and cats and for teddy bears. Children (n=285) aged 3 to 6 years participated in the study and were tested on different tasks based on the 'sorting by preference' approach, using paired pictorial stimuli. Children preferences for infant/non infant features and for different species (dogs vs cats) were obtain and the effects of gender, age, presence of animals at home and parents' attitudes toward animals on such preferences analyzed. Results show how factors such as gender, age and familiarity with an animal species are able to influence children's attitudes towards animals from a very early stage of development. Little attention has been paid so far to the factors underlying children preferences towards animals. The identification of animal features that can attract and engage children appears particularly important since this information could be used to promote positive emotions in animal-based children education and in Animal-Assisted Intervention programs.

P11 COMPANION ANIMALS: INTERACTIONS AND RELATIONSHIPS

Helen Hewertson

University of Central Lancashire, Preston, UK. hhewertson@uclan.ac.uk

The poster is about how British people interact with their companion animals. Examining the complex and multidimensional relationships between humans and various companion animals, why we adopt these nonhuman animals and the benefits and costs associated.

An online survey was used to investigate the research questions and allow the human participants to talk about any companion animal they wish within the realm of the study.

Of the 130 respondents, 88% were female, 12% male, ages ranging from 18–65 and were based in the UK. The survey was advertised in pet forums and through the university. Smart survey tools were used as well as Nvivo and thematic analysis to interpret the data.

The study showed, all animals are considered to have a personality and are talked to. Almost as many understand you as much as you understand them. Most are considered a family member. The time spent interacting with an animal influences their status in the home, cats and dogs are considered family, rodents, birds and fish as pets. Most animals are reported to feel emotions, not all feel empathy, dogs are most widely considered to be empathetic, a significant percentage of animals can be manipulative, cats being the most widely considered here. The benefits of companion animals are well documented and were repeated here, the costs are not. Mentioned here include the following costs; they can be time consuming, present ongoing commitment, but quite frequently the fear of loss, ageing and illness of the animal and the stress associated. Monetary cost is quite low on the list, but the scheduling restrictions and inconvenience of finding care when you want to go away is quite high. Mess and maintenance was a chore, but few stated there were no downsides.

This has great implications for animal welfare and understanding anthropomorphic projections.

***P12 AWARD WINNING FILMS OR AWARD WINNING ANIMALS?
A CRITICAL ANALYSIS OF THE LAST TWENTY YEARS OF
INTERNATIONAL AWARD WINNING NATURAL HISTORY
PROGRAMMING WITH REFERENCE TO SPECIES CHARISMA***

Cluny South

University of British Columbia, Vancouver, BC, Canada. cluny@clunysouth.com

Trends in award winning natural history programming over the last twenty years catalogue a wide variety of presentation styles, as well as fashions in content format. Environmental messaging, presenter led programs, blue-chip, and magazine styles have all taken a turn at the top. However a similar analysis of the representation of animals on a per species basis in these programmes reveals a different picture. Over the last two decades a surprisingly limited collection of animals have featured in award winning programmes. Looking at USA and European Award winning natural history programs from 1990–2010 a “big ten” emerges, drawn disproportionately from the animal kingdom with heavy representation from a ‘species group’ known as charismatic-mega fauna. These results echo previous findings of research into North American natural history magazine publishing (Clucas et al., 2008), also demonstrating how a select number of charismatic species repeatedly featured on magazine covers and major articles within. The significance of an over-representation of popular charismatic animals, and a corresponding under-representation of less popular uncharismatic animals, should not be underestimated in a media format that is increasingly recognised for its public educational knowledge-building role (Barker, 2007). It is known that attitudes towards animals are shaped by a culturally constructed world (Spears et al., 1996) that is informed by many communication systems including the media. Furthermore lack of knowledge is proven to adversely impact on a species’ popularity (Hunter and Rinner, 2004; Barney et al., 2005). As a result under-representation of certain species in the popular media is likely to negatively impact on their perceived value in society, and potentially influence willingness-to-pay issues for their conservation. In consideration of the above the impacts and responsibilities that natural history factual programming may or may not have for public education is discussed.

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P13 POLITICAL ANIMALS: DOGS, CATS, PIGS, AND GOATS USED AS IMAGES IN POLITICAL CARTOONS

Linda Weldon¹, Alva Hughes²

¹*CCBC Essex, Essex, MD, USA.*

²*Randolph-Macon College, Ashland, VA, USA. docweldon@gmail.com*

Animal images have been used in political cartoons for satirical effect and to present or expand on the ideological message being delivered. The current study examines the literal and figurative use of animals in art by examining their use in political cartoons.

Method

The corpus of political cartoons used in the present study were cartoons available in the Library of Congress Prints & Photographs online catalog. Subsets of four target animals were developed consisting of all unique (non-repeating) digitized cartoons with a visible representation of the target animal. Political cartoons of dogs (n=70), cats (n=15), pigs (n=11), and goats (n=6) from the 18th through the early 20th century were used.

Results and Discussion

Three independent judges rated each cartoon on how the animal was used (as itself, as a person, as a concept) and whether the valence of the usage was positive, negative, or neutral. The usage ratings had the most interrater agreement, with unanimous agreement for usage on 72% of the cartoons and majority agreement on 93%.

The most frequent use of animals was as itself (39%), followed by its usage as a concept (35%) and as a person (26%).

The valence data were interesting but problematic. There was little agreement among the judges on whether the depicted animal was being portrayed in a positive, negative, or neutral light. The judgement requires knowledge of history as well as a subjective evaluation of what is being presented. Further, assumptions must be made about the intent of the artist. For example, a cartoon that includes an image of a dog biting someone or urinating on something might be interpreted differently by different viewers. Whether you interpret an animal's action as positive or negative might well depend on which side of the ideological fence you are on.

Examples:

Dog=Itself< <http://www.loc.gov/pictures/resource/cph.3a08856/>>

Pig=Person< <http://www.loc.gov/pictures/resource/ppmsca.28131/>>

Cat=Concept< <http://www.loc.gov/pictures/resource/cph.3a15262/>>

Valence=rating positive/negative/neutral depends on the backgrounds of the artist and the viewer< <http://www.loc.gov/pictures/resource/ppmsca.28267/>>

P14 THERAPY CANINES AND SENIOR VETERANS: IMPACTING IN VITRO AND IN VIVO STRESS INDICATORS THROUGH ANIMAL-ASSISTED INTERVENTION

Cheryl Krause-Parello

Kean University, Union, New Jersey, USA. ckrausep@kean.edu

The increased number of senior veterans experiencing impaired health calls for the development of alternative interventions in Veterans Affairs (VA) healthcare systems to reduce stress and increase well-being. Congressman Michael Grimm of Staten Island introduced the Veterans Dog Training Act (HR 198) in October 2011 to provide canine handling and training education in order to pair therapy dogs with veterans based on physical and mental health needs. No formal canine visitation program exists at the VA in the Connecticut Healthcare System where this study is taking place.

The objective of this research is to test the efficacy of Animal-Assisted Intervention (AAI) in reducing stress indicators in senior veterans with impaired health. Both male and female senior veterans who meet the following criteria will participate: (1) 65 years and older; (2) veterans of the US Armed Forces; (3) being treated at the VA Healthcare System in West Haven, Connecticut; (4) medically cleared to participate by attending physician; and (5) able to communicate in English. Stress indicators salivary cortisol, alpha-amylase, immunoglobulin A, blood pressure, and pulse will be measured before, after, and 30 minutes after a 20 minute visitation from a certified canine (accompanied by handler) and control condition (usual care).

This study is in progress. The research team and the biostatistician will perform descriptive statistical analyses using the Statistical Package for the Social Sciences (SPSS) with a level of significance of $p < 0.05$.

Expected outcomes will address whether AAI can lead to stress indicator reduction in senior veterans with impaired health, thus opening gateways to future research endeavors exploring benefits of AAI in other at-risk populations. These outcomes could improve clinical practice in VAs by addressing the need for non-invasive, non-pharmaceutical interventions with the ultimate goal of discovering an innovative, evidence-based intervention that will improve health in vulnerable populations.

P15 CREATING A POSITIVE LEARNING HABITAT FOR HORSES

Francesco De Giorgio, José Schoorl

Sparta Association, Rome, Italy. sparta.formazione@gmail.com

Recent studies are defining the elements of welfare and wellbeing for horses and the importance of social learning for a healthy development. It is widely accepted that social isolation is stressful for horses, but still isolating a young horse is the first step when it comes to training methods.

Due to tradition and culture and our performance-oriented society it is both difficult to accept and apply a different social/cognitive training approach where the relationship is not based on the horse as a subordinate. Training methods are focused on immediate results whereas in cognitive learning the process is latent and often will not be visible immediately. However, taking the cognitive skills into account plays an important role in avoiding tension both in the horse as in the human–horse interaction. For their well-being, horses should be allowed to actively participate in their environment and express behaviour of attention and exploration.

In this study we created a positive learning habitat, training six young horses in a herd-situation, with opportunity to move and express their individual and social behavioral repertoire.

Three males and three females, between two and three years old, all six with initial difficulties to human interaction were followed for two years, with one training session per week. The trainers involved had a knowledge of herd activities and equine social behavior. After eighteen months all six horses were confident with the saddle and with riding. None of the horses ever fled or showed defense behavior in the saddling and riding phase and in the case of unexpected events they showed no emotional reactivity/reactive behavior.

This preliminary study highlights how a positive learning habitat for horses differs from today's accepted training methods and how it contributes to safety, welfare and the establishment of a more problem-free relationship between horse and human.

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P16 DOG SPORTS: HUMANS AND DOGS INTERACTING IN LIFE-LONG, FORMALIZED ACTIVITIES

Joey Farrell¹, Rodney Hulstein¹, Ashley Hope¹, Sandi Spaulding²

¹Lakehead University, Thunder Bay, Ontario, Canada. rhulstei@lakeheadu.ca

²University of Western Ontario, London, Ontario, Canada.

Introduction/objectives

Interacting with one's dog has the propensity to afford dog-owners physical, psychological, and social benefits to health (Knight & Edwards, 2008), including increased levels of physical activity (Brown & Rhodes, 2006). Dogs also receive many benefits with activity including weight loss (Kushner et al., 2006) and improved cardiovascular capacity (Wyatt & Mitchell, 1978). Dog sports offer dog-owners opportunity for life-long engagement in a formalized mode of activity with one's dog. To investigate dog sports as activities that support health and well-being of humans and dogs, participants described their activities, participation levels, perceived benefits, motivators, and barriers to participation.

Method

Demographic information provided a description of the population (n=85) related to their involvement in dog sports. Time spent participating in specific dog sport(s) and the duration spent inside and outside of structured classes was determined. Open-ended questions provided a deeper understanding of individuals' perceived benefits, barriers, and motivators for dog sport participation.

Results

Results illustrated that 77% of participants were over 45 years old and 80% were female. Seventy-six percent reported participation in 12 or more dog sport competitions yearly and 62% wanted to participate in more. Mean duration of weekly in-class participation was 4.06 hours, while average time spent outside of class was 4.92 hours. Motivators cited were enjoyment and social interactions. Benefits identified were positive social interactions, bond between owner and dog, and exercise. Barriers of time and financial commitments limited participation.

Conclusion

Dog sport participation in this sample exhibits a high-level of activity for dogs and humans. Participants perceive dog sports as a way to bond with their dogs and to provide exercise for both themselves and their dogs. Dog sports are indicated as life-long activities for aging adults to engage in exercise leading to improved health and well-being for both owner and canine.

P17 JUST ANOTHER DAY IN THE PARK; THE DOG PARK. DEMOGRAPHIC MAKEUP & PERCEPTIONS OF THE IDEAL DOG PARK

Heather Lum², Valerie Sims¹, Shane Halse¹, Matthew Chin¹, Ashley Carter¹

¹University of Central Florida, Orlando, FL, USA. vs11ms@gmail.com

²Penn State Erie, The Behrend College, Erie, PA, USA.

Over the past fifteen years, dog parks have grown from obscurity into common place, especially in urban areas backyard access is limited (Krohe, 2005). Dog parks provide a social and physical outlet for the dogs and a gathering place for their owners. According to the AKC, dog parks also promote responsible dog ownership and public health and safety. In this study, researchers examined the demographic makeup of those who go to Central Florida dog parks, in addition to their perceptions on what aspects are the most important in the “ideal” dog park.

104 participants were sampled from three different local dog parks and there were 52 females and 45 males with a mean age at 37 years old (SD=13.9). The average dog owner has at least a Bachelor’s degree or higher and a mean income of \$40,000–\$49,999 a year. With regards to the demographic makeup of the dogs, the majority (n=60) were large (51–90lbs) or extra large (91+lbs). There was a higher percentage of mixed-breed (n=81) than pure-bred (n=74) dogs with only 8 households having both mixed and pure bred dogs. Moreover, a majority of dog owners purchased premium dog food (n=52) than grocery brands (n=35).

Researchers also asked the most important characteristics in the design of the “ideal” dog park as described by the AKC. Of the 13 characteristics, closeness of the dog park to the owner’s residence ($F(2,99)=4.421, p<0.015$), separation for small and large dogs ($F(2,100)=6.421, p<0.002$), availability of seating for humans ($F(2,100)=3.005, p<0.054$), and the demographic makeup of the dogs ($F(2,99)=2.438, p<0.093$) were the significant factors. Further research is needed in larger metropolitan cities in order to discover if the same results can be obtained. In conclusion, these results should be kept in mind when designing future dog parks to facilitate perceptions of the ideal park.

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P18 GIVING THE DOG CAREGIVER THE DIGNITY OF INFORMED MEDICAL DECISION-MAKING REGARDING NEUTERING OF DOGS: PROFILING THE GOLDEN RETRIEVER

Gretel Torres de la Riva, Benjamin Hart, Thomas Farver, Anita Oberbauer, Neil Willits, Locksley Messam, Lynette Hart

University of California, Davis, CA, USA. lahart@ucdavis.edu

Spaying and neutering of dogs is the most preponderant practice in the U.S., especially prior to puberty, differing from the typical practice in many other industrialized countries. We retrospectively examined the effects of gonadectomy in 1 to 9 year old Golden Retrievers, using patient records from 2000-2009 from the University of California, Davis, Veterinary Medical Teaching Hospital. Records were examined for evidence of musculoskeletal disorders and neoplastic diseases. Of the 1,763 patients meeting the initial inclusion criteria, over 80% were neutered. Complete birth and neutering data were obtained for 492 neutered dogs and 271 gonadally intact dogs.

To quantify disease occurrence, incidence rates were estimated for intact, early (before 1 year), and late (1 year or older) neutered male and female dogs. The Kaplan Meier method was used to test for differences in survival of male and female intact and (early and late) neutered dogs. Generalized Wilcoxon (W) and log-rank (LR) tests were used for the analyses.

Early neutering was associated with elevated occurrence of hip dysplasia in males ($p < 0.05$; W). Cranial cruciate ligament tear occurrence was elevated in early neutered females and males as compared with intacts ($p < 0.05$; W). Early neutered males presented lymphosarcoma more than intact and late neutered dogs ($p < 0.05$ LR). In these cases, incidence was higher in early neutered compared with intact dogs. Mammary cancers were too rare for reliable estimates. These results profile the importance of early neutering in the occurrence of three important diseases of Golden Retrievers, ranging from 5–10% for these early neutered dogs. This shows the need to examine the health-related effects of neutering for various diseases in various breeds. This provides the caregiver with evidence-based information for making medical-surgical decisions regarding their dogs in keeping with “responsible pet ownership.”

P19 A CRITICAL LOOK AT THE POTENTIAL ROLE OF ANIMAL-ASSISTED INTERVENTIONS (AAI) PROGRAMS FOR INSTITUTIONALIZED GERIATRIC PATIENTS

Marta Borgi¹, Alessandra Berry¹, Alessandro Giuliani⁴, Sonia Sessa², Emilia Reda², Fabio Miraglia³, Francesca Cirulli¹

¹*Istituto Superiore di Sanità, Department of Cell Biology and Neurosciences, Rome, Italy.*

²*RSA Viterbo, Viterbo, Italy.*

³*GIOMI RSA S.r.l, Rome, Italy.*

⁴*Istituto Superiore di Sanità, Environment and Health Department, Rome, Italy.*
marta.borgi@guest.iss.it

Aging is characterized by a progressive loss of the ability to cope with external challenges, leading to a condition of frailty, which can precipitate aging-associated pathologies. Since life expectancy in the 20th century has greatly increased, developing specific programs aimed at fostering healthy life styles in old age will become increasingly important over the next decades. Moreover institutionalization can have serious implications for the well being of elderly people as a result of the stress and loneliness due to separation from the home environment, with a consequent decline in physical and emotional health. Since depression and apathy are almost ubiquitous symptoms in nursing home patients, an important challenge is to devise low-cost and effective interventions that can reduce stress and apathy in institutionalized elderly by stimulating social responsiveness and physical activity. The recognition of the importance of the human–animal bond has led to the proliferation of programs, also known in general terms as Animal-Assisted Interventions (AAI), designed to improve the lives of geriatric patients. We review the growing literature emphasizing the use of visiting dogs as an innovative tool to ameliorate psychological conditions of institutionalized geriatric patients. The analysis of a conspicuous body of literature shows the ability of dogs to improve communication, reduce loneliness as well as symptoms linked to depression. In addition, recent evidence on physiological indicators of stress, such as cortisol levels, suggest that such interaction can also result in a reduction of the apathetic state by means of an increase in arousal level as a result of activities involving dogs. Notwithstanding such evidence, further research to substantiate the potential beneficial effects of dog-mediated intervention programs for geriatric patients is needed.

P20 PET DOGS FOR CHILDREN WITH AUTISM SPECTRUM DISORDER (ASD)

Hannah Wright¹, Daniel Mills¹, Annette Hames¹, Richard Mills³, PAWS Project Team²

¹*University of Lincoln, Lincoln, UK. hwright@lincoln.ac.uk*

²*Dogs for the Disabled, Banbury, UK.*

³*The National Autistic Society, London, UK.*

Anecdotal evidence suggests that dogs may provide benefits for children with ASD, however little is known about people's expectations versus their experience in this regard, especially outside of the context of a specifically trained assistance animal. The aim of this study was therefore to undertake a qualitative content analysis of interviews of parents with a child with ASD, either with a dog or considering getting a dog to evaluate differences in perceived benefits.

Forty parents (twenty dog owners and twenty considering getting a pet dog) undertook semi structured interviews by telephone, about the effects of pet dogs on the family and child. Interviews were transcribed, and data analysed using thematic analysis with an inductive approach. Responses were compared between groups.

Overall, expectations of both groups were similar. Impact on family relationships was found to be the most frequently stated 'best thing' for both groups. The dog bringing the family happiness was mentioned more by people who did not have a dog compared to those who did.

Time commitment and dog specific work (e.g. clearing up, caring for a dog) were most frequently stated as bad things in both groups. Restrictions (e.g. with travelling and holidays) was more frequently reported by the dog owners than the non dog owners, and 'negative relationships between the dog and child' was more frequently reported as a concern for the non dog owners.

Both groups reported 'calming', 'impact on relationships' and 'activity' as the most important effects on the child'. While those with a dog were more likely to rate 'relationship' higher; those without a dog anticipated more effects on the child's communication. Parents without a dog seem to anticipate more changes in the areas of child behaviour, for example, decreased repetitive behaviours and improved self-care skills, than were reported by the dog owners.

P21 CHILDREN WITH AVOIDANT OR DISORGANIZED ATTACHMENT PATTERNS RELATE DIFFERENTLY TO A DOG AND TO HUMANS IN A SOCIALLY STRESSFUL SITUATION

Kurt Kotrschal¹, Andrea Beetz², Henri Julius², Manuela Wedl¹

¹*Konrad Lorenz Research Station and Department of Behavioural Biology, University of Vienna, Vienna, Austria.*

²*Department of Special Education, University of Rostock, Rostock, Germany.
kurt.kotrschal@univie.ac.at*

One of the main factors determining human attachment representations (secure, insecure-avoidant, ambivalent, disorganized) is the quality of early caregiving. The attachment representation (“internal working model”) is shaped in interaction with the primary caregiver and is generally transmitted to further bonding/social partners later in life. Towards companion animals, this transmission does not seem to occur. However, our present data show that in a sample of male children supported by a real dog during a socially stressful situation (n=24), the disorganized subjects (n=11) communicated more intensely than avoidant children (n=13) with both, the dog and humans. Children with a disorganized attachment touched/stroked the dog for longer periods of time before and during a socially stressful situation than did children with an insecure-avoidant attachment (before the stressful situation: p=0.041; during: p=0.022; all testing Mann-Whitney). The same patterns were found for the duration of body contact with the dog (before: p=0.047, during: p=0.026). Children with a disorganized attachment representation talked more to the dog during and after the stressful situation than did children with an insecure-avoidant attachment (during: p=0.022; after: p<0.001). Both before and after the stressful situation children with a disorganized attachment representation talked more to the persons in the room than did children with an insecure-avoidant attachment (before: p<0.001; after: p=0.030). However, no significant differences between children with insecure-avoidant and disorganized attachment representation were found with respect to salivary cortisol levels. We conclude that against the commonly held belief that attachment representations acquired with humans do not transmit to companion animals, our data indicate that some components of interaction styles may be transmitted to animal partners also.

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P22 REASONS AND PREFERENCES OF NEW OWNERS WHO ADOPTED CATS FROM JAPANESE ANIMAL SHELTERS

Nodoka Onodera, Yoshie Kakuma

Teikyo University of Science, Tokyo, Japan. g061001@st.ntu.ac.jp

Many cats are now adopted from animal shelters in Japan and increasing the number of adoption is promoted nationwide. Previous studies revealed that the most important factor the new owners consider when they chose their cats at shelters was their appearance such as coat colour. Such information, however, lacked among Japanese shelters while it is expected that the people's ideas differ according to the culture and types of animals at shelters. Therefore in this study, we conducted a survey with new cat owners in Japan to determine their preferences for cats and reasons why they adopted cats.

A questionnaire survey was conducted with 52 new cat owners upon adoption at a shelter or a veterinary hospital. The mean age of adopted cats was 3.7 ± 1.7 months old. Most owners have previously owned another cat (92%). The main reason for adopting the cat was 'want a companion nearby' (24%), and 'other' (32%) included 'as a companion for another cat' and 'as a replacement for a deceased cat'. The most preferred factors with the cats were 'appearance' (51%) and 'character' (32%), whereas 'sex' or 'health status' was little considered. The mean (\pm SD) rating for their impression (1–7 scale) of the adopted cat was 2.6 ± 1.6 for fearfulness, 5.0 ± 2.1 for activity, 1.9 ± 1.5 for aggression, and 4.9 ± 1.9 for affection-demanding. The behaviours the adopters think as problem in cats were 'escaping outside' (29%) and 'house soiling' (22%). Significant association was found between reasons and preferences ($\chi^2=51.7$, $df=24$, $p<0.01$ by SPSS), suggesting adopters who seek a companion tend to consider 'character' as important. It would be useful for shelters to know the reasons and preferences of prospective new owners and their association for better matching of owners and cats, which will lead to successful adoption.

P23 PET OWNERSHIP AND BLOOD PRESSURES DURING THE DAILY LIVES OF OLDER ADULTS WITH PRE-TO MILD HYPERTENSION

Erika Friedmann¹, Sue Thomas¹, P. Sue Hall¹, Heesook Son¹, Sandra McCune²

¹*University of Maryland School of Nursing, Baltimore, Maryland, USA.*

²*Waltham Centre for Pet Nutrition, Melton Mowbray, Leicestershire, UK.
efrie002@son.umaryland.edu*

The number of older adults living with hypertension (HTN) is rising dramatically. Uncontrolled HTN contributes to increased mortality associated with cardiovascular and renal disease. Ambulatory blood pressure (ABP) is a better predictor of HTN-related morbidity and mortality than office sitting blood pressure (BP). Lowering BP is the most important therapeutic goal in treating HTN. Any reduction in BP has significant benefits for older adults. Our research presented at ISAZ 2010 indicated that among community living older adult pet-owners with pre to mild HTN, the presence of a dog was associated with lower systolic(SBP) and diastolic(DBP) BP and of a cat was associated with lower DBP during owners' normal daily lives. This finding suggests that pets, especially dogs, may be an effective adjunctive intervention to slow the development/progression of HTN in older adults. We evaluate whether previously observed differences in BP during the daily lives of pet owners were related to pet ownership or to the presence of the pet in independently community living older adults with pre- to mild HTN. ABPs during the daily lives of pet owners were compared with those of non-owners. In a longitudinal observational study of 32 pet owners (24 dog; 11 cat; 29 women) and 31 non-owners(28 women) aged 50–85 years with BP 120–150/80–100 or <150/100mmHg with anti-hypertensive medication, participants' ABPs and heart rates (HRs) were recorded every 20 minutes during waking hours for 1 day at 0,1,& 3 months. Activity monitors and diaries provided information about activity, mood, and pet presence at each assessment. 5560 observations(median 90/participant) were included in generalized estimating equation analyses for hierarchical data (unstructured correlations) examining predictors of BP and HR. Average ABPs and HRs did not differ significantly according to pet ownership status alone (SBP: owners 126.96, non-owners 130.09mmHg, $p=0.289$; DBP: owners 74.73, non-owners 76.05mmHg, $p=0.755$; HR: owners 77.38, non-owners 77.96bpm, $p=0.755$) or after controlling for participant's mood and activity intensity (SBP: owners 128.15, non-owners 126.46mmHg, $p=0.473$, DBP: owners 76.69, non-owners 77.98mmHg, $p=0.689$, HR: owners 75.86, non-owners 75.71bpm, $p=0.780$), which were significant predictors of ABP and HR. When dog ownership and cat ownership were simultaneous independent predictors, average ABPs and HRs did not differ significantly according to dog(SBP: owners 130.64, non-owners 130.78mmHg, $p=.964$; DBP: owners 76.73, non-owners 77.45mmHg, $p=0.716$; HR: owners 75.42, non-owners 74.10bpm, $p=0.609$) or cat(SBP: owners 134.47, non-owners 126.95mmHg ; $p=0.097$, DBP: owners 76.39, non-owners 77.79mmHg; $p=0.481$, HR: owners 73.35, non-owners 76.17bpm, $p=0.331$) ownership status. The previously reported effect of the presence of a pet on blood pressure of pet owners during their normal daily activities is not related to pet ownership status. The cardiovascular benefits from the presence of pets, especially dogs, during owners' daily lives is due to the animal's presence rather than simply owning a pet.

P24 APPLYING THE SELF-DETERMINATION THEORY: UNDERSTANDING MOTIVATION TOWARD DOG SPORT PARTICIPATION

Joey Farrell¹, Ashley Hope¹, Rodney Hulstein¹, Sandi Spaulding²

¹Lakehead University, Thunder Bay, Ontario. joey.farrell@lakeheadu.ca

²University of Western Ontario, London, Ontario, Canada.

Introduction/objectives

The sport motivation scale [SMS] was developed in accordance with Deci and Ryan's (2008) Self-Determination Theory [SDT] to assess motivational states among sport competitors. The SMS has been demonstrated to effectively assess athletes' motivation on several independent subscales including: intrinsic motivation, three subscales of extrinsic motivation, and amotivation (Pelletier, 1995). Intrinsic motivation is associated with positive outcomes, such as increased enjoyment and adherence to activity participation (Deci & Ryan, 2008). Dog sport competitions provide structured physical activity with one's dog, which builds on the human-animal interaction to develop a team-like bond. The ability for a canine and owner to realize goals, while bonding during physical activity participation is unique to dog sports. Utilizing the SMS to determine the motivational orientation experienced by dog sport competitors is pertinent to understand the implications towards participation in dog sport activities. Supporting sustained participation will promote physical activity, positively affecting health and well-being for both humans and canines.

Method

Eighty-five participants were recruited at various dog sport competitions. Sport competitors completed the SMS questionnaire, which was adapted to capture motivation toward dog sports. Correlations were conducted to confirm the underlying scale and dependent t-tests were used to test the differences between the subscales.

Results

A correlation matrix supported the underlying structure of the scale. Intrinsic motivation was significantly greater than each of the three subscales of extrinsic motivation ($t_{ID}(75)=10.052$; $t_{INT}(76)=19.616$; $t_{ER}(75)=18.64$, $p<0.001$). Amotivation was virtually non-existent amongst this group of competitors.

Conclusion

The results provide preliminary support for the use of the SMS within structured dog sport activities. The analyses illustrated that participants were highly intrinsically motivated to participate in dog sports. Understanding motivation toward dog sport activities is an important first step in understanding sustained participation in dog sports, which will ultimately promote health and well-being for both owners and their team companion.

P25 RELIABILITY AND VALIDITY OF A OBSERVATIONAL CODE SYSTEM FOR CHILD–DOG INTERACTION

Ceres Berger Faraco¹, Laura Dolz-Serra²

¹Faculdades de Taquara - FACCAT, Rio Grande do Sul, Brazil.

²Universidad de Valencia, Valencia, Spain. laura.dolz@uv.es

The main objective of this research is to put forward an instrument comprised of a sequential code system to observe the interaction of a dyad formed by children and dogs. The instrument was designed to examine the interactive properties between children and dogs by their natural or experimental environment, applying an observational code system. This instrument was used to codify the sessions of interspecies interaction recorded in a video. There are currently no instruments designed specifically to study the interaction between children and dogs. The instruments, which are applied for this purpose, have not been tested for reliability and validity. Thus, the main objective of this research was to establish the validity and reliability level of the Child–Animal Interaction Code - Dog (CACI). To establish the reliability rates, was applied the testing procedure related to the agreement among interrater and also the Kappa agreement rates (k), that oscillate around 1,00 (excellent), to the social skills approach/attention category and 0,364 (mild), to the social skills obedience. The mean of accuracy interrater, on the whole, was 94,2%. The instrument showed validity rates from strong to excellent on the majority of categories, as well as reliability indicators. Content validity was evaluated by two experts in methodology. They have been tested objectivity, clarity and appropriateness of the instrument. The results suggested that, through the application of the observational system Child–Animal Interaction Code - Dog, we could identify and recognize the flows of communicative content and the properties of the interaction between children and dogs.

P26 IMPACT OF EDUCATIONAL MATERIAL ON ADULTS' ATTITUDES TOWARD THE HUMAN-ANIMAL RELATIONSHIP

Ashley Carter, Matthew Chin, Valerie Sims

University of Central Florida, Orlando, FL, USA. acarter898@gmail.com

This study examined the impact of pictures and text in shaping beliefs about animal cruelty. Undergraduates (111 males and 114 females; mean age=19.31, SD=2.76) completed four scales as pre- and post-measures: (1) AHCS: Animal-Human Continuity Scale (Templer et al., 2006), (2) ATTAS: Attitudes Toward the Treatment of Animals Scale (Henry, 2004), (3) PAS: Pet Attitudes Scale (Templer et al., 1981), and (4) an ASPCA scale devised for this study. Between tests, participants were exposed to information about animal cruelty adapted from the ASPCA and they completed a math distractor task. Participants were randomly assigned to one of 6 conditions in this design: 2 (Text: Included or Not Included) \times 3 (Picture: Photograph Not Included, Animal Only, Animal and Human Together).

A 2(Time of Test) \times 2(Sex) \times 2(Text present) \times 3(Picture presence) mixed ANOVA was computed for each of the four scales. Only major results are reported here. For the HCS, there was a Time \times Sex \times Text interaction ($F(1,213)=3.92$, $p=0.049$), with females more persuaded by text. For the ATTAS, there were main effects of Time ($F(1,210)=1.72$, $p=0.001$) and Sex ($F(1,210)=56.40$, $p<0.001$), showing that females were affected most. On the AAS, there was a significant four way interaction ($F(1,212)=3.99$, $p=0.02$). On the ASPCA measure, there was a significant Time \times Text interaction ($F(1,213)=13.42$, $p<0.001$) showing that both males and females became more informed about animal cruelty, but females were more affected by the presence of the text. Females make large attitudinal changes about animal cruelty as a function of persuasive textual information, whereas males appeared to make smaller positive changes regardless of the presentation method. Presence of pictures of animals only affected attitudes on the ATTAS and the AAS, suggesting that form of persuasion needs to be matched to the specific types of attitudinal changes expected.

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P27 DOG-ASSISTED GROUP THERAPY (MTI): GENDER DIFFERENCES CONCERNING EFFECTIVITY OF AAT PROGRAMS IN DRUG ADDICTED PRISONERS

Birgit U. Stetina¹, Romana Klee⁴, Julia McElheney², Alexandra Wischall⁴, Ursula Handlos³

¹*Webster University, Vienna. stetina@webster.ac.at*

²*Penitentiary Vienna-Favoriten, Vienna.*

³*City School Council, Vienna.*

⁴*Research-and Training Practice, Faculty of Psychology, University of Vienna, Vienna, Austria.*

Most therapeutic interventions (in prison and anywhere else) have at least slightly different effects on men and women. In addition there are relevant differences male and female incarcerated people that are relevant regarding rehabilitation.

In a special prison for drug addicted criminal offenders (Justizanstalt Wien-Favoriten) 83 male and 18 female prisoners participated in the dog-assisted therapy MTI. Using a pre-post intervention study design all participants were asked to fill out a series of questionnaires on emotional status and emotional competencies. During all ten intervention sessions open behaviour observation was used to include additional aspects, which might be overseen in the self-description questionnaires.

Although group dynamical processes were observed relevantly different in men and women it seems that both genders could profit from the intervention. Both groups enhanced their emotional status and emotional competencies with some interesting details to present (after detailed analysis of the brand new data).

Working with dogs in a therapeutic group setting might enhance our options for gender sensitive work. The dogs instinctively react on the needs of each person and to the group dynamics. Especially that result shows the relevance of working with naturally behaving dogs that kept as most of their natural reactions (e.g. leaving a place when a situation is getting tense). The special bond between humans and dogs can be used to enhance the rehabilitation process.

P28 DOG POPULATION AND HUMAN ATTITUDINAL SURVEY TO ASSESS FACTORS IMPACTING OWNERSHIP IN COZUMEL, MEXICO

Eduardo Santurtun^{1,2}, B. Witkind Davis³, Kathryn Natrass Atema¹

¹*International Fund for Animal Welfare, Den Haag, The Netherlands. katema@ifaw.org*

²*Center for Animal Welfare and Ethics (CAWE), School of Veterinary Science, The University of Queensland, Gatton, Queensland, Australia.*

³*University of New England College of Osteopathic Medicine, Biddeford, Maine, USA.*

Although a local humane society had run a shelter and sterilization campaign in their community of 80,000 for over ten years, euthanasia of unclaimed dogs on Cozumel, Mexico, remained at 60–70% through 2009. To better understand the dynamics of the human–dog relationship impacting abandonment on Cozumel, in 2010 we conducted a dog population survey and a human behavior/attitudinal survey in San Miguel de Cozumel, Mexico. The dog population survey, conducted as a line-transect (street-by-street) survey in San Miguel, intended to establish the proportion of owned to un-owned dogs in the city. The human questionnaire targeted 400 households, representing 2.2% of households. While results of the dog population survey did not lead to an absolute population estimate, the proportion of dogs observed on the street (29.1%) correlates roughly with the number of owners that stated that they allow their dogs to roam freely (21.6%), suggesting that the majority of apparently “stray” dogs in Cozumel are in fact be owned.

Looking further, although the majority of dogs appear to receive the basics, age was a significant predictor of ownership traits associated with a bond or relationship with dogs. The older the owner, the more likely they were to spend more than one hour daily with their dog (Spearman’s $\rho=0.195$, $p=0.009$, $n=176$). Different age groups had different reasons for having a dog ($\chi^2=38.5$, $p=0.003$, $df=18$); the older a person, the more likely the dog was for companionship. People also appeared to spend more time with their dogs as they got older (Spearman’s $\rho=0.195$, $p=0.009$, $n=176$).

We conclude that in Cozumel, a breakdown of the relationship between younger owners and their dogs may disproportionately represent the dogs which go abandoned or unclaimed. Outreach targeting the concerns of younger residents is likely to have the most significant impact in addressing Cozumel’s high euthanasia rate.

P29 PRISON INMATES' LOCUS OF CONTROL AND SELF-ESTEEM AFTER TRAINING SHELTER DOGS

Rebecca Johnson, Charlotte McKenney

University of Missouri, Columbia, MO, USA. rechai@missouri.edu

Introduction

“Puppies for Parole” is a prison program in which selected inmates train dogs from local animal shelters. Only inmates convicted of non-violent, non-sex abuse crimes are eligible. Dogs live with their inmate trainers. A certified dog trainer works with the inmates and dogs twice per week to teach the inmates to train the dogs to the Canine Good Citizen level. Once dogs have successfully completed the program, they are returned to the shelter for adoption. The study aims to identify to what extent participating in the program is associated with improved self esteem, more internal locus of control and better self perceived health in the inmates

Methods

A non-random, two-group experimental design with a treatment (Shelter Dog Training, SDT) and usual standard of care/activities (control, C) group is being used. Data collection occurs at three intervals (baseline, 8 weeks & 16 weeks of dog training or after enrolment in the control group. Baseline data collection included demographic information, dog ownership history, self-perceived health, self-esteem, locus of control and personal factors (requests for medical services, conduct violations, and grievances filed). Outcome variables are measured at the other 2 data collection points. SDT group participants responded to group questions about their perception of the dog training program.

Results

Thirty-two male offenders participated (SDT n=13, C n=19). Ages ranged from 23 to 66 years (mean 37.8). The majority were not married, were Caucasian, had a high school education or lower and had 2 or fewer children. All reported having had a dog prior to incarceration to which they felt attached. To date 8 week post-test self esteem scores increased in the treatment group (not significant) and decreased in the control group. Locus of Control scores decreased in the treatment group and increased in the control group (not significant). Comments from participants will help to illuminate these outcomes.

Conclusions

Data collection is ongoing. The project will apply empirical outcome measures to a widely used yet seldom tested program.

P30 EXPLORING THE INFLUENCE OF DOGS ON OWNERS' MOTIVATION TO WALK: A PILOT STUDY

Ashley Hope, Joey Farrell

Lakehead University, Thunder Bay, Ontario, Canada. ahope1@lakeheadu.ca

Introduction/objectives

Relationships with dogs can be enriching and rewarding experiences for owners. Interacting with a dog can provide dog owners with psychological, physiological, and social benefits, which can influence health and well-being (Knight & Edwards, 2008). Dog ownership has been linked with increased physical activity, which can facilitate health and well-being for both humans and dogs. Older dog-walkers walk a median of 175 minutes per week and are more likely to meet the 150-minute physical activity recommended guideline, yet less than 50% of dog owners over age 65 walk their dogs (Reeves et al., 2011). Dog ownership has been cited as a form of motivation to dog-walk (Cutt et al., 2008); therefore, exploring how dogs influence older dog owners' motivation to walk will allow greater understanding of this behaviour within an older cohort.

Method

To collect information regarding the motivating role of dogs, a pilot investigation composed of one-on-one, semi-structured interviews was conducted. Four participants (aged 55+) completed interviews, which were transcribed and analyzed to reveal themes.

Results

All participants placed a strong emphasis on factors related to the dog; the necessity of physical activity for dogs' well-being including physical and psychological health, the bond, and the duty of an owner to care for the dog. Concepts such as the benefits of enjoyment, health, and well-being emerged in relation to the older adult. Lastly, contextually-related concepts such as the natural environment and social activity developed. Participants highlighted that they walked in all seasons, with minimal exceptions.

Conclusion

Participants discussed many concepts that they felt influenced their motivation to dog-walk, some of which were similar to the findings of Cutt et al. Furthering our understanding of how dogs influence older adults' motivation to walk will allow the development of interventions geared to provide support for dog-walking into older adulthood.

P31 YOUR CANINE WINGMAN: HOW FIRST IMPRESSIONS CAN BE INFLUENCED BY LIVE & ROBOTIC ANIMALS

Shane Halse¹, Heather Lum², Valerie Sims¹, Matthew Chin¹, Ashley Carter¹

¹*University of Central Florida, Orlando, FL, USA. Matthew.Chin@ucf.edu*

²*Penn State Erie, The Behrend College, Erie, PA, USA.*

First impressions are often shaped by our physical appearance but how does the addition of animals help form this impression? Research has shown that people seen interacting with cats are seen as less dominant than those who interact with dogs (Perrine & Osbourne, 1998). The purpose of the present research was to examine whether the presence of a live or robotic animal has an effect on how a person is perceived by others.

386 undergraduate college students (169 Males, 217 Females, Mean Age=20.14, SD=4.76) attending a large metropolitan university participated in an online study. They were shown a picture of a model (pre-tested and matched for average physical attractiveness) interacting with one of four entities (live dog, live cat, robot dog, robot cat) or by themselves as a control. Participants answered a survey related to the attributes of the model as well as the Pet Attitude Scale (Templer, et al., 1981).

A 2 (Participant Gender) × 3 (PAS Score (low, medium or high) × 5 (Entity Type) Mixed ANOVA was performed for a set of attributes. For attractiveness, there was a main effect for PAS score ($F(2,29)=1.63$, $p=0.002$) such that participants who had a higher attitude score toward pets rated the models as more attractive. Further, there was an interaction for PAS score by entity type ($F(7,29)=1.89$, $p=0.007$). Post-hoc analyses revealed that for the high scoring PAS participants, they rated the model with the live dog and live cat as most attractive and the robotic dog and cat as least attractive. The attributes of friendliness, intelligence, and hard-working also resulted in significant results. This study suggests that the addition of a robotic or live animal can be particularly important in public and social settings where first impressions can be the only ones a person gets to make.

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P32 STAFF PERCEPTIONS OF BENEFITS OF AN ANIMAL-ASSISTED ACTIVITY IN AN OUTPATIENT ONCOLOGY CENTER: DEGREE OF INTERACTION AND PERCEIVED BENEFIT

Jessica Bibbo

University of Missouri, Columbia, MO, USA. jlbmq7@mail.missouri.edu

Introduction

This study examined the perceptions of healthcare and non-healthcare staff toward the implementation of an animal-assisted activity (AAA) in an outpatient regional cancer center. The opinion of staff regarding animal-assisted interventions in general and the appropriateness of animal-assisted interventions in healthcare facilities were investigated. Whether and to what degree staff had interacted with the five visiting volunteer canine-handler teams, had observed patients or their informal caregivers interact with the teams, and been spoken to about the intervention by patients or their informal caregivers were all investigated.

Method

Staff completed an anonymous questionnaire developed by the primary investigator following the four week intervention. A total of 34 questionnaires were completed by staff (a response rate of 62%). No demographic or employment characteristics were included in the questionnaire in order to maintain confidentiality and promote honest responses.

Results

Results of a one-way ANOVA indicated that staff who had observed a lot of interaction between patients and the visiting teams were more likely to perceive the AAA as beneficial for patients ($M=8.12$, $SD=1.27$), compared to those who had seen a little interaction ($M=5.67$, $SD=0.89$), and those who had seen none ($M=5.0$, $SD=0.0$), $F(2,28)=20.55$, $p<0.001$. Results of a one-way ANOVA indicated that staff who had observed a lot of interaction between caregivers and the visiting teams were more likely to perceive the AAA as beneficial for caregivers ($M=7.87$, $SD=1.41$) compared to those who had observed no interaction ($M=5.0$, $SD=1.41$), $F(2,28)=20.55$, $p<0.001$.

Implications

The degree of indirect interaction staff had with visiting AAA teams had positive relationships to perceptions of the benefit of the AAA for patients and their informal caregivers.

P33 IMAGES OF INTEREST: AN EYE-TRACKING STUDY OF VISUAL ATTENTION TO PICTURES OF HUMAN AND NONHUMAN ANIMALS, LANDSCAPES AND ABSTRACT PATTERNS IN CHILDREN WITH AUTISM AND IN NEUROTYPICAL PEERS

Daniela Plesa Skwerer

Boston University, Boston, MA, USA. dani4ple@rcn.com

Visual preferences for attractive human-faces are displayed by very young human infants, but whether this attractiveness effect is restricted to faces of conspecifics or to the infancy period remains unclear. Children with autism spectrum disorders (ASD)—condition diagnosed reliably through behavioral assessments around 2 years of age—show impairments in social reciprocity and often avoidance of eye contact with other humans. Studies of visual attention deployment using eye-tracking technology have indicated atypicalities in gaze behavior in individuals with ASD in response to social stimuli, but empirical evidence that visual preferences reflect the social profile characteristic of the disorder remains controversial (Klin et al., 2002; van der Geest et al., 2002; Boraston & Blakemore, 2007)

In this study we investigated attentional processes potentially underlying differences in the social-behavioral profile of children with ASD compared to their typically-developing peers (TD), by examining visual scanpaths to images of human and nonhuman animals, flowers, abstract patterns and landscapes, in a preferential looking paradigm.

Thirty-five TD children aged 3 to 6 years and 27 children with ASD in the same age range, passively viewed a slide-show of 50 image-pairs presented on a TOBII 1750 eye-tracker. Images of people (adults, children, babies), paired with images of nonhuman animals, flowers, landscapes, or abstract designs were displayed side-by-side for 6 seconds, separated by a 1-second central fixation stimulus. To account for baseline attentional differences, fixation counts per image were divided by total fixations per trial. Analyses of group differences in number of fixations and mean fixation durations to categories of images yielded a significant effect of image-category, $F(1,60)=24.4$, $p<0.01$ and a group by category interaction $F(1,60)=4.2$, $p<0.05$: while TD children showed a preference for images of people over all other image-categories, children with ASD showed no difference in mean fixation durations to nonhuman animals, humans and abstract patterns. Findings will be discussed in terms of the significance of investigating gaze behavior as an index of social attention and preferences in children with and without developmental disorders.

P34 KNOWLEDGE AND AWARENESS OF ASSISTANCE DOGS IN JAPAN: RESEARCH AMONG WOULD-BE ANIMAL HEALTH TECHNICIANS

Noriko Niijima

Yamazaki Gakuen University, Hachioji, Tokyo, Japan. noriniji@gmail.com

Introduction

To understand the actual situation of knowledge and awareness of assistance dogs in Japan, the data were collected via questionnaires among college students of department of Animal Health Technology.

Methods

The questionnaires were collected at X college in Tokyo, from November to December 2009. The questionnaires contains multiple choices and four-point items (12 questions in total), asking about attribute data, including pet keeping experience, knowledge and experiences related to assistance dogs, image, impressions and attitudes towards assistance dogs. The results were analyzed by chi square test and residual analysis, using SPSS ver.16.0. The participants were 12 male (8.3%) and 133 female (91.7%) college students, with an average age of 19.68. Valid response were 145, and the response rate was 100%.

Results

96.6% (n=140) of the respondents had experienced animal keeping before, and 69.0% (n=100) were present and/or ex-dog keepers. 89.0% (n=129) of the respondents have met blind dogs, but only 5.5% (n=8) have met hearing dogs. 58.6% (n=85) feel secure when they make a close encounter with assistance dogs in public space, while 24.1% (n=35) feel scared or nervous in the same situation. The results of the other questions will be indicated in a poster.

Conclusion and implications

In this modern society in Japan, knowledge and awareness of assistance dogs are not sufficient, and opportunities to “contact” assistance dogs are still rare. The results indicates that the amount of knowledge regarding animals is not necessarily increased the knowledge and understandings regarding assistance dogs. In order to increase the knowledge and awareness of assistance dogs, we need to increase the unique opportunities for publicizing assistance dogs, not relying on the escalation these days in interest in animals in general.

Short Films: Wednesday 11 July – 4 pm

Film: The Fast and the Furious

Director: Taus Makhacheva

<http://vimeo.com/user8514414>

HD video/ 21.06 min., colour, sound / Makhachkala, Dagestan, 2011 / Camera: Alexandr Sinyagin, Shamil Gadzhidadaev

Taus Makhacheva's work "The Fast and the Furious" depicts a series of social shifts that illustrate the impact of visual media on contemporary society. The setting is a street racing subculture, in which drivers congregate on the new highway that links Makhachkala, the Dagestan Republic's capital, to its airport. Once there they orchestrate illegal races under the cover of darkness. Every Saturday night in the early hours of the morning men dressed head to toe in black meet at prearranged locations to take part in the races or watch from the roadside. For each individual that is present, regardless of whether their participation is passive or active, the races symbolise a sense of belonging to an elite, exclusive, members-only club into which only real men are allowed. For an alpha male the car is an extension of his body and his sense of self. He will pay great attention to the car's design and spend hours tuning and maintaining his vehicle. To be accepted as a part of the community Taus seeks to emulate the behavior of these men by modifying her 4x4. She does this by covering it with fur originating from old soviet fur coats found at flea markets in Moscow. Although she was not eventually able to race due to a police raid shutting down the activities of the subculture, an artistic intervention into an urban environment did occur. Text: Alexey Maslyaev

Film: Noise

Director: Milorad Djuknic

<http://vimeo.com/user2031714>

Shot on the beach and underwater, this film aims at raising awareness of human attitude towards the delicate ecosystems forming the spaces of tourism. How people behave on the beach is reflected in the way they treat the environment. The film was made thanks to a Mediterranean Environmental Award (Organised by the United Nations Environment Programme—Mediterranean Action Plan - UNEP/MAP). NOISE won first place on GREEN SREEN FEST (Belgrade eco festival) in 2010.

Film series:

The Flayed Horse: human–animal relations in the American West.

Episode One - The Grizzly Experience

Director: Roz Mortimer

www.wonder-dog.co.uk

In 2011 I spent five months living in a small town in Montana. While there I created *The Flayed Horse*, a blog about human–animal relations in the American West. From desperately sad to exhilarating, this series of micro films and blog entries presents a critically challenging perspective of contemporary life in the American West.

It started with a photograph of a flayed horse that had been dumped in the waste bin of the car park opposite my office, and within days I was standing outside the cage of Tonka, a captive Grizzly that lived on marshmallows. This was the American West as I had not imagined it.

Film: Intelligent Design

Director: Marcus Coates

<http://www.katemacgarry.com/artists/marcus-coates>

In his video *Intelligent design*, Coates queries the ‘intelligent design’ theory developed by a group of American creationists in the 1980’s. It proposes that all life because of its complexity must have been designed by an intelligent creator. The looped footage features the monotonous and ultimately failed attempt by Galápagos giant tortoises to mate. By focussing on this dysfunctional act, Coates questions the idea of perfection that design presumes. While the tortoise’s grunts, not being dissimilar to a male human vocalisation during sexual exertion, remind us of our distant connection.

Film: Dawn Chorus

Director: Marcus Coates

How do we perceive humanness through nonhuman realities? An extensive knowledge and understanding of British wildlife has allowed Marcus Coates to create unique interpretations of the natural world and its evolving relationship with society. Using humans to mimic birdsong, the work replicates a romantic idyll—the unmediated “pure expression” of the chorus—that suggests a lost or evolutionary connection between our mundane isolation and the natural world. Coates, together with wildlife sound engineer Geoff Sample, recorded the dawn chorus at three sites in Northumberland in northeastern England over six mornings. Coates then trained amateur singers to replicate particular birdsongs but at drastically slower speeds, filmed them singing for up to two hours in their own habitats—from an office to a garden shed—and speeded up the film to yield four minutes of finished footage. Although this laborious process demonstrates that there is no shared language between the human and non-human worlds, we can discern points of connection and analogy in habitats, communication and possibly cultural artefacts.

Film: Human Report, Channel 9 TV, Galapagos, Ecuador, 2008

Director: Marcus Coates

What would animals advise if they could speak to us? Coates proposes a news broadcast in which one of the islands iconic birds, the Blue Footed Booby, reports on the humans on the island. It points out with humour how the invaders have changed the island, how they can not adapt to their surroundings and therefore adapt the surroundings endangering the very things that brought them to that paradise in the first place. Even having adapted the island to their needs, they still struggle and depend on imports in order to survive.

Film: Frank with speaker, 2011

Director: Jenny Gillam

<http://www.jennygillam.com/>

An excerpt from a two-channel video work of Frank, a Jack Russell terrier, responding to New Zealand bird songs emitting from a speaker played from a 1950's 45rpm record. The dog listens intently, inspecting the speaker, sometimes moving away, but then drawn back to the sounds. Both recordings of animals—the initial audio recording of the birds, and later the video of the dog's reaction to that recording are human attempts to understand and classify animal behaviours. This work is one of a series in which the artist has videoed her pet dog's actions. By observing an animal's behaviour the works challenge the viewer to consider our perception of the world and humankind's complex relationship with animals.

Film: Frank with toy duck, 2012

Director: Jenny Gillam

An excerpt from a video work documenting Frank, a Jack Russell terrier's reaction to a fluffy, squeaking toy duck sold in New Zealand pet shops. Viewers might initially be amused by the dog's antics, yet the work draws our attention to the dual nature of the domestic dog—while terriers are popular pets, they were originally bred as a working dog with a tempered aggressiveness to bolt fox from their dens during hunts. The work serves as a reminder of an animal's inherent instincts as the untrained hunting dog eviscerates another (toy) animal. Over time the duck (and therefore the video) becomes silent, and in spite of the violent actions of the dog, the room remains clean. This work is one of a series in which the artist has videoed her pet dog's actions, challenging the viewer to consider our constructed perception of the natural world.

www.theflayedhorse.com

Film: Friday 13 July – 2:10 pm

NokotaHeart



Directed by Sean Garland

(see next page for biographical details)

North Dakota. Present day.

Haunted prairies and shimmering badlands.

Ghost towns and grazing buffalo.

Lakota, Sioux, Chippewa. This is Indian country.

Buried under Wal-Mart and strip malls.

Leo Kuntz, Vietnam vet turned horse rancher, feels the quiet storm of change.

He has fought to preserve the legendary lineage of Sitting Bull's Nokota horses for decades.

It has impacted his life, his loves, the very beating heart and soul of him.

But the 21st Century is upon us now.

America's frontier is vanishing hard and fast.

So too are the old ways, horse people and horse cultures.

In the face of such stark transition Leo Kuntz may be the last of his kind.

His fight to save the equine legacy of the Greatest American Indian of them all is running out of time.

This may be the last American Western.

NokotaHeart is his story.



DIRECTOR

Sean Garland

NOKOTAHEART

After cutting his teeth on *IN THE NAME OF THE FATHER*, *INTERVIEW WITH THE VAMPIRE* and a number of more independent films in Ireland, London and Los Angeles, writer/director Sean Garland (aka Long Island Bridie Pictures) began making his own films. 1996's *The Majesty of The Haunt* garnered a cult following throughout festivals across Ireland and the UK. *Abbot's Approach* scooped Best Cinematography at the 2000 London Portobello Film Festival. Other shorts include *Inside Me Like A Warmth* which won Best Music & Visuals at the first Salvador Dali Film Festival in London. In 2006 Garland shot and directed *The Wheelhouse*, a supernatural thriller set aboard an aging fishing trawler. It made the *TURNER CLASSIC MOVIES* Honorable Mention list in 2006 with judges Stephen Woolley and Sally Potter. The Cambridge Film Festival have featured a number of Garland's shorts as part of their up and coming directors-to-watch series. There have also been a number of documentary commissions from Tate Modern and The Guildhall School of Music & Drama as well as music promos for MTV. *NokotaHeart* is Garland's first feature documentary. It won **BEST FEATURE DOCUMENTARY** at the 2010 White Sands International Film Festival in New Mexico, USA and was also awarded the **SPECIAL JURY PRIZE FOR CINEMATOGRAPHY** at the 2011 Arizona International Film Festival. It continues to do the festival circuit. Currently, Garland is in development on his first dramatic feature, *OWL*, starring Cherokee actor Wes Studi (*HEAT*, *THE LAST OF THE MOHICANS*).

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