

# A comparison of attitudes towards animals between the German- and French-speaking part of Switzerland

B. Fehlbaum, E. Waiblinger, D.C. Turner

Institut für angewandte Ethologie und Tierpsychologie, Hirzel

## Summary

A comparison of attitudes towards animals between German- and French-speaking Swiss adults is of particular interest, given the often invoked cultural barrier, the «Röstigraben». We sent questionnaires to 3000 randomly chosen Swiss adults in both language regions. 319 German and 293 French questionnaires were returned. Participants had to express their opinion regarding 29 statements on nature conservation, wild animals, farm animals, meat eating, animal feelings and cognition, and pets. In 19 items we found a significant difference in responses between the German- and the French-speaking participants. It is important to note that the direction of the responses was identical in all cases, the only difference being the degree of agreement. In general, the Swiss agreed that nature conservation is important. They agreed also that animals have feelings, but that these are different from the feelings of humans. Pets were viewed as beneficial to humans. Both cats and dogs were seen as likeable animals, and there was agreement that dogs need more time to care for than cats. Strays were not viewed as a problem in Switzerland, despite the fact that there are numerous stray cat colonies.

Keywords: attitudes, human-animal-relationship, survey, Switzerland, cross-cultural

## Ein Vergleich der Einstellung gegenüber Tieren zwischen Personen aus der deutsch- und französischsprechenden Schweiz

Ein Vergleich der Einstellung gegenüber Tieren zwischen erwachsenen Personen der deutsch- und französischsprachigen Schweiz ist von speziellem Interesse, besonders in Bezug auf die oft zitierten kulturellen Unterschiede zwischen den Sprachregionen, dem sogenannten Röstigraben. Wir haben 3000 Fragebogen an zufällig ausgewählte erwachsene Schweizer Einwohner in beiden Sprachregionen versandt. 319 deutsche und 293 französische Fragebögen wurden zurückgeschickt. Die Teilnehmenden mussten ihre Meinung bezüglich 29 Aussagen über Naturschutz, Wildtiere, Nutztiere, Fleischkonsum, Heimtiere sowie Gefühle und Kognition bei Tieren ausdrücken. Bei 19 dieser Aussagen fanden wir signifikante Unterschiede zwischen den Antworten von deutsch- und französischsprachigen Teilnehmenden. Grundsätzlich war die Einstellung der deutsch- und französischsprachigen Teilnehmenden gleich, ein Unterschied bestand lediglich im Grad der Zustimmung bzw. Ablehnung der Aussagen. Die Teilnehmenden stimmten zu, dass Naturschutz wichtig ist, Tiere Gefühle haben, und dass diese anders sind als die Gefühle von Menschen. Der Besitz von Heimtieren wurde als positiv für die Menschen beurteilt, und sowohl Katzen als auch Hunde wurden als liebenswerte Tiere angesehen. Es bestand Einigkeit darüber, dass die Pflege und Betreuung von Hunden mehr Zeit braucht als diejenige von Katzen. Streunende Hunde und Katzen wurden in der Schweiz nicht als Problem angesehen, obwohl zahlreiche Kolonien von verwilderten Katzen nachgewiesen sind.

Schlüsselwörter: Einstellung, Mensch-Tier-Beziehung, Umfrage, Schweiz, interkulturell

## Introduction

Given the current globalisation of interest in human-companion animal relations and pet ownership (Turner, 1998), there is a glaring paucity of cross-cultural studies

on knowledge about, attitudes toward and care of such animals and almost nothing set against the backdrop of cultural/religious differences in general attitudes toward nature, wildlife, zoos, and animal protection and -welfare. Such information is not only of academic interest,

but essential for strategic planning and the development of educational programs and campaigns by major players in the field.

The few cross-cultural studies that exist are very limited in scope (directly comparing attitudes in only one to three countries, sometimes only between «western» societies, or of different ethnic groups within just one country) but indicative of the worthiness of this approach on a larger scale (Herzog, 1996; Bradshaw & Limond, 1997; Abramaitis, 1999; Herzog, 1999; Miura et al. 2000; Herzog et al. 2001; Griffith and Wolch, 2001; Swabe et al. 2001; Miura et al. 2002; Hsu et al., 2003).

While a number of mono-cultural (mostly western) studies have applied appropriate and tested methods of assessing attitudes toward nature, animals in general and/or companion animals in particular (Kellert, 1980; Templar et al., 1981; Poresky et al., 1987; Wilson, 1987; Bowd and Bowd, 1989; Johnson et al., 1989; Stallones et al., 1990; Herzog, 1996; Staats et al. 1996; Zasloff, 1996; Herzog, 1999; Herzog et al., 2001; Hsu et al., 2003), these methods have rarely been applied to compare attitudes between people in different cultures (Bradshaw and Limond, 1997; Miura et al., 2000; Griffith and Wolch, 2001; Miura et al., 2002; Hsu et al., 2003).

The current study comparing attitudes toward animals in German- and French-speaking Switzerland is part of a much larger, four-year study which is currently being conducted by the third author and his co-workers in 12 countries: Japan, China, Singapore, India, the UAE, Jordan, Israel, the UK, France, Germany and Brazil. The main study is intended to make up for the above-mentioned deficits and is the first multi-national, cross-cultural comparison to assess knowledge, attitudes and behaviour locally and within expatriate communities and to cover more than two regions of the world, especially those where animal welfare is an upcoming issue. To better understand the magnitude of the effects of culture and religious differences on such, it is necessary to investigate these items amongst persons *in situ* (i.e. both when geographically «at home» and amongst «expatriates» living in a foreign society).

A comparison of attitudes between German-speaking and French-speaking Swiss adults (and later between those samples and German respectively French adults in Germany and France) is of particular interest as a preliminary study, given the often invoked cultural barrier, the «Röstigraben» in Switzerland.

## Material and Methods

The present study will present results of a survey in the Swiss population. Turner developed a three-page, standardized questionnaire which was translated and back-translated from the original English questionnaire into German and French. On the first page, the questionnaire

collected demographic and biographic information: sex, age, country of birth, country where participants grew up, whether the person was born and grew up in the present country, religion (Buddhism, Christianity, Hinduism, Islam, Shintoism or another religion), ethnic descent (European, Indian from India, Malaysia, Chinese, Japanese, Arabic, African or any other descent), education, i.e. the number of school years attended, the type of higher education (college or university, vocational/trade school or apprenticeship) and past or current pet ownership. The following two pages contained 29 attitude items, i.e. statements for each of which the participants had to check a box in a 5-point Likert scale. The Likert scaling was «Strongly agree», «Agree», «Neither agree nor disagree», «Disagree», «Strongly disagree». The items contained 5 control statements which were placed on different pages of the questionnaire. The order of the questions was random, but the same on all questionnaires. The questionnaire contained items concerning the following fields: Nature conservation/wild animals (4 items), farm animals/meat eating (7 items), animal cognition and feelings (5 items), pets (8 items). The last item asked participants to state how much time per day they thought was required to care for a cat and a dog, and the questionnaire offered boxes to check from 10min up to 3 hours. Addresses for the sample were drawn randomly, but balanced according to structural data (age at least 18 years and sex) for the resident population of cities and agglomerations in the German- and French-speaking part of Switzerland. 3000 questionnaires, 1500 each in German and French, were sent to all addresses in our sample. 612 questionnaires were filled in anonymously and returned, thereof 319 German and 293 French questionnaires.

## Statistical analysis

Upon receipt, the questionnaires were numbered and coded electronically using Excel and SPSS. Participant reaction to control statements were compared using Spearman rank correlation. The influence of language region on participants' reaction to items was the main independent factor we analyzed using Mann-Whitney U-Tests, time requirements for the care of cats and dogs we compared using Wilcoxon-Test. If percentages are given in the text, these do not always add up to 100 %. The missing percent are due to missing responses on a particular item.

## Results

### Demographic composition of the sample

Respondents were 52.1 % Swiss German speaking and 47.9 % French speaking Swiss residents. Sex of respondents was well balanced with 51.1 % male and 48.5 %

female, the sexes also being well balanced between language regions. The majority of respondents was older than 30 years. Compared to the last Swiss census of 2000 (Haug et al., 2002), persons between 40 and 59 years (our dataset 47.4 % compared to 35.9 % of all persons older than 20 years according to census 2000) as well as over 60 years (our dataset 29.7 % compared to 26.0 % according to census 2000) are overrepresented, persons between 18 and 39 years are underrepresented (our dataset: 22.7 % compared to 38.1 % between 20 and 39 years according to Swiss census 2000). Most respondents were born in Switzerland (81 %), but there was also a proportion (8.4 %) of persons born in neighbouring countries (Germany, France, Italy or Austria), which compares to their overall representation in the Swiss populace according to Swiss census 2000 (7.2 %), and a total of 51 respondents (8.3 %) born elsewhere, in a total of 25 countries. As expected, most participants adhered to the Christian faith (94.9 %, compared to 81.9 % reported Christians according to Swiss census 2000), and most respondents' ethnic origin was European.

### Control items

Control items correlated significantly and negatively, as expected, though we found relatively low correlation coefficients (Tab. 1). This indicates that the statements were generally comprehended and that respondents reacted sufficiently consistently.

### General results

In 19 items of 29 we found a significant difference in responses between the German- and the French-speaking participants. It is important to note, however, that the

direction of the responses was identical in all cases, i.e. participants of both language regions responded either with agreement or disagreement to the same item, the only difference being the degree of agreement or disagreement. Therefore we abstain from graphically illustrating differences in all cases, describing only the direction of the differences in the responses between German- and the French-speaking participants.

### Nature conservation and wild animal items

There were no significant differences between the responses of participants of the two language regions to the 4 items in this category. German and French speaking inhabitants of Switzerland did not react differently to the statements that «Conservation of nature (plants, animals, natural resources) is very important», «Keeping wild animals as pets at home is acceptable», «Keeping animals captive in zoos should be forbidden» and «It is acceptable that some people eat the meat of endangered wild animals». The majority of Swiss basically agreed strongly that nature conservation is important, disagreed with keeping wild animals as pets, but not strongly, also disagreed with the acceptability of eating meat of endangered animals, and are therefore opposed to the notion of eating the meat of endangered wild animals. However, participants also disagreed with the statement that «Keeping animals captive in zoos should be forbidden» and therefore the attitude of our participants was mostly pro-zoo animal keeping.

### Farm animals and meat eating items

Participants of the two language regions did not differ in their responses to three of the items. «Raising large

Table 1: Spearman correlations of responses to control items

Control items	N	Korrelations-Koeffizient (spearman)	p
Keeping animals as pets is useless. Keeping animals as pets brings many benefits to the person.	606	- 0.538	0.0001
Cats are very likeable animals. Cats are disgusting animals.	604	- 0.489	0.0001
Dogs are very likeable animals. Dogs are disgusting animals.	602	- 0.500	0.0001
Animals' feelings are different from those of people. Animals have the same feelings as people.	606	- 0.556	0.0001
Animals cannot think. Animals can think like people	609	- 0.377	0.0001

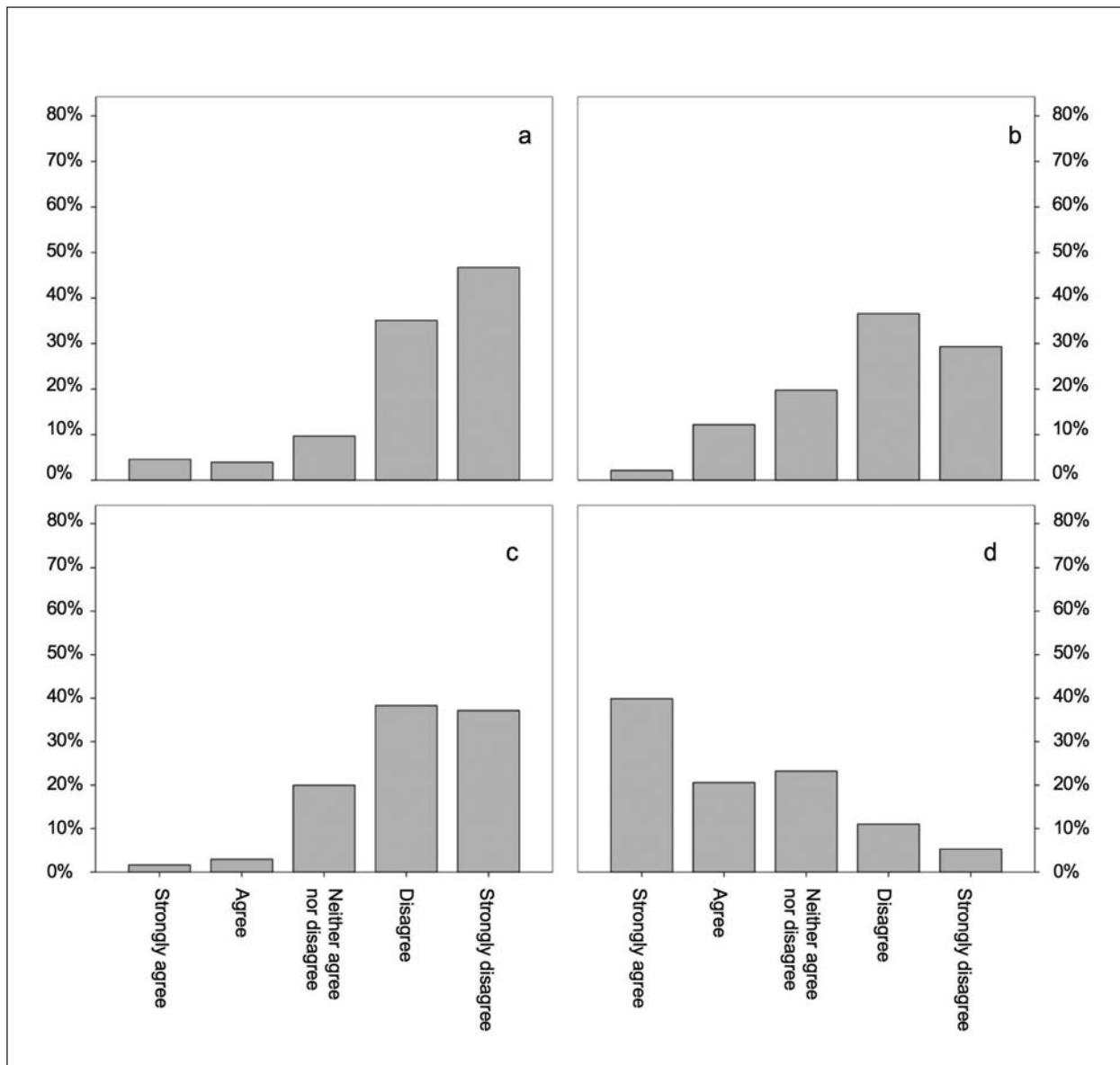


Figure 1: Response distribution in all four items concerned with farm animals and meat eating.

- Responses of participants to the statement that «Raising large numbers of animals for food (for meat or milk) outdoors (not in buildings or cages) is not acceptable»
- Responses of participants to the statement that «Raising large numbers of animals for food (for meat or milk) indoors (in farm buildings or cages) is quite acceptable»
- Responses of participants to the statement that «All people should be vegetarian and not eat meat at all»
- Responses of participants to the statement that «Eating dog or cat meat is unacceptable»

numbers of animals for food (for meat or milk) outdoors (not in buildings or cages) is not acceptable». (underline exactly as in questionnaire.), «Raising large numbers of animals for food (for meat or milk) indoors in farm buildings or cages is quite acceptable» and «Eating dog or cat meat is unacceptable». The majority disagreed with the first statement, and were therefore in favour of raising animals for food (for meat or milk) outdoors, i.e. free range farming (Fig. 1a). Consistently, participants disagreed with the second statement, and were therefore opposed to raising animals for food in farm buildings or

cages (Fig. 1b). 59.9 % of respondents found eating cat or dog meat unacceptable (Fig. 1d), however a comparably large proportion (23 %) did not have a clear opinion on this subject. An astounding 16.1 % were opposed to this statement, i.e. were actually not against eating dog or cat meat. Participants of the two language regions differed in their attitude in the remaining 3 items. The respondents of the French-speaking part of Switzerland were more strongly opposed to the statement that «All people should be vegetarian and not eat meat at all» than the Swiss German speaking respondents, but the majority of

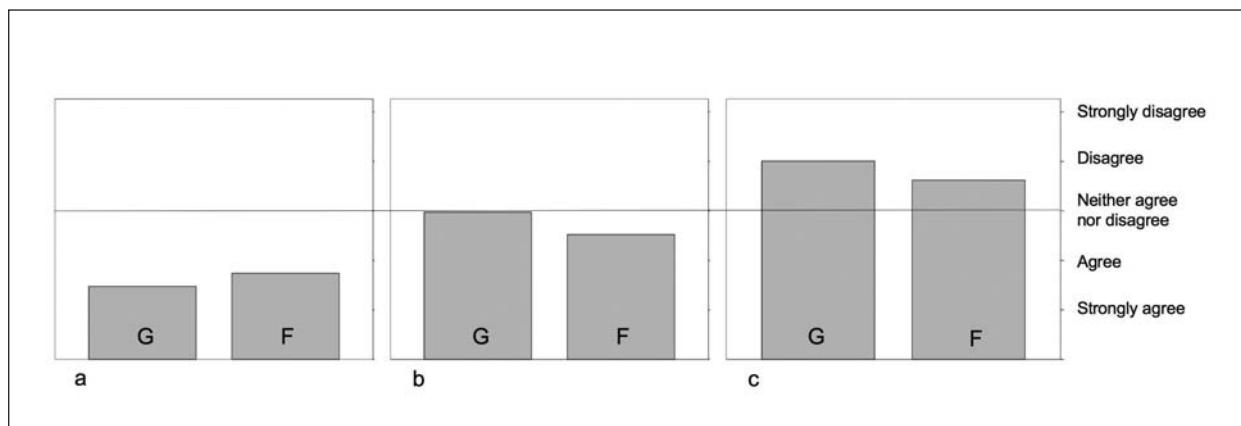


Figure 2: Mean responses of participants of the two language regions to the following statements.

- «Animals have feelings, for example fear, joy, etc.»
- «Animals' feelings are different from those of people»
- «Animals cannot think»

G: German-speaking; F: French-speaking

respondents in both language regions still disagreed, i.e. does not think of vegetarianism as something that should be compulsory (Fig. 1c). There was also a significant difference between the responses of participants of the two language regions to the statements that «It is unacceptable that some people eat pork meat» and «It is quite acceptable that some people eat beef meat». The respondents of the French-speaking part of Switzerland were more strongly opposed to the first statement and supported the second statement more strongly than the Swiss German speaking respondents.

### Animal cognition and feelings items

Respondents of both language regions agreed that «Animals have feelings, for example fear, joy, etc.», but the Swiss German-speaking respondents supported this statement more strongly than the French-speaking respondents (Fig. 2a). French-speaking respondents supported the statement that «Animals' feelings are different from those of people» more strongly than the German-speaking participants, admitting to differences in feelings between humans and animals, whereas German speaking participants tended more towards neither agreeing nor disagreeing (Fig. 2b). Participants generally disagreed with the statement that «Animals cannot think», German-speaking participants, however, disagreed more strongly than French-speaking ones (Fig. 2c).

There was overall agreement that «If an animal is suffering (pain or incurable disease) and cannot be cured, it should be killed painlessly», and no difference between the language regions. However, the German-speaking respondents were more strongly opposed to the statement that «If an animal is killed for food, fur, leather, etc., it does not matter how this is done, painlessly or not» than the respondents of the French-speaking part of Switzerland.

### Pet items

French-speaking respondents supported the statement that «Keeping animals as pets brings many benefits to the person» more strongly than German-speaking ones. 62.9% of respondents agreed that pets bring many benefits. German-speaking respondents supported that «Dogs are very likeable animals» more strongly than French-speaking ones. In general, dogs were viewed as likeable animals by roughly 63.7%, but with a proportion of 27.1% respondents neither agreeing nor disagreeing, and only 7.5% seeing dogs as not likeable. With cats, German-speaking respondents agreed more strongly than French-speaking ones with the statement that «Cats are very likeable animals». The proportion of participants who agreed was higher (80.4%) than with dogs, but the proportion of undecided responses was about the same as with dogs (14.1%), and 5.2% of participants did not find cats likeable. German-speaking respondents supported the statement that dogs make ideal pets more strongly than French-speaking ones. In general, agreement was high (54.2%), but a proportion of 31.4% respondents neither agreed nor disagreed, and 13.9% of participants did not think of dogs as ideal pets. German-speaking respondents more strongly opposed the statement that the cat is not an ideal pet more strongly than French-speaking ones. In general, 58.5% of participants of both language regions thought of cats as ideal pets, but 19.3% of respondents agreed with the statement and therefore were of the opinion that cats do not make ideal pets, whereas an even higher proportion of 21.6% neither agreed nor disagreed.

Another set of statements explored opinions on the size of the problem of stray animals in Switzerland. French-speaking respondents supported the statement that stray dogs are no problem in Switzerland much more strongly than German-speaking respondents. Generally, 77.8%

of respondents agreed that stray dogs are not a problem in Switzerland. However, a proportion of 9.6% of respondents disagreed, i.e. perceived a problem with stray dogs in Switzerland. A further 11.9% of respondents did neither agree nor disagree. The language regions did not differ when stray cats were concerned, the majority disagreed with the statement that stray cats cause many problems in Switzerland (75.7%). 8.3% of participants agreed that there is a stray cat problem in Switzerland, and 15.7% of respondents could not decide on whether to agree or not.

### Daily time requirements for the care of cats and dogs

There was a significant difference in how much time the respondents of the two language regions thought the care for a cat needed. German-speaking respondents estimated the time required to care for a cat to be greater than the respondents of the French-speaking part of Switzerland. The majority (67.5%) estimated the time required to care for a cat to be 30 to 60 minutes per day (Fig. 3). There was no significant difference in how long the respondents of the two language regions estimated the daily time required to care for a dog. The majority (72.8%) estimated the time required to care for a dog to be 2 to 3 hours (Fig. 3).

The time needed to care for dogs is therefore considered to be longer than the time needed for cats.

### Discussion

Despite the fact that our dataset was based on random addresses, the demographic age structure of our respondents is not identical with the age structure of the Swiss populace in general as stated by the Swiss census 2000, with the age group of persons older than 40 years being overrepresented. Our control items correlated significantly and negatively, albeit with relatively low correlation coefficients. We realized that the control item with the lowest correlation coefficient wasn't really a true control question: «Animals cannot think» and «Animals can think like people» are not really opposites. However, the questionnaires still seem to have been filled in rather consistently.

We refrain from comparing this Swiss data sample with our international data sample since within our study we are still collecting questionnaires in various countries. We therefore only compared responses of German- and French-speaking Swiss participants. There were no significant differences between the German- and the French-speaking parts of Switzerland when questions on

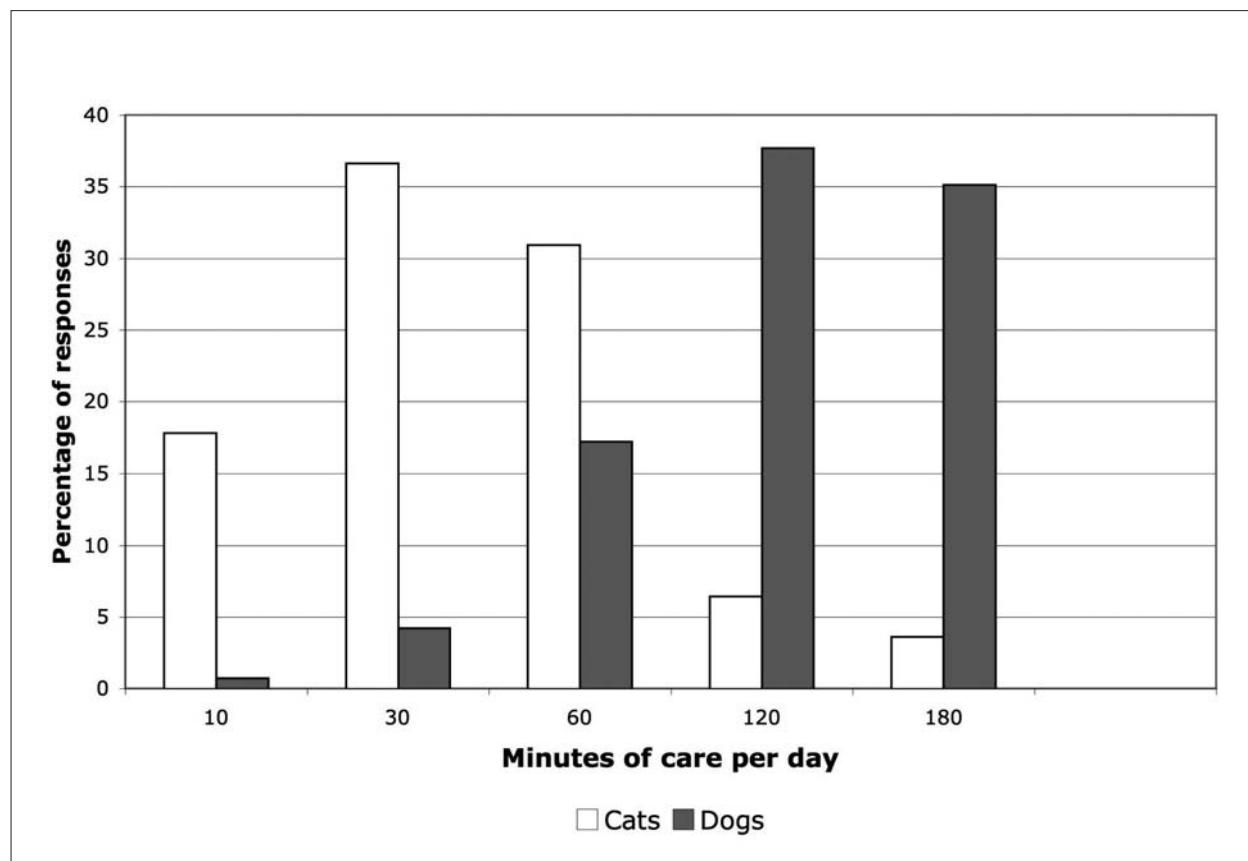


Figure 3: Time required to care for cats and dogs.

## Attitudes towards animals between the German- and French speaking part of Switzerland 291

nature conservation and wild animals were addressed. 98 % of respondents judged nature conservation to be an important issue. Such a high number of supporters might well be a consequence of long standing campaigns by nature conservation societies such as WWF and Pro Natura in Switzerland. The high acceptability of keeping animals in zoos by the public is in coherence with the experience of Swiss Animal Protection SAP (Peter Schlup, personal communication) and increasing visitor numbers in Swiss zoos (Press release of Zurich Zoo, 4.3.2009), which might in turn be due to the efforts of Swiss zoos put into building appropriate enclosures and being involved in conservation projects. Despite a growing number of reptiles and amphibians as pets in Switzerland (Langenecker, 2006), the views expressed by our respondents are clearly against wild animals as pets. Participants seemed to be opposed to endangered wild animals being eaten, even though one is still allowed in Switzerland to hunt and consume hares (National law on hunting and protection of wild mammals and birds, 20. June 1086, Article 5), for example, despite the species being endangered, i.e. on the red list (Red List of Endangered Swiss Wildlife). Probably respondents associated this item with the problem of bushmeat rather than with endangered animals still hunted in Switzerland. Concerning farm animals and meat consumption, German- and French-speaking parts of Switzerland differed in their opinions about vegetarianism, pork and beef meat. French-speaking participants were slightly more in favour or eating pork and beef meat, as well as more opposed to compulsory vegetarianism than German-speaking participants. It will be interesting to compare this tendency with attitudes in France and Germany in the course of our further surveys. It is not surprising that both language regions were unanimous in advocating free range farming and opposing intensive farming in buildings and even cages. Switzerland had and, also with the new animal protection law, has one of the most progressive animal welfare laws of the world. Keeping chickens and laying hens in cages has been forbidden 1992, and about 70 % of whole eggs consumed in Switzerland were laid by free range chickens, compared to 10 % in Germany (Marktbericht Eier 2008, Bundesamt für Landwirtschaft BLW; Dr. H.-U. Huber, CEO Swiss Animal Protection SAP, personal communication). Animal welfare legislation in Switzerland also states that animals need to be killed painlessly (Article 16 Paragraph 2; Art. 178, Swiss Animal Welfare Ordinance, 23. April 2008), and if suffering, their owners have to take immediate steps to ensure that the animal is either treated and cured appropriately or, if this is not possible, that it is euthanized painlessly to prevent suffering (Article 5, Paragraph 2, Swiss Animal Welfare Ordinance, 23. April 2008). In accordance with legal requirements, the majority of participants agree with painless killing and euthanasia of suffering animals; however, French-

speaking participants were slightly less advocate of painless killing of production animals and livestock. German-speaking respondents agreed more strongly than French-speaking ones that animals are able to think and that they have feelings, and that these feelings do not differ from those of people, i.e. German-speaking participants have a more anthropomorphic attitude towards cognitive abilities of animals. In general, attributing animals the ability for feeling as well as suffering is core to the new Swiss welfare legislation (Article 4, Paragraph 2, Swiss Animal Welfare Ordinance, 23. April 2008), oriented towards pathocentric animal ethics that strive to prevent suffering.

French-speaking participants were more supportive of the benefits of pet-keeping. On the other hand, German-speaking participants found dogs and cats more likeable and more ideal as pets than the French-speaking ones. Both language regions were consistent in allotting more time to care for a dog than for a cat. We presume that participants included time requirements for walking a dog into their calculation, i.e. that caring for a dog also includes walks and exercise, whereas they did not include the time which a person spends together with his or her cat (for example stroking the cat while watching TV, having the cat on the lap whilst reading etc.), but just the effective time of feeding, brushing, cleaning out the cat litter tray etc. In this, the Swiss opinion does not differ greatly from the Brazilian and Japanese opinions that we already analyzed (Turner et al., 2007).

Concerning strays, German-speaking participants less strongly agreed that stray dogs are not a problem in Switzerland than French-speaking participants. Nevertheless, it is astonishing that 10 % of respondents thought that stray dogs are a problem in Switzerland and a further 10 % neither agreed nor disagreed. This perception of the stray dog problem is astounding. Animal welfare sources in Switzerland confirm that there is absolutely no stray dog problem in Switzerland aside from occasional, but very few unowned dogs, but there are certainly no stray dog colonies (Tasker, 2008). Probably the reaction of respondents to a purported problem with stray dogs in Switzerland was partly due to both a discrepancy of understanding of the term «stray» by respondents («stray» probably understood as temporarily uncontrolled, roaming dog) and we authors («stray» as unowned, constantly roaming, feral dog), and a heightened awareness of the Swiss public to temporarily uncontrolled, roaming dogs after a fatal accident in 2005. Participant perception of the stray cat problem, however, was certainly not very accurate. Three quarters disagreed with the statement that stray cats cause many problems in Switzerland, whereas Swiss Animal Protection SAP and its member societies have been neutering up to 10'000 stray and farm cats annually for the last 15 years (Press release of Swiss Animal Protection SAP, 9.2.2009) and there are many confirmed stray cat colo-

nies in Switzerland, in allotment gardens as well as in factory areas. Probably these colonies are not perceived as being real strays, i.e. unowned, feralized cats since many such colonies are managed by animal welfare organisations, or maybe the urban and agglomeration residents population we drew our data sample from does not really encounter stray cat colonies in residential areas.

### Comparaison de l'attitude face aux animaux entre des personnes provenant de Suisse Alémanique et de Suisse Romande

Une comparaison de l'attitude face aux animaux entre des adultes romands et alémaniques est particulièrement intéressante vis à vis des différences culturelles souvent évoquées entre ces régions linguistiques, appelées aussi «barrière de roesti». Nous avons adressé 3000 questionnaire à des adultes suisses habitants ces deux régions linguistiques. 319 questionnaires en allemand et 293 en français ont été retournés. Les participants devaient donner leur avis quant à 29 affirmations concernant la protection de la nature, les animaux sauvages, les animaux de rente, la consommation de viande, les animaux de compagnie ainsi que leurs sentiments et leur perception face aux animaux. Sur 19 de ces affirmations, on a constaté une différence significative entre les réponses des alémaniques et des francophones. Si la position fondamentale des deux groupes linguistiques était similaire, il y a avait une différence dans le niveau d'adhésion, respectivement de refus, des affirmations. Les participants étaient d'accord avec le fait que la protection de la nature est importante, que les animaux ont des sentiments et que ceux-ci sont différents des sentiments humains. Le fait de posséder un animal de compagnie a été considérés comme positif pour les humains et les chats comme les chiens sont les animaux domestiques préférés. Il y avait un consensus sur le fait que les soins et le temps nécessaire pour s'occuper d'un chien sont plus importants que pour un chat. La divagation de chiens et de chats n'était pas considérée en Suisse comme un problème même s'il existe de nombreuses populations de chats hares.

### Conclusion

Our results demonstrate the absence of a profound cultural barrier, the so called «Röstigraben». We found some interesting differences between the language regions of Switzerland, but in general, participants of both languages exhibited similar attitudes toward animals.

### Paragone dell'attitudine verso gli animali tra persone provenienti dalla Svizzera tedesca e dalla Svizzera francese

Un paragone di attitudine tra adulti della regione linguistica tedesca e francese in Svizzera è di vivo interesse in relazione alle tanto citate differenze culturali tra le differenti regioni linguistiche, il cosiddetto Röstigraben. Abbiamo quindi inviato 3000 questionari a abitanti adulti svizzeri scelti a caso nelle due regioni linguistiche. Di ritorno abbiamo ricevuto 319 dalla parte tedesca e 293 da quella francese. I partecipanti dovevano dare il loro avviso su 29 affermazioni sulla protezione della natura, animali selvatici, animali da reddito, consumo di carne, animali da compagnia e sensazioni e cognizione negli animali. Abbiamo riscontrato in 19 di queste affermazioni una netta differenza tra le risposte provenienti dalle due parti linguistiche esaminate. In linea di massima l'attitudine tra i partecipanti delle due regioni era uguale ma una differenza si è potuta rilevare sul grado di consenso e di rifiuto delle affermazioni. I partecipanti hanno affermato che la protezione della natura è importante, che gli animali provano sensazioni e che queste ultime sono differenti di quelle degli uomini. Il possesso di animali da compagnia è ritenuto positivo per gli uomini e sia i gatti che i cani sono visti come affettuosi. Vi è concordanza sul dire che la cura dei cani necessita più tempo che quella dei gatti. Cani e gatti vagabondi non sono visti come un problema in Svizzera anche se vengono segnalate molte colonie di gatti inselvaticchiti.

### Literature

*Abromaitis S.:* Hinduism and attitudes toward the treatment of animals. In: Men, Women, and Animals: The Influence of Gender on our Relations with Animals and Nature. International Society for Anthrozoology ISAZ, Fifth Interdisciplinary Conference, Veterinary Hospital of the University of Pennsylvania, June, 1999, 12.

*Bowd A., Bowd A.C.:* Attitudes toward the treatment of animals: a study of Christian groups in Australia. *Anthrozoös*, 1989, 3: 20–24.

*Bradshaw J., Limond J.:* Attachment to cats and its relationship with emotional support: a cross-cultural study. In: Third International Society for Anthrozoology Conference, ISAZ, Tufts University School of Veterinary Medicine, July, 1997, 12–13.

*Bundesamt für Landwirtschaft BLW (2009):* Marktbericht Eier 2008, <http://www.blw.admin.ch/dokumentation/00018/00110/00115/index.html?lang=de>

*Galvin S. and Herzog H.:* The ethical judgement of animal research. *Ethics and Behavior*, 1992, 2: 263–286.

*Griffith, M. and Wolch, J.*: Attitudes to marine life among Asians and Pacific Islanders living in Los Angeles. In: Human-Animal Conflict: Exploring the relationships with conflict between humans and other animals. ISAZ, 10th Anniversary Conference, University of California at Davis, June, 2001, 16.

*Haug W., Schuler M., Wanner P.*: Räumliche und strukturelle Bevölkerungsdynamik der Schweiz 1990–2000, Bundesamt für Statistik (BFS), 2002. <http://www.bfs.admin.ch/bfs/portal/de/index/infothek/publ.Document.65886.pdf>

*Herzog H.*: Public attitudes and animal research: The social psychology of a moral issue. In: The Animal Contract: Exploring the relationships between humans and other animals. Ed. A. Podberscek, ISAZ Conference, Downing College, Cambridge University, Cambridge, July, 1996, 6.

*Herzog H.*: Power, money and gender: Status hierarchies and the animal protection movement in the US. ISAZ Newsletter, 1999; 18, 2–5.

*Herzog H., Rowan A. and Kossow D.*: Social attitudes and animals. In: The State of the Animals. Eds. D. Salem and A. Rowan, Washington, DC: Humane Society Press 2001, 55–69.

*Hsu Y., Liu Sevinghaus L., Serpell J.*: Dog keeping in Taiwan: 1st contribution to the problem of free-roaming dogs. *J. Appl. Anim. Welfare Science*, 2003, 6: 1–23.

*Johnson T., Garrity T. and Stallones L.*: Psychometric evaluation of the Lexington attachment to pets scale (LAPS). *Anthrozoös*, 1989, 5: 160–175.

*Kellert S.*: American attitudes toward and knowledge of animals: an update. *Internat. J. Study Anim. Problems*, 1980, 1: 87–119.

*Langenecker M.*: Retrospektive Untersuchung zur Entwicklung der Artenverteilung und den häufigen Krankheitsbildern bei exotischen Heimtieren im Zeitraum von 1994 – 2003. PhD Thesis, Universität Zürich, 2006.

*National law on hunting and protection of wild mammals and birds*, 20. June 1986 (last revision 12. December 2008), [http://www.admin.ch/ch/d/sr/922\\_0/index.html](http://www.admin.ch/ch/d/sr/922_0/index.html)

*Swiss Animal Welfare Ordinance*, 23. April 2008, [http://www.admin.ch/ch/d/sr/c455\\_1.html](http://www.admin.ch/ch/d/sr/c455_1.html)

*Miura A., Bradshaw J., Tanida H.*: Attitudes towards dogs: A study of university students in Japan and the UK. *Anthrozoös*, 2000, 13: 80–88.

*Miura A., Bradshaw J., Tanida H.*: Childhood experiences and attitudes towards animal issues: A comparison of young adults in Japan and the UK. *Animal Welfare*, 2002, 11: 437–448.

*Poresky R., Hendrix C., Mosier J., Samuelson M.*: The companion animal bonding scale: internal reliability and construct validity. *Psychological Reports*, 1987, 60: 743–746.

*Red list of endangered Swiss animals*, p.21, <http://www.bafu.admin.ch/publikationen/publikation/00913/index.html?lang=de>

*Staats S., Miller D., Carot M., Rada K., Turnes J.*: The Miller-Rada commitment to pets scale. *Anthrozoös*, 1996, 9: 88–94.

*Stallones L., Marx M., Garrity T., Johnson T.*: Pet ownership and attachment in relation to the health of U.S. adults, 21 to 64 years of age. *Anthrozoös*, 1990, 4: 100–112.

*Swabe J., Rutgers B., Noordhuizen-Stassen E.*: Killing animals: an interdisciplinary investigation of cultural attitudes and moral justification. In: Human-Animal Conflict: Exploring the relationships with conflict between humans and other animals. ISAZ, 10th Anniversary Conference, University of California at Davis, June, 2001, 33–34.

*Swiss Animal Protection SAP*, press release of 9.2.2009, <http://www.tierschutz.com/media/> - > news

*Tasker L.*: Stray Animal Control Practices (Europe). A report into the strategies for controlling stray dog and cat populations adopted in thirty-one countries, pp 30–32. World Society for the Protection of Animals (WSPA) and Royal Society for the Prevention of Cruelty to Animals International (RSPCA International), 2008.

*Templer D., Salter C., Dickey S., Baldwin R., Veleber D.*: Pet attitude scale. The construction of a pet attitude scale. *Psychological Record*, 1981, 31: 343–348.

*Turner D.C.*: Globalizing human–animal companionship. *World Health (WHO)*, 1998, 51: 28.

*Turner D.C., Waiblinger E., Stammbach K., Hosoido T., Ohta M., Niijima N., de Cassia Garcia R.*: A comparative study of attitudes toward animals in seven countries amongst locals and expatriates: results from Japan and Brazil. Abstract. Proceedings of the 11th International Conference on Human-Animal-Interactions IAHAIO, Tokyo, 5.–8. 10. 2007.

*Wilson C.*: Physiological responses of college students to a pet. *J. Nervous and Mental Disease*, 1987, 175: 606–612.

*Zasloff R.L.*: Measuring attachment to companion animals: a dog is not a cat is not a bird. *Appl. Anim. Behav. Science*, 1996, 47: 43–48.

*Zoo Zurich*, press release no. 451, 3.4.2009: Der Zoo Zürich – 2008 erneut mit einem Rekordergebnis, [http://www.zoo.ch/documents/PM\\_451\\_Zahlen\\_2008.pdf](http://www.zoo.ch/documents/PM_451_Zahlen_2008.pdf)

## Corresponding author

PD Dr. D.C. Turner  
I.E.T. Institut für angewandte Ethologie und  
Tierpsychologie  
Vorderi Siten 30, Postfach 32  
CH-8816 Hirzel  
Phone: + 41 (0)44 729 92 27  
E-mail: dennis@turner-iet.ch

Received: 7 May 2009

Accepted: 29 July 2009