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Human-Animal Interaction in Post-Tsunami Japan

1.0 The Human-Animal Connection: Companions in Everyday Life. Humans have lived with animals since prehistoric times. Gunter discusses historical evidence suggesting that the domestication of dogs occurred at least 12,000 years ago, and cats, about 9000 years ago (2-3). A relationship with one or more animals seems to be very important for many living in today's world. Franklin claims that the importance of the relation between humans and pets is increasing because people feel ontologically insecure in their increasingly urbanized society (84-86). According to Kruse, Irvine and Peggs, sociological research has focused on humans and their relationships with animals, not on animals and their involvement in animal-human relations or the role of animals in society (Kruse, *Relevance*; Irvine, *Question*; Peggs 2). Although people live closely with animals in the actual world, sociological studies have tended to disregard the way in which animals play important roles in society.

This paper provides a perspective on the animal-human nexus in Japan by examining the experience of people caught up in the tragedy of the March 2011 tsunami which whisked away both humans and companion animals in the matter of a few hours.

Over the last 30 years various empirical studies have shown that pet ownership has beneficial effect on human health. Beck and Katcher report that the mortality rate of heart patients who keep pets is lower than that for non-pet patients (2-8). Patronek and Glickman argue that pet ownership reduces the incidence of cardiovascular disease because it influences psycho-social risk factors. Gaeng and Turner also found that pets contribute to the health of older adults in nursing homes. In a study over 52 weeks Johnson and her colleagues found that regularly walking a dog reduces adult obesity (see also Zeltzman and Johnson). Carlisle found a significant difference between the social skills of children with Autism Spectrum Disorder (ASD) who lived with dogs and those who did not live with dogs, and concluded that dog ownership may be beneficial for some children with ASD. These studies demonstrate that a relationship between a human and an animal can produce various benefits for the human involved. However, Herzog has argued, that the "pet effect" is still an unsubstantiated hypothesis which at present requires much more research.

In these regards Irvine noted that since the 1990s, many working in this area have come to use terms such as "companion animal" and "guardian" in place of "pet" and

“owner” to capture the emotional connection between the species and to articulate the responsibility of humans for their pets, and that usage is now common amongst academics in Japan (Irvine, *If You Tame Me* §3).¹

At the same time, the decision to have a pet often involves an ethical stance that recognizes the value (and the rights) of the animal itself. Whatever the motivation to own a pet may be, the assessment of companion animals in the United States over the past 50 years by Brackenridge et al. leads to the conclusion that the relationship between people and animals has become very close. Considering the dramatic changes that have occurred in the structure of American families, Kruse argued that the increased practice of allowing animals to share homes as members of the family has blurred the boundary between humans and animals as non-humans. On the other hand, Franklin has described the relationship between pets and humans in late modernity in terms of changes in the ontological security of the individual (Kruse, *Social*; Franklin 85-86). Since the 1970s, he argues, the nuclear family has come under increasing pressure, with individuals experiencing more fragmented and less secure life styles (cf. Franklin 85-86). He suggests that the role of pets in human society has been enhanced by this important social and cultural transformation. However, he also emphasizes that the relationship between human and animals is not embedded in sentimentalism only; it is challenging and dissolving the boundary between species.

Today many Japanese display one or more photographs of their pets on their mobile phones; they also spend considerable amounts of money on pet food and veterinary care. Some pet owners even go so far as to indulge their pets with birthday parties, funerals, and other rites of passage, and treat their pets like their own children. Although other Japanese may think such behavior silly, obsessive, or just eccentric, few any longer openly criticize such behavior. Given the closeness of the relationship between some Japanese and their animals, it is reasonable that we ask what happened with regard to that relationship when the March 2011 tsunami struck many communities along the Pacific Ocean coastline in Northeast Japan. This paper first surveys the literature on disasters and pets, noting that the immediate outcome is that many pet owners have to deal with the sudden and permanent separation from their pets. It then discusses findings from research on pet owners following the Japanese tsunami and earthquake. The case study is used to tease out some broad implication for our understanding of the human-animal relationship.

2.0 Pet Owners During Disaster. Even though one family may consider its pet to be a family member, it is often the case that others afford the pet a much lower status. Doka

observed that the grief of those who lose their pets is often overlooked and ignored by others around them (11). Redmalm argues that the problem is not so simple, and points to the ambiguity generated by pet grief as a “grief on the margins.” In any case, the sense of isolation which follows can then become a serious psychological burden for pet owners who have lost or otherwise become separated from their pets during and after a disaster. Several quantitative investigations have been conducted by psychologists in this regard. Zottarelli suggests that pet loss impacts negatively on the ability of their owners to respond during and after a disaster. Hunt, Al-Awadi, and Johnson found that pet loss or forced abandonment slowed the process of recovering from a disaster. Hunt, Bogue, and Rohrbaugh suggest the need for steps to allow pets and owner to more easily evacuate together. Thompson, and Thompson, et al. found in their review of the literature that animals could be a protective factor rather than a risk factor during disasters. For example, animal attachment may construct disaster resilience. Trigg, et al. open a different window on the pet-owner relationship by reviewing literature regarding human-animal interaction. They find that an understanding of different types of relationship can improve the effectiveness of rescue operations when disasters occur. Yamazaki analyzes the factor that influences evacuation behavior of pet owners and their needs for support in quantitative investigation. Trigg, Bradley and Thompson’s questionnaire survey also reveals how pet-owner closeness affects the survival plans made by owners. Although there are few qualitative studies about animals when a disaster strikes, Potts and Gadenne have collected extensive accounts from experts in the area of animal protection, rescue, and welfare, and also from the guardians of companion animal after the Christchurch earthquake in New Zealand in 2011. They report that although the traumatic experiences connected humans and other animals intimately, the emergency management frameworks tended to be anthropocentric.

Irvine’s investigation of the decision-making process has concluded that the vulnerability of animals is constructed by our “thinking” (Irvine, *FILLING*). Accordingly, the Pet Evacuation and Transportation Standards (PETS) Act of 2006 was passed in the United States following Hurricane Katrina and other disasters (Public Law 109-308). The Act ensures that state and local emergency preparedness operational plans address the needs of individuals with household pets and service animals during and following such emergencies. Leonard and Scammon provide an interesting review about the value and meaning of the pet in the society that are reflected in the PETS act. They suggest that pets could be seen as existing with their own set of rights and thus deserve protection in this Act, or as a special possession of humans that require a special legal status. In these regards a move towards the animal-rights and animal-liberation perspective of Singer might be detected, and the way animals are viewed in

Japan — both as a species and as an adjunct to human behavior — needs to be seen in an evolving cultural context.

Here it is important to note that most of the studies just mentioned are set in an American (or at best a Western) context. For that reason it is useful to consider how the relationship between animals as companions and their human guardian is changing in the non-Western world. We may thus ask about the enduring impact of traditional cultural outlooks and the extent to which affluence and the spread of urban lifestyles are likely to change the way people view and treat animals in other societies. This research contributes to that questioning by considering the way in which one highly developed Asian society has responded to the plight of pet owners following a major disaster.

3.0 Evidence from Post-Tsunami Japan. Inokuma writes that dogs crossed over to Japan from the Korean Peninsula and from the Nansei Islands (the chain of islands extending from southwestern Kyushu to northern Taiwan) after the Jomon period (14,000BC-300BC). He also notes that the “Japanese Ching” that was kept inside as a pet by medieval aristocrats (32). Nozawa and Nishida argue that cats were probably introduced into Japan from the Asian Continent during the Nara period (AD.710-794) as a “pet” for the aristocracy (365).

For ordinary people, animals had a practical value. Dogs were then kept mainly to protect households and to aid in hunting. Utsunomiya states that cats also had a utilitarian value, as they were able to catch mice, an important task given that rice was often stored in wooden containers, as were kimonos, books, and many other valuable possessions. She reasoned that the cats spread among the common people during the middle in the Muromachi Period (AD1336-AD1573) (108). In the present era, with rapid urbanization, the role of pets begins to change. Ishida writes that the watch dogs had pretty much disappeared by the end of the 1960s (10).

In line with theories about development and social convergence, Hamano argues that rapid economic growth in Japan after the 1950s produced the economic margin that would allow a shift away from keeping pets for instrumental reasons to having them for their consumatory value. In an aging society with fewer children, some people are seeking to own companion animal for psychological reasons. In that context the companion animal can become “an eternal child” for parents in what remains of the nuclear family after the children have grown up and left (22). Ozaki and Ozaki and Sakurai argue that a “pet boom” occurred from around 1990 with the registration of

dogs rising 1.5 times from 3.8 to 5.8 million animals between 1990 and 2000. The number of registered dogs has since continued to rise, and the figure stood at 6,785,959 in 2013 (Ministry of Health, Labour and Welfare of Japan MHLW, *Annual*) (See Figure 1). In Japan, the Rabies Prevention Law of 1950 requires owners of dogs to register their dogs with local governments within 30 days after acquiring the animal. Although owners do not always follow the guidelines, the government figures give us fair idea as to how the number of dogs is changing over time. Based on its own survey of 50,000 people, Japan Pet Food Association estimated the number of dogs in Japan was 10.346 million in 2014. There is no official registration system for cats, but the Association's estimate for cats was 9.959 million.

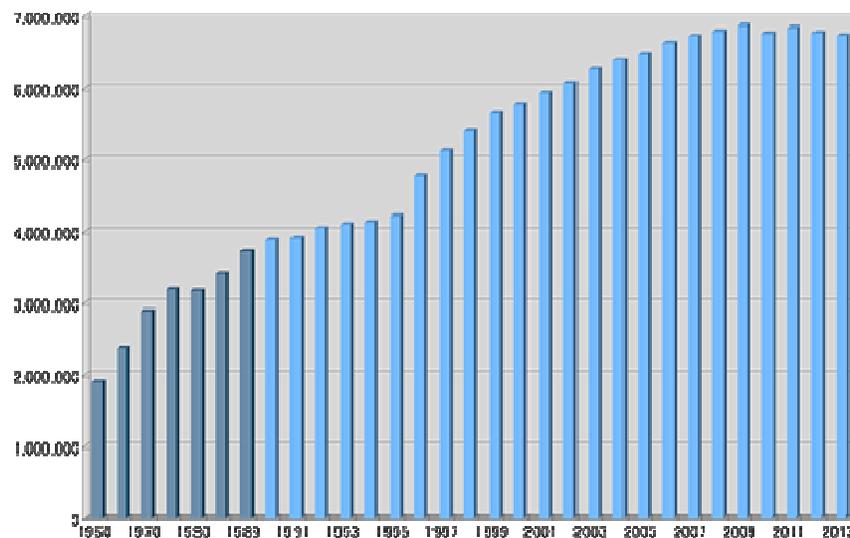


Figure 1: Registered Dogs in Japan: 1960-2013 (Source: Ministry of Health, Labour and Welfare of Japan [MHLW])

Although by many measures the relation between Japanese and their dogs could be described as “very close,” the majority of owners kept their dogs outside until the beginning of this century, perhaps reflecting the ingrained cultural practice of removing footwear when entering a home. However, one survey in 2014 found that 80 percent of owners were now keeping their pet dog indoors (Japan Pet Food Association). Although only 1 percent of apartments sold in the Tokyo metropolitan area in 1998 permitted pets, by 2007 the figure had risen to 86.2 percent (Real Estate Economic Institute). Kakinuma also found that 80 percent of dogs are sleeping indoors, with 30 percent even sleeping in bed with their owner (79-80). The shift to pet ownership can also be detected in Figure 2. It shows that the number of articles in which the phrase

“pet loss grief” (*Petto Losu*) appeared in the title or text of an article. Before 1995 there were no articles about the pet loss grief in Japan’s two major newspapers. After 1995, however, both newspapers began to publish articles on such grief and the number of such articles has remained pretty constant since then. In other words, in this way as well, a strong attachment to pets has also been recognized in the Japanese society since the mid-1990s.

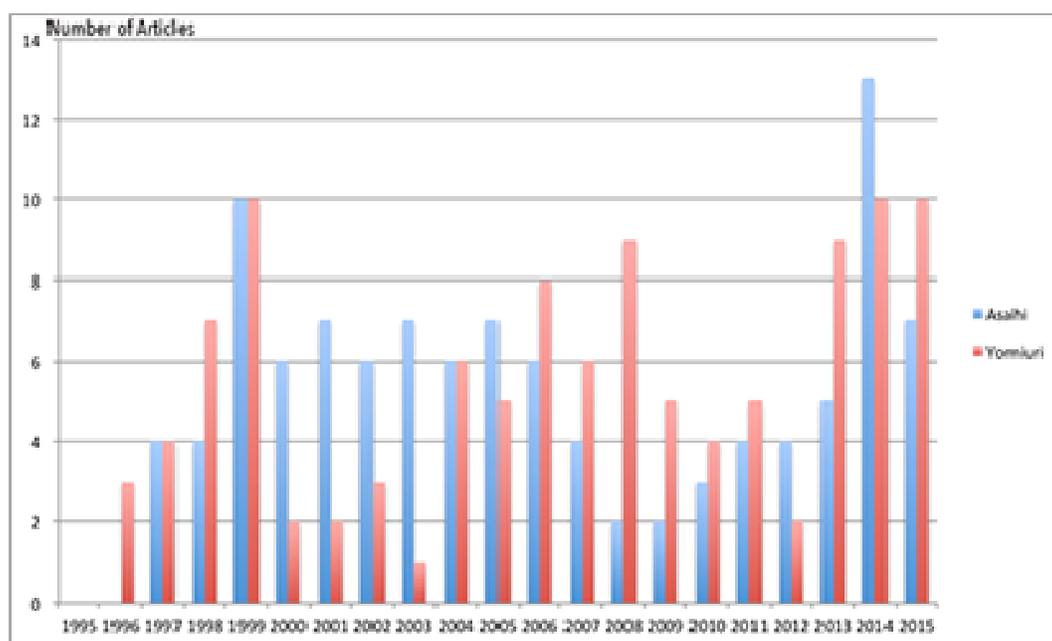


Figure 2: Articles about Pet Loss Grief (Source: Compiled by the authors from the Asahi Shinbun’s database “Kikuzo II Visual” and the Yomiuri Shinbun’s database “Yomidasu Rekishikan.”)

Today, about 34.3% of Japanese households keep some kind of pet (Cabinet Office, Government Of Japan CAO, *The Summary*). The Yano Research Institute estimates that in 2013 pet owners spent about 1.4 trillion yen (about US\$11.4 billion) at pet shops for pet food and for other pet related supplies and at veterinary clinics. According to Anicom Insurance Inc., in 2014 pet owners spent J¥360,000 yen (about US \$3000) for each dog on average and J¥180,000 (about US \$1500) for each cat.

In the mid-afternoon on 11 March 2011 the Tohoku region in Japan was struck by a large earthquake and the tsunami that followed. This was the largest earthquake on record in Japan, and the fourth most powerful earthquake in the world since modern record-keeping began in 1900 (Ministry of Education, Culture, Sports, Science and Technology MEXT). About 18,500 people died from the tidal wave (National Police

Agency). Furthermore, although causing no deaths from radiation, the Fukushima No.1 nuclear power plant was seriously damaged and released much radiation which continues to be an on-going issue for those living in that part of Japan. Although the number of animals that died is not known, Miyagi Veterinary Medical Association estimates ten thousand dogs and cats were lost only in Miyagi Prefecture. In 2014 239,000 victims were still living as refugees at various locations around the nation (Reconstruction Agency of Japan).

On 11 March many people evacuated with their companion animals. In ordinary times those animals are accepted by most Japanese as members of their owner's family on a kind of live-and-let-live basis. When evacuating, however, many pet owners suddenly discovered that the value afforded their pets by many of their fellow victims was rather low, in keeping with the idea that "human needs" would and should be given a much higher priority. People with pets were refused entry to many communal shelters and some were forced to abandon their pets. People who did not give up their pets often had to survive outside the framework for emergency support that had been established by government authorities and by many of the voluntary groups that swung into action.

Japan has a long history of frequent earthquakes, typhoons, volcanic explosions, and other natural disturbances. Although the Great Hanshin-Awaji Earthquake in 1995 and the Great East Japan Earthquake in 2011 were especially devastating, little research has been conducted on pets and pet owners caught up in those events. This paper reports on a qualitative study of the experience of pet owners who sought to evacuate with companion animals following the tsunami in March 2011. The content of interviews, field notes, governmental reports, news, and the website of Sendai City in Miyagi prefecture were analyzed to find answers to the following four questions:

- What meaning did having companion animals have for pet owners?
- Once the tsunami hit, how did that meaning change?
- How did the owners have to struggle to maintain their relationship with their companion animals?
- How did their relationship with their animals change in the aftermath of the tsunami?

4.0 Methodology. Forty seven individuals were interviewed in the three prefectures affected by the tsunami: Iwate, Miyagi and Fukushima (see Figure 3). Table 1 provides a breakdown of the interviewees.

		Male		Female		Number Housing Complexes Visited	Total
Pet Owners		20		15			35
	Age	Under 30	0	Under 30	0		
		30-50	5	30-50	1		
		51-65	6	51-65	6		
		66+	9	66+	8		
	Prefectural Distribution	Iwate	1	Iwate	4*	2	
		Miyagi	4	Miyagi	10**	2	
		Fukushima	10	Fukushima	6	5	
Other interviewees		4		8			12
Total		24		23			47

Notes: * One female interviewee in Iwate lived in her own house.

** The one female interviewee at Miyagi had moved to another place.

Table 1: The Interviewees



Figure 3: The Three Prefectures Most Affected by the 11 March 2011 Tsunami

Semi-structured interviews lasting 60-150 minutes were conducted with each interviewee. Overall, 13 field trips were made to obtain interviews in the three

prefectures from August 2013 to March 2015. A casual follow-up interview was carried out with most interviewees. In addition to the 35 pet owners, representatives of an animal welfare organization working with persons in the temporary housings, a pet beauty parlor owner, a city bureaucrat and 3 animal rescue activists were also interviewed in Miyagi Prefecture. Throughout field notes based on observation at each location were also taken.

All interviews were recorded with the signed consent of the interviewees and then later transcribed. To better evaluate the interview data, reports of the Ministry of Environment of Japan, which has jurisdiction over companion animals and other information released by Sendai City, were accessed from their websites.

4.1 The Sample. A snowball sample was used in each of temporary housing complexes in the three prefectures. Before interviewing I contacted the presidents of the neighborhood associations or the informal leaders within each of the housing complexes. Once the details of the research were explained, the presidents or leaders also helped the snowballing process by providing introductions to potential interviewees. The research was explained again to each of the potential interviewees.

This “base camp” for this study was in Miyagi Prefecture for several reasons. First, the number of registered dogs in Miyagi Prefecture in 2011 was 135,587 (Ministry of Health, Labour and Welfare of Japan MHLW, *The number*). The number of cats is unknown. Second, the presidents of the neighborhood association at each of two temporary housing complexes in Miyagi had a pet, and were readily sympathetic to the research. Third, the makeshift temporary housing complexes were first built most in Sendai City immediately after the disaster. Consequently, many pet owners gathered who were first excluded from shelters in that area. Fourth, the housing complexes in Miyagi were the largest with one complex including 233 houses, and other the other including complex including 194 houses.

The first interviews were with the leaders at each temporary housing complex I visited. They introduced me to the next person, and that person introduced the third and fourth persons, and so on. This proved to be a straightforward process for several reasons. The leader at each complex had already built close ties with all the residents in their crowded temporary housing complex. Moreover, because two years had passed since the tsunami, all of the informants were able to talk freely about their experience. Snowball sampling also had some limits. First, pet owners less well acquainted with the leader of their complex were not considered for the sample. Moreover, it was difficult to

schedule interviews with some residents who were working, despite their having responded positively to an initial introduction. The sample was skewed some toward older residents who were more accessible. However, Japan has the most aged advanced population in the world with 26% of Japanese aged over 65 in 2014 (Cabinet Office, Government Of Japan CAO, *Annual*). Moreover, within Japan demographic aging is most advanced in the Tohoku region where the tsunami hit in 2011. According to the Miyagi prefectural government in 2014, 43.8% of the persons in the prefecture's temporary housing complexes were over 65 years of age. This reflects the fact that elderly people living with their pets are concentrated in the public facilities, because the elderly and pet owners are often refused accommodation by the owners of private rental apartments. According to the leader of one public temporary housing complex which I investigated, 70% of the residents were aged over 60. Conversations with government officials and other volunteers indicated that the experiences gleaned from the snowball sample were not unusual.

4.2 The Interviews. Although the interviews were semi-structured, interviewees were allowed to talk freely and often integrated other information of their life stories into their narratives. This is in line with Frank's suggestion that qualitative data becomes very much richer when people relate their experiences of life in their own way.

Each leader's interview was held in a meeting room in the office area at his or her complex. All other interviews were held in the interviewee's own home, usually in the main living area. The pets were always present, and sometimes other family members who lived together sat at the same table. As I travelled to the field many times, I was able to revisit many interviewees and gain further insights from those informal chats. Sometimes I walked a dog with an interviewee; at other times I played with the interviewee's cats.

Apart from asking for demographic information concerning the interviewees and their pet(s), I often began by asking them about life and their relationship with their companion animal before the tsunami hit in March 2011. I followed up with a general question about events on the day of the disaster, and then allowed interviewees to proceed to talk about their experience after the 11th of March. Often without prompting, interviewees reflected on the existence of their pets, the support they required at the time of the disaster and afterwards, and their hopes and plans for the future once they are able to leave the temporary housing.

4.3 Observation. While in the field, I stayed at the places visited until evening, often sitting on one of the benches placed in an open area provided within the confines of a temporary housing complex. This allowed me to observe people and their pets. Many of the owners walked their dogs, and occasionally some would walk their cats. That allowed me to observe the interaction between people, between people and animals, and between animals. At one housing block I was able to participate in the summer festival. At another I participated in the *karaoke* singing that occurred twice a week. I recorded in my field notes what was noticed on such occasions.

4.4 Ethical considerations. The interviewees were promised confidentiality and anonymity. They were told that their participation was voluntary, and that they could withdraw from the research at any time. Two copies of the consent form were signed by both the interviewer and the interviewee, with one copy remaining with each party. The interview records were carefully kept to protect the interviewees' privacy. First, after transcribing the interviews, a unique code was assigned for each interview record so that the transcribed notes would not reveal who the interviewees were. Second, the transcribed notes and interview audio records were stored separately in locked locations. Third, only I would have access to the original data, although the transcripts, which are in Japanese, might be made available to committed researchers after a set period of time. Finally, a Japanese general family name was randomly assigned to each interviewee in this article. Although a fictitious name was assigned to a pet, the English name was given for an English name and a Japanese one for a Japanese name.

5.0 Findings. The discussion below is organized around the four research questions posed above. Sections 5.1 and 5.2 focus on the nature of the relationship between owners and their companion animals before and after the tsunami. Section 5.3 describes the efforts of owner to maintain the relationship with their animal companions in the confusion after the tsunami. Section 5.4 considers how the relationship between owners and their animal companions changed following the tsunami. From those findings, the notion of "companion animals first" is forwarded as a useful category when evaluating the responses of many pet owners who are displaced by a large natural disaster.

5.1 Companion Animals as Children. All interviewees referred to their companion animal as their "child" when talking about life before the tsunami, and these "children" seem to exist independently from whether the interviewees had real children. For example, Mr. Takahashi (aged 51) had a son and a daughter, and simply considered "Muffin, his Welsh corgi, to be his "second daughter." Mrs. Tanaka (aged 61) complemented her two sons and three daughters with a fourth daughter, "Riku" (a

mixed large-breed dog), who, in Mrs. Tanaka's opinion, was "100 times cuter than any of my three daughters." Living alone, Ms. Hayashi (aged 63) spoke about Ranmaru (her mixed breed cat), saying, "He is my child even though he probably thinks of me only as a buddy." That sense of there being a child-like relationship was also reflected in terms such "my kids" (*uchino kora*) or "good boy" (*yoi ko*). Their behavior conjures up images of Blouin's "humanistic orientation." Blouin argues that "humanistic" owners often personify their dogs in humanistic terms and usually treat them as children in order to enjoy a closer attachment to their pet. However, the meanings expressed by the word "child" by the respondents in this study seem to be more varied than in the study described by Blouin.

Although this sense of parent-child relationship pervaded the interviews, living with a companion animal held different meanings for each of the interviewees and reflected differences in the way the animals functioned within each household. When Mr. Watanabe (aged 71) talked about his companion, he mentioned that Duke (a Shih Tzu) served as a "*kasugai*" (clamp or clasp), a term often used to refer metaphorically to indicate something that binds husbands and wives together and helps them to overcome difficulties in their marriage. A Japanese proverb states that "a child is a *kasugai*." When Mrs. Sasaki (aged 85) lost her son 13 years ago, her nephew, who is a veterinarian, suggested that having a dog might help her overcome her grief and loneliness. She claims that John (a Shih-Tzu) actually became like her son. Ms. Nakamura (aged 37) had been suffering from depression for more than ten years when she adopted a kitten. Her Lu (a mixed breed cat) helped her mentally to get through 3-11, and for that reason she thinks of Lu as being her eldest daughter.

Another important point to note is the choice of a name for one's pet. Interviewees tended not to give their pets traditional Japanese names (e.g., such as "Taro" or "Hanako." Many pets had English names. While the "foreignness" of the name might suggest that having a pet was not a Japanese practice, names were all friendly names such as "Bob," "Jodie," and "Muffin." Diminutives in English were easy to pronounce and suggestive of a certain "cuteness" or intimate closeness that would not resonate with more formal names such as "Elizabeth" or "William." At the same time, the foreignness also seemed to indicate the limits to which the parent-child fiction might be taken. Although companion animals were described as children, there was no sense of responsibility for bringing up their pets to be independent adults. In other words, the companion animals in this study were destined to remain as children who never grow up. It then follows that one role of these companions is to be showered with constant affection all the time, suggesting that their owners have a human need not only to

receive affection but also to be giving affection. While that might be seen as a maternal instinct, that orientation was found in all interviewees regardless of their gender.

5.2 The Impact of the Tsunami. Many of the interviewees whose lives were threatened by the tsunami believed that their animals had saved their life. Mrs. Kimura (aged 64) and Mr. Watanabe (aged 71) claimed that their dogs, who were riding in their car as they drove to escape the torrent of black water, conveyed a sense of urgency, as though urging their owners to flee with even greater alacrity. It was as though they were yapping, “Let’s go! Hurry! Hurry!” As a result, each person kept their foot on the accelerator and charged full speed ahead, thereby just barely escaping the tidal waves. Ms. Nakamura (aged 37) told how she had to wait for eight hours to be rescued after the sea had suddenly plunged into her room. She insisted that she had been kept awake by the faint cry of Lu (her mixed breed cat) who had managed to reach “high ground” on top of the closet:

Lu continued to call for me with her little voice, “meeeow! meeeow!” in order to keep me awake. As a result I never fell slept and could survive.

In these stories Irvine’s notion of the animal as a “protector” emerged (Irvine, *My Dog* 114). Even when the companion animals died, their death was seen as being the ultimate sacrifice to protect their owner. The narrative of Mrs. Yoshida (aged 56), who lost a cat and a dog to the tidal wave, related how her pets had died so that she and her family members would survive. Three years later she was still thanking her dog and cat for saving her family’s lives. Such persons irrevocably associate their own survival with the animal who died saving them. However, they do not think that animals have a supernatural or religious ability. Rather they are proud that their “child” saved their life.

Many of the animals that survived had come to embody the lost world of their owners whose homes had been destroyed or carried away by the tsunami, leaving only a wasteland behind. Pictures and objects reminding their owners of the past were lost forever. However, in line with Stewart’s concept of “special animals,” the interviewees in this study suggested ways in which their animals had become a bridge to a past which seemed to float forever in the back of their minds. In her book, she wrote “... every animal is special in its own way, but some become more special to their owners than others” (8). She goes on to define six types of the extra special animals. One type in particular served to link past events or transitions to the present in ways that allowed their owners to “stay in touch” with their lost worlds.

For yet others, such as Mrs. Yamada (aged 33), pets came to symbolize a shared “victimhood.” Once Mrs. Yamada had been rescued following the earthquake, her first thoughts turned to Pansy (her Maltese dog). She confided:

I came back to the house on foot, it took hours. It was very cold ... [and] it was already night, and pitch-dark. I thought that Pansy might be dead. While I was yelling out her name, I pushed my way through the rubble in the house. Then I heard her voice! She survived! Because my husband was abroad on business, we moved to the emergency accommodation, just two of us, Pansy and I. Then people began to tell me, “Persons with a dog can't come in.” I was so surprised. ... It took a while for me to realize that for other people Pansy was only a dog.

The stories of interviewees such as Mrs. Yamada highlighted the existence of discrimination or arbitrariness in society, as the owners came to recognize the existential gap that existed amongst people when it came to assigning a value to their companion animals. Before the tsunami they had never been a position where they had to justify the existence of their pets or to think in detail about that gap. In this way many experienced a new dimension to being the owner of a pet as they shared hardships with their companions after the tsunami. They felt that the need to prioritize animal life and human life in a different way had been imposed upon them, and in this regard their relation with some of the significant people in their lives had fundamentally changed. Suddenly they were confronted with a deeper set of human-first-above-all-else survival instincts many of their friends and acquaintances had not previously revealed. As a result, they felt they had been forcibly dragged into a harsh new world that existed beyond the confines of their own cocoon-like existence.

5.3 Four Strategies to Maintain The Relationship. Interviewees who were refused emergency accommodation with their pets had had to struggle to maintain their relationship with their companion animals. Most experienced a hiatus of three to four months before they were able to locate accommodation in a temporary housing complex. However, they were proactive in seeking solutions to their dilemma.

Confronting the system. Two owners (Mr. Watanabe, aged 71, and Ms. Ito, aged 36) parked their cars in front of the emergency accommodation and continued living in the car with their dogs. Mr. Watanabe told his experience:

I argued with the director of the gymnasium many times. I repeatedly requested that he let me and my dog in, just to sleep anywhere during the night. But he repeatedly and emphatically refused. He said “there might be people who have a dog allergy” or “the regulation require that we ‘keep animals out’” as he gabbled on and on, blah blah blah!

Ms. Nakamura (aged 37) did not have a car, but stubbornly faced those in charge of one emergency accommodation facility, repeatedly telling them “Lu(cat) is my family.” Not knowing what to do with her, they repeatedly shifted her from one room to another while repeating their own mantra, which was that having companion animals ran against the rules. Ms. Nakamura’s and Lu’s mental fatigue were severe.

Returning to a destroyed residence. After being evacuated, four owners returned to their partially destroyed house even though they had been prohibited from doing so by the authorities. Although the area in which they lived had been declared dangerous owing to the high possibility of aftershocks, they continued to stay with their pets in their dilapidated homes in defiance of the authorities. In doing so, they clearly place themselves outside the framework that had been established by the government on behalf of all the displaced victims of 3-11.

Making alternative arrangements. Four interviewees were able to find emergency accommodation for themselves and their pets with relatives. In terms of social network theory, they were using their “strong ties” as social capital in ways conceived by Granovetter. However, they came gradually to feel guilty and ashamed, as their relatives continued to house them without any financial demands. After the initial shock of having escaped the tsunami subsided, two of them moved to a public refuge and leashed their dog to trees outside the gymnasium that was being used as a shelter.

The choice of one of the above strategies often reflected a rational assessment of the situation in which several factors were at play: the individual’s personality, their economic and social capital and the relative degree of social vulnerability. Having said that, it was also clear that each interviewee had given careful consideration to the needs of their companion animal. Here the breed of the pet seemed to be important, partly as a parameter defining what was physically possible for the animal, but also partly reflecting the owner’s perception of what his or her pet could tolerate. Mr. Watanabe (aged 71) felt strongly that his boy (John, a small Shih-Tzu) would die if kept outside as requested by the managers of the shelter where he stayed. (In much of northeastern Japan that was affected by the tsunami it is important to remember that even in March

the temperatures are often below freezing.) Mrs. Kobayashi (aged 52) continued to keep her two cats in her dilapidated apartment in a restricted area, commenting that she never thought she would bring Hinano and Yui (her two mixed breed cats) to the emergency accommodation. She believed strongly that her cats would suffer from diarrhea at the place where dogs and many people were congregated, because her cats are especially nervous. Because Mrs. Kimura (aged 64) and Mr. Kato (aged 72) had always kept their robust medium-sized mixed-breed dogs outside, they were happy to have their animal stay outside when offered accommodation with a relative. In both cases the animals served as watchdog guardians, thereby in some ways might be understood as providing a loose form of social exchange. In saying the strategy of owners to maintain their relationship with their companion animals reflected to some extent the breed or other characteristic of their pets, what was most significant was not the actual vulnerability of the animals but the owners' interpretations of their companion animals' needs.

Suffering in silence. In contrast to the above interviewees who were proactive in meeting what they saw to be the needs of their animals, two people who lost their pets did not speak to others about their loss. Mrs. Tanaka (aged 61) who lost two mixed large-breed dogs explained:

How can I say it? If I talk, it will be painful, ... too painful. And how can someone understand? ... Nobody can understand our grief. You often see the "specialists" on television, don't you? When I see them come on the screen, I think "AGAIN?" I can only stare dumbfounded and blankly at such "specialists" [e.g. Psychologists]. I think, what the hell are you talking about? An expert in what? Can you understand the inside of our heart properly? So much for such experts!

They mentioned two reasons for suffering in silence. First, in line with Doka, some persons would not have seen the loss of their pet as socially or psychologically significant even in normal times, and even much less so in the extraordinary aftermath of the tsunami (11). Given that the March disaster was so huge, with the tremendous multiple losses many experience — humans, homes, infrastructure, and places of employment, etc. These two felt that it was difficult to compare in any way the grief they experienced from losing a pet with the grief that many other people with greater losses were experiencing. Moreover, in their normal lives they were not accustomed to communicating with strangers. Neighbors and others they might have talked with had died or ended up in different locations. We can reason that they might have been able to

locate their friends using the internet, but they did not have the skills to do so. As a result, once they had left their homes and communities, they spoke to no one about their grief. However, each of the interviewees did manage to “adopt” a new companion animal within one year.

5.4 Changed Relationships. Many of the tsunami victims lost everything except their pets, and the bond with their companion animal became stronger. The animals may also have felt that bond strengthen, but did not require from their owners a logical or existential explanation. Before the tsunami, the owner’s relationship with a companion animal was simply part of their ordinary life, taken for granted. However, once removed from their familiar surroundings they had to fight tenaciously to continue living with their companion animals and in some cases even for the right of their animal to survive. It is only natural that such persons would then be even more committed to maintaining a future with their pets.

Almost all of the companion animals belonging to the interviewees in this study experienced decrease in appetite, physical deterioration, and illness. The owners stated that their companion animal had become very nervous and showed signs of separation anxiety. Mrs. Yamada (aged 33) reported that Pansy, her Maltese, was diagnosed by a veterinarian as having PTSD. Whenever Mrs. Yamada went out, Pansy would whine intensely, causing her to take Pansy with her as much as possible. Recognizing this kind of vulnerability, many of the owners started to keep indoors companion animals that had previously remained outside. One exception was Mr. Kato (aged 72) who kept his dog outside in a doghouse.

Many of the victims of the tsunami were middle-aged and elderly, widowed, or otherwise living alone in communities devoid of a younger generation. They were at an age and a stage in life where it would generally be difficult to reconstruct their lives as they had been before the tsunami. Many felt powerlessness. Even among the proactive interviewees, many had acted out of a belief, even a hopelessness, that they had nothing to lose. Nevertheless, with whatever limited resources they might have had, many interviewees described their desire to build new houses for their companion animals or to move to public housing where pets would be accepted. Ms. Ito (aged 36) and her father showed a drawing of a new house that included a garden where dogs could run around. The plan that the father drew in a pencil was accurate. He is a retired carpenter who looks forward to building a house as soon as feasible. Mrs. Kimura (aged 64) said that she was happy where she was, but nevertheless would like to build a house for her dog. Because they will live with two or three generations together in new house, they

will be able to get a “two-generations loan.” For such interviewees, the relationship with companion animals and having a plan to do something “together” symbolized the desire to start a new life.

Considering the above, the outlook taken by many interviewees might be described as a “*companion animal first stance*.” These are people who want to give first priority to their pets. Mr. Watanabe (aged 71) who is a guardian of John (Shih-Tzu) described specifically his stance:

[After a tsunami] I behaved John-centered. All that I did was for John, John, John. I was very much concerned about him rather than my wife!
(laugh)

At the time of a disaster when many seem to attach a prime value on human life, the interviewees often felt themselves to be out of step with the many other Japanese with whom they had to live, and were certainly at odds with policy makers and administrators who had been given the task of looking after the victims. Be that as it may, those who took a “companion animal first stance” were also seeking to reaffirm their faith in life. By accepting that stance as a valid perspective, the relocation of victims might have been carried out much more smoothly and with much less trauma for those owing pets.

The findings indicate clearly that after the tsunami, companion animals played a positive role in lives of those interviewed, charging lives with hope for the future. For some animals this meant that they would come to embody the owners’ lost worlds. Many owners seemed to benefit from the sense of loyalty and the affective affirmation they believed they had received from their pets. Although the behavioral choices made by owners sometimes brought risks to their own health and safety, their choices seldom rebounded negatively on others in the community. To a certain extent all they sought was a return to the live-and-let-live equilibrium that existed before the tsunami. In any case, the attachment of the owners to, and perhaps dependence on, their companion animals seems to have been strengthened as a result of the disaster. It remains to be seen how far those strengthened relationships will be reflected in a significant society-wide transformation in the way animals are seen in a Japanese society where pets are coming to have an increasingly conspicuous presence. This begins to touch on notions of animal rights and will invite considerable debate in coming years.

6.0 Conclusion. In this study, the relationship of humans and their companion animals after the great 3-11 disaster were studied. The findings are, similar to those of Potts and Gadenne, that the companion animals became more important for owners after the disaster. This outcome was labeled the “*companion animal first phenomenon.*” It is an orientation which gives priority to companion animals above all else. Whether that orientation is long-term or not remains to be seen, but in the immediate aftermath of the March 2011 tsunami in Japan it is an important factor to consider when trying to understand the behavior of many pet owners during and after a major catastrophe.

Most survivors are now beginning to move into newly built public housing. Although some public housing in Sendai City permits companion animals, generally pets are not allowed in public housing in Japan. Most private rental housing also restricts pets. However, the interviewees in this study who have survived with their companion animal will find it extremely difficult to begin new lives without their pets. Further research is needed to establish the extensiveness of the animal first outlook, but the need for more inclusive policies for dealing with at least some of the victims in the immediate aftermath of a sizable natural disaster should be obvious.

As mentioned previously, the relationship between humans and their pets has become increasingly closer in Japan. However, although the importance of considering that relationship during a disaster now appears on the agenda in many modern urbanized societies, few studies have focused that on what happens to that relationship when visited by such extraordinary circumstances. Even from a purely anthropocentric point of view, the importance of such research for humans who own pets cannot be refuted. It is hoped that the findings from this and other similar research will contribute to meeting that need, in part by encouraging a greater amount of comparative research in different cultures including those of Asia and of traditional societies now being shaped by the forces of globalization — forces that impel us to probe further and to recast questions about the convergence of human societies and the ethos they are likely to embrace in the near future.

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Note

1. For the sake of convenience “companion animal” and “pet” are used interchangeably in this paper, as are “guardian” and “owner.”

Works Cited

Anicom Insurance, Inc. "Annual expenditure investigation for pets 2014" <http://www.anicom-sompo.co.jp/company/news/news_0150202.html> 4 Nov. 2015.

Beck, Alan, and Aaron Katcher. *Between Pets and People: The Importance of Animal Companionship*. Revised ed. West Lafayette : Purdue UP, 1996.

Blouin, David D. "Are Dogs Children, Companions, or Just Animals? Understanding Variations in People's Orientations toward Animals." *Anthrozoos* 26.2 (2013): 279-294.

Brackenridge, Sandra, et al. "Dimensions of the Human-Animal Bond and Evacuation Decisions among Pet Owners during Hurricane Ike." *Anthrozoos* 25.2 (2012): 229-238.

Cabinet Office, Government Of Japan(CAO). "The Summary of Opinion Poll About Animal Protection 2010 October." <<http://www.env.go.jp/press/files/jp/16451.pdf>> 21 Jul. 2015.

_____. "Annual Report on the Aging Society 2015." <<http://www8.cao.go.jp/kourei/whitepaper/w-2015/html/zenbun/index.html>> 30 Jan. 2016.

Carlisle, Gretchen K. "Pet Dog Ownership in Families of Children with Autism: Children's Social Skills and Attachment to Their Dogs." Diss. U of Missouri at Columbia, 2012.

Doka, Kenneth. *Disenfranchised Grief: New Directions, Challenges, and Strategies for Practice*. Illinois: Research P, 2002.

Frank, Arthur W. *Letting Stories Breathe: A Socio-narratology*. Chicago: U Chicago P, 2010

Franklin, Adrian. *Animals and Modern Cultures: A Sociology of Human-Animal Relations Modernity*. London: SAGE , 1999.

Gaeng, Marianne, and Dennis C. Turner. *Mit Tieren leben im Alter*, Reinhardt Ernst. Munich: Ernst Reinhardt Verlag, 2005

Granovetter, Mark. S. "The Strength of Weak Ties." *The American Journal of Sociology* 78.6 (1973): 1360–1380.

Gunter, Barrie. *Pets and People: The Psychology of Pet Ownership*. New Jersey: Wiley, 1999.

Herzog, Harold. "The impact of pets on human health and psychological well-being: Fact, fiction, or hypothesis?" *Current Directions in Psychological Science* 20.4 (2011): 36-239.

Hamano, Sayoko. "Katei Dobutsu to no Tsukiai" (Relations With The Family Animals). *Nihon no Dobutsu Kan: Hito to dobutsu no Kankei Shi* (Japanese Attitudes Toward Animals: A History of Human-Animal Relations in Japan). Ed. Osamu Ishida, et al. Tokyo: U of Tokyo P, 2013. 19-35.

Hunt, Melissa, Hind Al-Awadi, and Megan Johnson. "Psychological Sequelae of Pet Loss Following Hurricane Katrina." *Anthrozoos* 21.2 (2008): 109-121.

Hunt, Melissa G., Kelsey Bogue and Nick Rohrbaugh. "Pet Ownership and Evacuation Prior to Hurricane Irene." *Animals* 2 (2012): 529-539.

Inokuma, Hisashi. *Inu no Dobutsu Gaku: Animaru Saiensu* 3 (Zoology of Domestic Dogs: Animal Science 3). Ed. Hayashi, Yoshihiro and Sato, Eimei. Tokyo: U of Tokyo P, 2001.

Irvine, Leslie. *Filling the Ark: Animal Welfare in Disasters*. Philadelphia: Temple UP, 2009. Kindle version.

_____. *If You Tame Me: Understanding Our Connection With Animals*. Philadelphia: Temple UP, 2004. Kindle version.

_____. *My Dog Always Eats First: Homeless People and Their Animals*. Boulder: Lynne Rienner, 2013.

_____. "The question of animal selves: Implications for sociological knowledge and practice." *Qualitative Sociology Review* 3.1 (2007): 5-22.

Ishida, Osamu, "Josho Dobutsu-kan no Keifu" (Introduction: The Genealogy of Attitudes Toward Animals). *Nihon no Dobutsu Kan: Hito to dobutsu no Kankei Shi*

(Japanese Attitudes Toward Animals: A History of Human-Animal Relations in Japan). Ed. Ishida, Osamu, et al. Tokyo: U of Tokyo P, 2013. 1-16.

Japan Pet Food Association. "National breeding survey of dog and cats 2014: Summary of key indicators." <<http://www.petfood.or.jp/data/chart2014/01.html>> 17 Jul. 2015.

Johnson, Rebecca A., Alan M. Beck, and Sandra Mccune. *The Health Benefits of Dog Walking for People and Pets: Evidence and Case Studies: New Directions in the Human-Animal Bond*. Indiana: Purdue UP, 2011.

Kakinuma, Miki. "Hattatsu Shinrigaku Kara Mita Kainushi to Inu no Kankei - Hito no Migattena Yokyuni Honrosareru Inu" (The relationship between Owner and Dog in The View of Developmental Psychology: The Dogs who Are Trifled With The Selfish Demand of Human). *Petto to Shakai: Hito to Dobutsu no Kankeigaku 3* (Pets And Society: The Study of Human Animal Relations 3). Ed. Yoshihiro Hayashi, et al. Tokyo: Iwanami Shoten, 2008. 76-99.

Kruse, Corwin R. "The Relevance of 'Animal Issues' for Sociology." *ISAZ Newsletter* 20 (2000): 2-6.

_____. "Social Animals: Animal Studies and Sociology." *Society and Animals* 10.4 (2002): 375-379.

Leonard, Hillary A. and Debra L. Scammon. "No pet left behind: Accommodating pets in emergency planning." *Journal of Public Policy & Marketing* 26.1 (2007): 49-53.

Ministry of Education, Culture, Sports, Science and Technology (MEXT). *White Paper on Science and Technology 2012* (Provisional Translation) : Toward a Robust and Resilient Society – Lessons from the Great East Japan Earthquake. Tokyo: MEXT, 2012. 13.

Ministry of Health, Labour and Welfare of Japan(MHLW). "Annual transition of the number of registration and vaccination of dogs, 1965-2013 fiscal year." <<http://www.mhlw.go.jp/bunya/kenkou/kekkaku-kansenshou10/02.html>> 17 May 2015.

_____. "The number of registration and vaccination of dogs according to all prefectures 2008-2013 fiscal year." <<http://www.mhlw.go.jp/bunya/kenkou/kekkaku-kansenshou10/01.html>> 17 May 2015.

Miyagi Veterinary Medical Association. "Introduction of Activity: Information Regarding Disaster." <http://miyaju.jp/activity/disaster/disaster_index/> 30 Jan. 2016.

National Police Agency. "Press Release." 10 Jun. 2015.
<<https://www.npa.go.jp/archive/keibi/biki/higaijokyo.pdf>> 23 Jun. 2015.

Nozawa, Ken, and Takao Nishida. *Kachiku to Ningen* (Domestic Animals and Human Being). Tokyo: Idemitsu Shoten, 1981.

Ozaki, Yuko. "Petto Shiiku no Kitei Yoin: Nihon-Ban Sogo Shakai chosa Maikurodeta o Mochiite" (The Determining Factors of Pet Keeping: Using Japanese Version of General Social Investigation Micro Data). *Seikatsu Keizaigaku Kenkyu* (Household Economics Study) 19 (2004): 21-34.

Ozaki, Yuko, and Fujiro Sakurai. "Juigyo no Doko: Kakushu no Tokei Shiryo Kara." (The Trend of Veterinarian Business: From Various Statistics Documents). *JNihon Juishikai Zasshi* (Japanese Veterinarian Society Journal) 55.8 (2002): 533-539.

Patronek, Gary J., and Lawrence T. Glickman. "Pet ownership protects the risks and consequences of coronary heart disease." *Medical Hypotheses* 40.4 (1993): 245-249.

Peggs, Kay. *Animals and sociology*. Hampshire: Palgrave Macmillan, 2012.

Pet Evacuation and Transportation Standards (PETS) Act of 2006. "PUBLIC LAW 109-308-OCT. 6, 2006 109th Congress CONGRESSIONAL RECORD, Vol. 152." <<http://www.gpo.gov/fdsys/pkg/PLAW-109publ308/pdf/PLAW-109publ308.pdf>> 17 May 2015.

Potts, Annie and Donelle Gadenne. *Animals in Emergencies: Learning from the Christchurch Earthquakes*. Christchurch: Canterbury University Press, 2014.

Redmalm, David. "Pet grief: When is non-human life grievable?" *Sociological Review* 63.1 (2015): 19-35.

Real Estate Economic Institute. "Press Release" 3 Apr. 2008. 1.

Reconstruction Agency of Japan. "Zenkoku no Hinansha to no Kazu" (The number of evacuees in Japan). <http://www.reconstruction.go.jp/topics/main-cat2/sub-cat2-1/20141031_hinansha.pdf> 17 May 2015.

Singer, Peter. *Animal Liberation: The Definitive Classic of the Animal Movement*. updated vers. New York: Harper, 2009.

Stewart, F. Mary. *Companion Animal Death: A Comprehensive Guide for Veterinary Practice*. Oxford: Butterworth, 1999.

Thompson, Kirrilly, et al. "No Pet or Their Person Left Behind: Increasing the Disaster Resilience of Vulnerable Groups through Animal Attachment, Activities and Networks." *Animals* 4.2 (2014): 214-240.

Thompson, Kirrilly. "Save me, save my dog: Increasing natural disaster preparedness and survival by addressing human-animal relationships." *Australian Journal of Communication* 40.1 (2013): 123-136.

Trigg, Joshua, Bradley Smith and Kirrilly Thompson. "Does emotional closeness to pets motivate their inclusion in bushfire survival plans? Implications for emergency communicators." *The Australian Journal of Emergency Management* 30.2 (2015): 24-30.

Trigg, Joshua, et al. "Engaging pet owners in disaster risk and preparedness communications: simplifying complex human-animal relations with archetypes." *Environmental Hazards* 14.3 (2015): 236-251.

Utsunomiya, Naoko. *Petto to Nihonjin* (Pet and Japanese). Tokyo: Bungeisyunju, 1999.

Yamazaki, Sakiko. "A Survey of Companion- Animal Owners Affected by the East Japan Great Earthquake in Iwate and Fukushima Prefectures, Japan." *Anthrozoos* 28.2 (2015): 1-14.

Yano Research Institute. " Results of investigation about pet business in 2013." <<http://www.yano.co.jp/press/press.php/001226>> 17 May 2015.

Zeltzman, Phil, and Rebecca A. Johnson. *Walk a Hound, Lose a Pound: How You and Your Dog Can Lose Weight, Stay Fit, and Have Fun Together*. West Lafayette: Purdue UP, 2011.

Zottarelli, Lisa K. "Broken bond: An exploration of human factors associated with companion animal loss during hurricane Katrina." *Sociological Forum* 25.1 (2010): 1101-1122.