# Twitter Thread by Benjamin Katz

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## I JUST CAME ACROSS THE MOST ADORABLE PEER-REVIEWED RESEARCH I HAVE EVER SEEN AND HAD TO MAKE A THREAD ABOUT IT HAVE AN AMAZING WEEKEND!!!!

Every intro to cognitive psychology course has at least one chapter where we ask how people know that dogs are dogs - after all, they look so different from each other.

This research one-ups our question and asks: HOW DO DOGS KNOW THAT OTHER DOGS ARE DOGS??

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ORIGINAL PAPER

**Visual discrimination of species in dogs (*Canis familiaris*)**

**Dominique Autier-Dérian · Bertrand L. Deputte · Karine Chalvet-Monfray · Marjorie Coulon · Luc Mounier**

First, let's meet our subjects in Figure 1 of this article. LOOK AT HOW CUTE THEY ALL ARE! THEY ARE ALL SUCH GOOD BOYS AND GIRLS AND CUSCO IS ABSOLUTELY SERVING!!


**Fig. 1** Dog subjects. The subject's name, its breed (*Bc* border collie, *L* labrador) or cross-breed (Cb) its sex and age (*2 y* 2 years) are specified below each portrait. These *portraits highlight* the variety of the subject's phenotype

Next, let's see how they were trained to identify other dogs. They would sit and see pictures of one dog and one not-dog. If they poked the dog picture, they got a treat. LOOK AT BAHIA CHOOSING CORRECTLY BECAUSE BAHIA IS VERY GOOD AND VERY SMART!!!

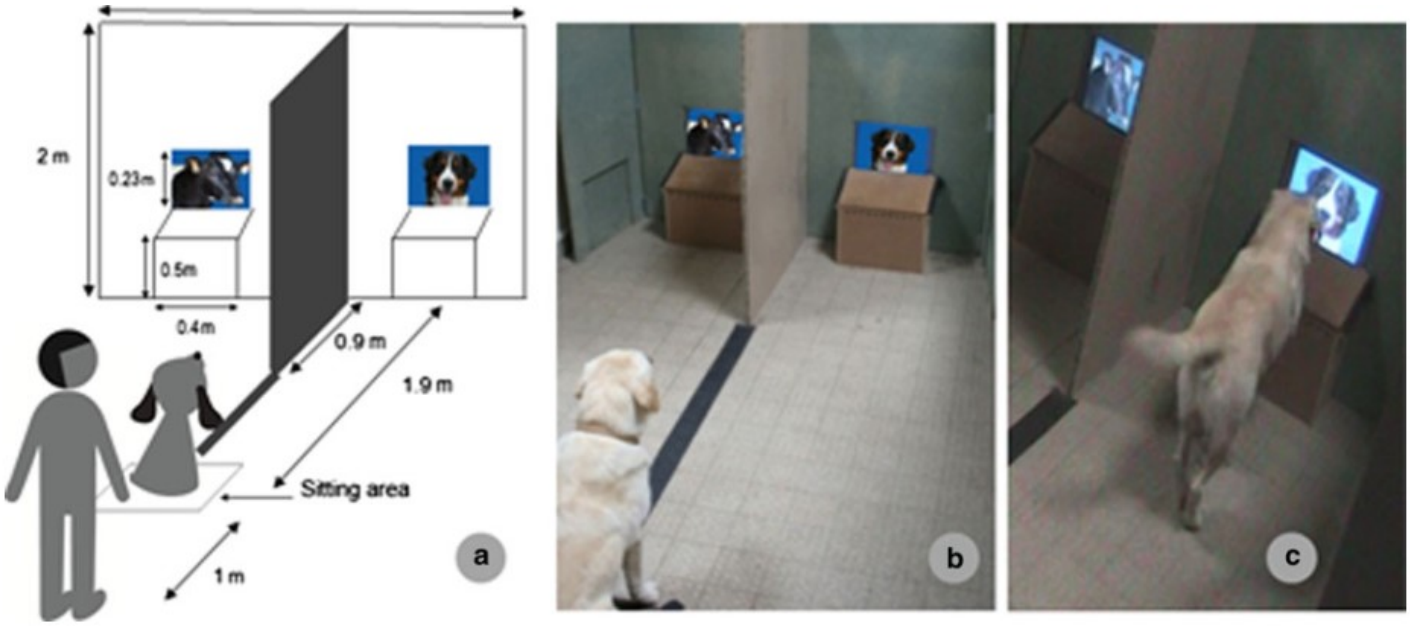


**Fig. 3** Apparatus. **a**, **b** The dog sits in front of the experimenter, on a line between the 2 screens. **c** When hearing an order, the dog expressed his choice by going to a given screen and putting his paw in front of the chosen image

AND BY THE WAY, IT SEEMS THAT THE PICTURES OF THE DOGS AND NON-DOGS WERE SPECIALLY SELECTED FOR HIGH LEVELS OF CUTENESS AND HUGGABILITY!!!

(except for the cat.)


**Fig. 2** Examples of stimuli used. **a** Dog heads displaying the variety of dog breeds (shape of head, hair length, ears and coat color). **b** "Other species" stimuli including humans, and domestic and wild vertebrates

It turns out dogs are pretty good at telling pictures of dogs from pictures of not-dogs.
ALSO I FULLY REGRET EVERY TIME I LABELED MY HUMAN PARTICIPANTS DUMB NAMES LIKE "105" AND "106" WHEN I COULD HAVE CALLED THEM "BAG" AND "VODKA"!!!

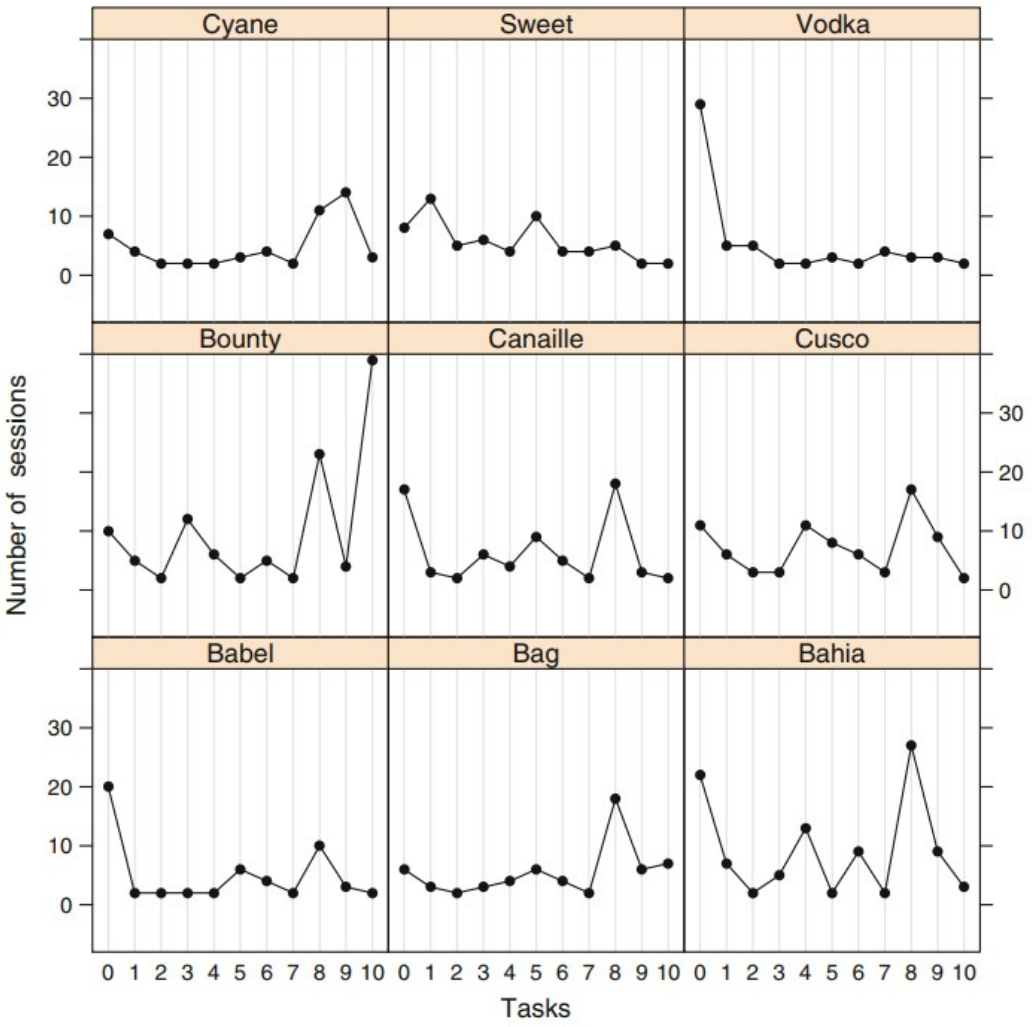


**Fig. 5** Individual changes in the number of sessions to reach the criterion, according to the type of the task, arranged sequentially along increasing difficulty (11 tasks from 0 to 10), for each of the 9 subjects

I should note that Bounty is a very good girl in general, but she is not very good at identifying other dogs by picture. Sorry, Bounty.

The generalized linear mixed model showed that the number of sessions needed for Task 9 was not significantly different from Task 3 (Table 2). With respect to Task 10, the results were different depending on whether the dog Bounty was taken into account or not. Bounty needed a considerable number of sessions to reach criterion on Task 10 (39 sessions). With Bounty included, median performance in Task 10 was significantly more difficult than in Task 3 ($P < 0.05$; Table 2; Fig. 6). Without Bounty's data, Task 10 was marginally less difficult than the reference Task 3 ($P < 0.1$; Table 2; Fig. 6).

The discussion is also adorable. Maybe some dogs did worse because they got more frustrated when they failed ■■■■■

ditioning also have to deal with frustration. Failing to respond correctly leads to no reward. The effect of this frustration may have varied consequences depending on the subject's temperament (Svartberg and Forkman 2002). Differences in temperament and emotional stability may explain some differences in the dogs' performance.

To summarize:

1. All dogs are good dogs.
2. Some dogs are also useful for identifying if another dog is a dog.
3. Every single one of us has chosen the wrong career path except for the authors of this study.

Happy weekend.