QUESTION: What is the social structure of dogs?

**Viewpoint #1 Tinbergen**


"Within each pack the individual dog lived in a kind of armed peace. This was the result of a very strict "pack order": one dog was dominant and could intimidate every other dog with a mere look; the next one avoided this tyrant but lorded it over all the others; and so on down to the miserable 'under dog'."

Photo: J. M. Packard

Statements I think are observation:

Statements I think are inference:

How objective is this viewpoint? (TIP: place an X on the continuum)

More inference ___________________ Both Inference & Observation ___________________ More Observation
OBSERVATION AND INference CRITICAL THINKING ACTIVITY

QUESTION: What is the social structure of dogs?

Viewpoint #2 Darwin


"When a dog approaches a strange dog or man in a savage or hostile frame of mind he walks upright and very stiffly; his head is slightly raised, or not much lowered; the tail is held erect and quite rigid; the hairs bristle, especially along the neck and back; the pricked ears are directed forwards, and the eyes have a fixed stare: (see figs. 5 and 7)...

Source: Fig. 13 Mugford (2007:228)

Statements I think are observation:

Statements I think are inference:

How objective is this viewpoint? (TIP: place an X on the continuum)

More inference  Both Inference & Observation  More Observation
OBSERVATION AND INFERENCE CRITICAL THINKING ACTIVITY

QUESTION: What is the social structure of dogs?

**Viewpoint #3  Darwin**


"Let us now suppose that the dog suddenly discovers that the man he is approaching, is not a stranger, but his master; and let it be observed how completely and instantaneously his whole bearing is reversed. Instead of walking upright, the body sinks downwards or even crouches, and is thrown into flexuous movements; his tail, instead of being held stiff and upright, is lowered and wagged from side to side; his hair instantly becomes smooth; ....

Source: Fig. 13 Mugford (2007:228)

Statements I think are observation:

Statements I think are inference:

How objective is this viewpoint? (TIP: place an X on the continuum)

More inference  Both Inference & Observation  More Observation
QUESTION: What is the social structure of dogs?

**Viewpoint #4 Darwin**


"Not one of the above movements, so clearly expressive of affection, are of the least direct service to the animal. They are explicable, as far as I can see, solely from being in complete opposition or antithesis to the attitude and movements which ...are assumed when a dog intends to fight."

Source: Lorenz 1953

Statements I think are observation:

- [ ]

Statements I think are inference:

- [ ]

How objective is this viewpoint? (TIP: place an X on the continuum)

<table>
<thead>
<tr>
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<th>More Observation</th>
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</thead>
</table>
OBSERVATION AND INFERENCE CRITICAL THINKING ACTIVITY

QUESTION: What is the social structure of dogs?

**Viewpoint #5  Lorenz**


"Another fence story concerns my old Bully and his mortal enemy, a white Spitz, which lived in a house whose long, narrow garden flanked the village street and was bordered by green wooden railing. Along the thirty yards of this fence, the two heroes would gallop backwards and forwards, barking furiously and only stopping for a moment at the turning points at both ends in order to curse each other with all the gestures and sounds of frustrated fury."

Source: Lorenz 1953

Statements I think are observation:

Statements I think are inference:

How objective is this viewpoint? (TIP: place an X on the continuum)

More inference  Both Inference & Observation  More Observation
QUESTION: What is the social structure of dogs?

Viewpoint #6 Lorenz


"One day, an embarrassing situation arose: the fence was undergoing repairs and parts of it had been carried away... First of all, a stationary cursing duel took place as usual, then the dogs, one each side of the fence, broke into their customary gallop along its front. And now the disaster happened: they ran past the place where the fence had been removed and only noticed their error on their arrival at the lower corner of the garden, where a further cursing match was due."

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Statements I think are inference:

How objective is this viewpoint? (TIP: place an X on the continuum)

More inference          Both Inference & Observation          More Observation
OBSERVATION AND INFEERENCE CRITICAL THINKING ACTIVITY

QUESTION: What is the social structure of dogs?

**Viewpoint #7  Packard**


"Visual signals used by dogs in communication were noted in the behavioral literature long before wolves were studied in captivity or the field. Charles Darwin illustrated his hypothesis about the principle of antithesis by contrasting images of the upright posture of an alarmed dog in response to a person approaching in the distance, compared to the crouching posture that the dog switched into as soon as it recognized the person as its “master”. In terms used in the nineteenth century, this expression of emotion signaled an unambiguous change in motivation, from dominance to submission. In modern terms, the change in visual signal conveyed information that the dog was unlikely to escalate attack in response to a familiar care-giving companion. "

**Statements I think are observation:**

**Statements I think are inference:**

**How objective is this viewpoint? (TIP: place an X on the continuum)**

| More inference | Both Inference & Observation | More Observation |
QUESTION: What is the social structure of dogs?

**Viewpoint #8 Packard**


"Unfortunately, the misperception that some individuals are always dominant and others are always subordinate has persisted despite the original context of the drawings that Darwin used; his drawings illustrate how one individual can rapidly change signals as it gathers more information about a stimulus (e.g. cues about familiarity)."

5. CANINE CUSTOMS

Source: Lorenz 1953

Statements I think are observation:

Statements I think are inference:

How objective is this viewpoint? (TIP: place an X on the continuum)

More inference ___________ Both Inference & Observation ___________ More Observation
OBSERVATION AND INFERENCE CRITICAL THINKING ACTIVITY

QUESTION: What is the social structure of dogs?

**Viewpoint #9 Packard**


"In the popular literature, the anthropomorphic myth persists that a dominant male is needed to enforce order so that all wolves in a pack know their roles in a dominance hierarchy. For example, Douglas Pimlott quoted Niko Tinbergen’s interpretation of a strict hierarchy in the sled dogs he observed in Greenland. At the time, it seemed reasonable to infer those dogs that look more like wolves would behave like wolves. No published evidence about wolf behavior was available prior to the 1940’s, so the hypothesis remained untested for decades. The popular notion of born losers and winners was reinforced by the insightful anecdotes about personal experiences with dogs and wolves published by Konrad Lorenz. However, Lorenz also noted both the persistent personality traits that varied across breeds of dogs, and the extreme changes in one individual deprived of his primary social companion."

Source: Lorenz 1953

Statements I think are observation:

Statements I think are inference:

How objective is this viewpoint? (TIP: place an X on the continuum)

More inference   Both Inference & Observation   More Observation
OBSERVATION AND INFEERENCE CRITICAL THINKING ACTIVITY

QUESTION: What is the social structure of dogs?

**Viewpoint #10 Packard**


"Two seminal publications introduced a different interpretation of social interactions in wolf packs, both emphasizing the family structure. In Alaska, Adolph Murie observed a wolf family caring for pups near a den now in Denali National Park. In a Swiss zoo, Rudolph Schenkel described in more detail how the food begging behaviors of pups developed into solicitous appeasement signals in juveniles interacting with both parents. He interpreted these interactions as the social glue that holds the wolf family together. Both studies emphasized the influence of age on the dynamics of dominance interactions, as both parents and older siblings cared for pups."

Source: Lorenz 1953

Statements I think are observation:

Statements I think are inference:

How objective is this viewpoint? (TIP: place an X on the continuum)

More inference  Both Inference & Observation  More Observation