How Social Trends Influence Pet Ownership (& Vice Versa)

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What Is a Pet?

*Oxford English Dictionary (OED)*

definition: “Any animal that is domesticated or tamed and kept as a favorite, or treated with indulgence and fondness.”

*Or:* Any animal that is domesticated or tamed and kept primarily as a source of nonhuman social support.
What is Social Support?

“The feeling or belief that one is cared for and loved, esteemed, and a member of a network of mutual obligations” (Cobb, S. 1976. *Psychosomatic Med.*, 38: 300-24).

- **Emotional support**: The sense of being able to turn to others for comfort in times of stress; the feeling of being cared for by others.
- **Social integration**: The feeling of being an accepted part of an established group or social network.
- **Esteem support**: The sense of receiving positive, self-affirming feedback from others regarding one’s value, competence, abilities or worth.
- **Practical, instrumental or informational support**: The knowledge that others will provide financial, practical or informational assistance when needed.
- **Opportunities to provide care and protection**: The sense of being needed or depended upon by others.
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Extent to which different health-related factors reduce risks of mortality (Odds Ratios)

Research on Human-Animal Interactions Has Found Evidence that:

1. Presence of pets is associated with de-arousal—e.g. short-term reductions in heart-rate/blood pressure; subjective feelings of calmness, relaxation.
2. Pet ownership is associated with increased social interaction with others (social catalyst).
3. Pet ownership is associated with fewer risk factors for cardiovascular disease.
4. Pet ownership is associated with improved survivorship with cardiovascular disease.
5. Pet ownership linked to less deterioration in health in response to life events and chronic stress.
6. Pet ownership associated with sustained reductions in people’s physiological reactions to experimental stressors.

Consistent with the view of pets as sources of social support.
My Working Hypothesis

Pet keeping is a form of mutualism: i.e. an interspecies relationship in which both participating species benefit by associating with the other (Serpell & Paul, 2011)

Humans benefit their pets by feeding and caring for them (and not eating them). Pets benefit their humans by acting as a source of nonhuman social support.
Pet Ownership
Past and Present
Pet Keeping Is Not a New Invention

- 12,000 year-old human + “dog” burial from Ein Mallaha in Israel.

- Similar human + cat burial dating from about 10,000 years BP found recently in Cyprus.

- Such discoveries point to strong attachments between people and animals in prehistoric times.
Pet Keeping Is Not a New Invention
Pets among the European Middle Classes
Current US Pet Populations

- 88.3 million cats in 38 million homes
- 74.8 million dogs in 44 million homes
- 16.0 million birds in 6.5 million homes
- 13.4 million reptiles in 4.5 million homes
- 151.0 million fish in 14 million homes

63% of US households now owns at least one pet. 45% owns more than one.

Americans spend about $50 billion annually on their pets

Source: AVMA
USA Pet Populations: 1967-2012 (millions)

The Recent Growth of Pet Populations

Source: AVMA; APPMA
The Recent Growth of Pet Populations


Dogs + Cats as % of Human Popn.
The Recent Growth of Pet Populations

UK Pet Populations: 1965-2004
Short-term Fluctuations

Fluctuations in Popularity of US Dogs based on Body Size, 2001-2013 (000’s)

- **Small Dog Popn (up to 20 lbs or 9 kg)**
- **Medium Dog Popn (20 to 50 lbs or 9 to 23 kg)**
- **Large Dog Popn (Over 50 lbs or over 23 kg)**
Short-term Fluctuations

Fluctuations in Popularity of UK Dogs based on Body Size, 2001-2013 (000’s)

- Small Dog Popn (up to 20 lbs or 9 kg)
- Medium Dog Popn (20 to 50 lbs or 9 to 23 kg)
- Large Dog Popn (Over 50 lbs or over 23 kg)
Dog Ownership in Europe 2001-2012
(% of Households with at least 1 Dog)

Source: Euromonitor International
Cat Ownership in Europe 2001-2012
(% of Households with at least 1 Cat)

Source: Euromonitor International
Estimated Percentage of Households Owning at Least One Cat or One Dog

Source: FEDIAF Facts & Figures 2012
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Estimated Percentage of Households Owning at Least One Cat or One Dog

- Switzerland: 11% Cats, 23% Dogs
- Sweden: 13% Cats, 17% Dogs
- Slovenia: 12% Cats, 30% Dogs
- Slovakia: 11% Cats, 27% Dogs
- Romania: 11% Cats, 45% Dogs
- Portugal: 13% Cats, 32% Dogs
- Norway: 12% Cats, 34% Dogs
- Hungary: 13% Cats, 33% Dogs
- Greece: 14% Cats, 33% Dogs
- Germany: 13% Cats, 16% Dogs
- Czech Republic: 13% Cats, 22% Dogs
- Austria: 12% Cats, 29% Dogs

Source: FEDIAF Facts & Figures 2012
What Is Driving these Trends?

- What has caused the recent long-term growth of dog and cat populations in the developed world?
- Can we account for some of the short-term fluctuations in levels of pet ownership within regions or countries?
- Or the observed regional/national differences in the popularity of different pet species?
Key Assumptions

- Some factors (socioeconomic, demographic, ecological, psychological, etc.) will tend promote pet ownership.

- Others will present obstacles to pet ownership.

Need to consider these separately
Factors that Promote Pet Ownership

Urbanization

Reason 1: Urbanization Is Associated with a Decline in Rural Values and Attitudes to Animals

Compared with urban and suburban populations, rural societies tend to display:

- Less interest in and affection for individual animals, principally pets.
- Less concern for the right and wrong treatment for animals, and less opposition to animal exploitation or cruelty.
- Greater concern for the instrumental or material value of animals.

Two Dimensional Model of Attitudes to Animals

- Beneficial to human interests
- Detrimental to human interests

Utility

-1

Affect

+1

URBAN

Love, sympathy, identification

Beneficial to human interests

RURAL

Fear, loathing, alienation

Pets as a Catalyst of Attitude Change

- The individuals with whom we develop social relationships and attachments in childhood define both who we are (who we identify with) and who we care about.

- Social exposure to animals in childhood expands the circle of ‘care’ beyond the ‘self’ to encompass animals because the animal is perceived as, “the kind of thing whose subjective well-being can be harmed or benefited as a result of the self’s actions.”


“[C]aring for and about dogs and cats is a primary portal to compassion and concern about a wide array of animal protection issues.”

This Shift in Attitudes has Resulted in a Change in the Moral Status of Animals (or at least some animals)

“things”

“persons”
The Rise of Anthropomorphism

The attribution of human mental states (thoughts, feelings, motivations, beliefs, etc.) to nonhumans
Impact on Animal Protection

Membership trends “People for the Ethical Treatment of Animals” (PeTA).
## Trends in Animal Protection Legislation

### Cumulative Number of US States with Felony Anti-cruelty Laws

<table>
<thead>
<tr>
<th>Period</th>
<th>Number of States</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986-1989</td>
<td>7</td>
</tr>
<tr>
<td>1990-1993</td>
<td>9</td>
</tr>
<tr>
<td>1994-1997</td>
<td>18</td>
</tr>
<tr>
<td>1998-2001</td>
<td>34</td>
</tr>
<tr>
<td>2002-2005</td>
<td>40</td>
</tr>
<tr>
<td>2006-2009</td>
<td>46</td>
</tr>
</tbody>
</table>

Reason 2: During the last 40-50 years, urbanization in the USA has also led to a breakdown in traditional social support systems. This trend has been marked by:

- A dramatic rise in the number of people living alone—especially in cities.
- An increase in the numbers choosing not to have children, or having fewer children.
- Escalating divorce rates.
- Fewer close relatives living with easy reach of people’s homes.
- Less involvement in local communities.
- Deteriorating friendships: people spending significantly fewer hours per week socializing with their friends than they did in the 1960s.

Are people using nonhuman social support (pets) to compensate for these trends?

Urbanization Effects on Attitudes to Animals

- Increased need for alternative sources of social support
- Decline in rural/instrumental attitudes to animals
- Increase in pet keeping
- Increased affective responses to animals
- Increased anthropomorphism

Urbanization
Rates of Urbanization Vary from Place to Place
Obstacles to Pet Ownership

1. Expense
2. Travel
3. Time restrictions—Lifestyle
4. Cleaning up
5. Housing restrictions
6. Allergies (cats)
7. Property damage
8. Attitudes to animals
Obstacles to Pet Ownership

1. Expense
2. Travel
3. Time restrictions-lifestyle
4. Cleaning up
5. Housing restrictions
6. Allergies (cats)
7. Property damage
8. Attitudes to animals
Influence of Income

Table 3-3. Percentage of households that owned pets by household income, 2001-2011

<table>
<thead>
<tr>
<th>Household income</th>
<th>2001</th>
<th>2006</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $20,000</td>
<td>47.6</td>
<td>51.3</td>
<td>57.2</td>
</tr>
<tr>
<td>$20,000 to $34,999</td>
<td>53.1</td>
<td>57.3</td>
<td>62.4</td>
</tr>
<tr>
<td>$35,000 to $54,999</td>
<td>57.5</td>
<td>60.6</td>
<td>63.9</td>
</tr>
<tr>
<td>$55,000 to $84,999</td>
<td>62.0</td>
<td>64.2</td>
<td>64.2</td>
</tr>
<tr>
<td>$85,000 or more</td>
<td>62.1</td>
<td>63.6</td>
<td>63.7</td>
</tr>
</tbody>
</table>

Source: AVMA
Influence of Income (USA)

Source: Pew Research Center

Dogs + Cats as % of Human Popn.
Relationship between Dog Ownership and Per Capita Income (Europe-2012)

\[ y = -539.32x + 27079 \]
\[ R^2 = 0.5077 \]

Source: Euromonitor International
Relationship between Cat Ownership and Per Capita Income (Europe-2012)

\[ y = -349.62x + 21947 \]

\[ R^2 = 0.1995 \]

Source: Euromonitor International
Housing Restrictions

According to a recent American Humane Association (AHA) survey:

“Sixteen percent of dog owners gave away their pet as did similar numbers of cat owners (17%). Of those who gave up their animals, the most common reason cited was that the landlord or place of residence did not allow dogs or cats. This was true for 29 percent of dog owners and 21 percent of cat owners.”

This would suggest that people who own their own homes would be more likely to own pets than those who rent, and that this effect might be greater among dog owners than cat owners.
## Housing Restrictions

### Table 3-6. Percentage of households that owned pets by home-ownership status, 1991-2011

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Owned own home</td>
<td>60.7</td>
<td>61.5</td>
<td>58.7</td>
<td>62.3</td>
<td>66.0</td>
</tr>
<tr>
<td>Rented</td>
<td>49.8</td>
<td>49.4</td>
<td>46.7</td>
<td>50.5</td>
<td>53.9</td>
</tr>
<tr>
<td>Other</td>
<td>59.9</td>
<td>59.7</td>
<td>57.6</td>
<td>59.6</td>
<td>62.5</td>
</tr>
</tbody>
</table>

### Table 3-19. Percentage of households that owned dogs by home-ownership status, 1991-2011

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Owned own home</td>
<td>40.7</td>
<td>36.2</td>
<td>39.4</td>
<td>42.1</td>
<td>45.6</td>
</tr>
<tr>
<td>Rented</td>
<td>23.6</td>
<td>22.2</td>
<td>23.8</td>
<td>26.7</td>
<td>29.9</td>
</tr>
<tr>
<td>Other</td>
<td>38.4</td>
<td>32.3</td>
<td>39.4</td>
<td>41.7</td>
<td>42.1</td>
</tr>
</tbody>
</table>

### Table 3-28. Percentage of households that owned cats by home-ownership status, 1991-2011

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Owned own home</td>
<td>31.8</td>
<td>29.2</td>
<td>32.6</td>
<td>34.4</td>
<td>35.3</td>
</tr>
<tr>
<td>Rented</td>
<td>28.4</td>
<td>26.0</td>
<td>28.5</td>
<td>30.3</td>
<td>31.7</td>
</tr>
<tr>
<td>Other</td>
<td>32.3</td>
<td>29.7</td>
<td>32.7</td>
<td>32.9</td>
<td>35.0</td>
</tr>
</tbody>
</table>
Effect of Home Foreclosures

Comcast’s Annual Animal Shelter Poll 2009
(N = 25 shelter directors)

• 91% reported increase in relinquished pets
• 64% noted a decline in adoptions

Comcast Pet Adoptions survey, 2009; S. Zawistowski, ASPCA.
Percent of Europeans who Own Homes without Mortgages

Relationship between Percent of Households with at Least 1 Dog & Percent Owning Homes w/o Mortgages (Europe)

\[ y = 1.7795x + 6.1004 \]

\[ R^2 = 0.4146 \]

Source: Euromonitor International
Relationship between Percent of Households with at Least 1 Cat & Percent Owning Homes w/o Mortgages (Europe)

\[ y = 1.2098x + 21.67 \]

\[ R^2 = 0.1792 \]

Source: Euromonitor International
Conclusions

- The unprecedented growth of Western pet populations in recent years can be attributed to a decline in rural attitudes to animals, and an increasing need to compensate for the fragmentation of traditional social support networks, both of which are associated with the process of urbanization.
- This growth in pet ownership, in turn, contributes to the rise in public concern for animal welfare and rights.
- While a shortage of disposable income may be an obstacle to pet ownership at the individual level, at the national level the opposite is the case (at least in Europe), perhaps due to lifestyle changes associated with increasing affluence that are not conducive to keeping pets, especially dogs.
- Home ownership is a surprisingly consistent predictor of pet ownership, perhaps due to widespread legal restrictions on pets in rental housing.
- Current access to online data on pet populations and human social and demographic trends makes this an ideal time to explore these associations in greater detail.
Questions?