Attaboy! The Search For The Smartest Dog In The World [B2]

Fedeli e sempre pronti a imparare, la capacità dei cani di adattarsi alle nostre vite ci affascina da migliaia di anni. La scienza cerca di comprendere la natura della loro intelligenza.

Many people believe that dogs are intelligent, but it's surprising to learn just how smart they are. One study, at Emory University in Atlanta in the US, found that dogs have a basic understanding of words, and can distinguish words they have heard before from those they haven't. Other studies have found that most dogs can understand complex gestures, such as pointing, even if they've never been trained to do so.

THE SMARTEST BREED

Many studies have found that the most intelligent **dog breed** is the British border collie. So it makes sense that the dog many consider to be the most intelligent in history is a border collie called Chaser (born in 2004-died in2019). Chaser was trained by **behavioural psychologist** John Pilley at his home in South Carolina. She learned to identify and **retrieve** 1,022 toys by name, including a variety of **stuffed animals**, frisbees and balls.

ON A MISSION

To find out more about the important role that dogs play in society, Speak Up contacted Juliane Kaminski. Kaminski is Associate Professor in Comparative Psychology at the University of Portsmouth. She is also the director of the Dog Cognition Centre located at the university. The centre studies how dogs understand humans and the world around them. It is currently on a mission to find the world's most intelligent dog. Kaminski began by explaining that, **unlike** wolves, domesticated dogs may have developed a way of communicating with us that specifically evokes a human emotional response. **Juliane Kaminski (German accent):** We have the hypothesis that

we have selected [dogs] for a facial movement in dogs' faces that we as humans seem to find attractive, or that **triggers** some kind of response in us. So there is an **eyebrow** movement that dogs perform, which is really literally **puppy dog eyes** that we probably all are familiar with: raising your **eyebrow**s in quite a specific way. And the muscles to produce that movement is something that we could find in dogs, but not in wolves, even though the facial muscle anatomy of dogs and wolves is **otherwise** identical. And we also did a study where we found that humans find this **eyebrow** movement extremely attractive. So meaning, in a **[dog] shelter** kind of environment, when people have to make a choice, "Which dog am I going to adopt?" We have seen some evidence that dogs that produce this **eyebrow** movement more often are adopted quicker than dogs that don't produce that **eyebrow** movement so often. So we think that we as humans might have unconsciously selected [dogs] for this movement because it **triggers** something in us. And the hypothesis that we have is that it resembles a movement that humans produce when we are sad. So it might trigger this **nurturing response** of, "Oh, poor dog, I need to get you out of this shelter." And so, it's not necessarily something that is under the dog's control to the extent that we think they use it intentionally to manipulate us. But it's something that we simply have selected [dogs] for because we found it **cute**, and it reminded us of something that plays a role in our own evolutionary history.

VERY SMART

While intelligence is subjective, there have been, by anyone's definition, some very smart dogs. Kaminski talks more about the research the dog Rico inspired. **Juliane Kaminski:** The first dog that was ever documented to be able to differentiate more than two hundred objects by name was a border collie called Rico. He was a dog that I actually worked with, so this was my publication. Since then, I found more of these dogs, but still realised that it was quite rare. That was obviously not something that any dog could quickly learn. So I always wanted to find out what it is about these particular dogs that puts them in a position to be able to learn this, when other dogs can't. So this is why we searched worldwide for these dogs to kind of have a

sample to work with. And we now found thirteen dogs that we could work with. Those are dogs in the UK, in Germany, in the Netherlands, and in the US. And we basically systematically presented them with a series of little cognitive tests and then compared their results in these cognitive tests with a group of dogs that do not have the ability to learn these big number of words, to see if we can find any systematic differences.

ALL BREEDS

So, are all the test dogs collies? Of course not, responds Kaminski. **Juliane Kaminski:** The ones in the UK are very collie sort of **biased**. But in the overall sample we have a Portuguese water dog, we have a **pug**. So there is a **pug** that knows more than eighty objects by name. There's a doberman **cross**, so there's different species. So it's not just border collies or collies in general. There is a bias towards them but there are other breeds as well.

DIFFERENT SENSES

Many people who feel they really **bond** with their pet treat them like humans, attributing human-type logic and emotion to an animal. While this is only natural, says Kaminski, research is now starting to reveal how very differently animals see the world from us. **Juliane Kaminski:** I think we are just starting to understand, really, but yes, there are differences, definitely. So there are some things that dogs seem to **struggle** with that are easy for, let's say, a ten-month-old child. And then there are other areas where dogs are really, really on a similar level. We always compare them to humans and that's natural, that's just our natural bias that we have. But I think it's important to understand them for what they are in their own unique evolutionary history. Something, for example, which we haven't explored at all is the whole world of smell. Because we humans are so visual, whenever we are thinking about cognition we are creating a paradigm, it's always visual, and we are completely ignoring a whole different modality that dogs operate in because we are so bad at it. We now have evidence, for example, that dogs might be able to see what they're smelling, so that they have an actual visual representation of the things that they are smelling, which of

course is huge. And we need to sort of explore that **further**. Humans have the tendency to over-interpret what their dogs are doing, and I think that's natural, and that's not necessarily a problem. [But] I think it can turn into a problem… I'm always using this example of dogs on Instagram, this tendency to present dogs as if they were infants with all the same motivations and same needs and same capacities also to tolerate certain things. And I think that is really dangerous because it creates potential conflict and doesn't necessarily respect the fact that dogs are a different species with different needs and different cognitive abilities, et cetera.

DOGS AS HEROES

Dogs are often heroes in films and TV series. We asked Kaminski whether a dog could act morally, whether it acted through instinct, or impulse, or whether it depended on training. **Juliane Kaminski:** To be honest, we don't really know. We do know that dogs cooperate, that they have a tendency to be cooperative with friends, or dogs that they associate with and have a strong **bond** with. And yes, **I'm aware** of these videos and I think that is interesting, but it might create this kind of picture of this altruistic dog that can tolerate everything because they love their family. And yes, most of that is true, but that doesn't mean they can tolerate everything. So, I mean the number of videos I've seen on Instagram of babies hugging the dog and all these kinds of things, and I'm always sitting there like, "Oh God!" because then if the dog makes a mistake because it cannot tolerate this, then suddenly there is big drama because the perception is "No, the dog is good and friendly, and cooperative." And I think that there is a real danger in that.

THE LASSIE EFFECT

It's important not to project too much onto a dog, as Kaminski explains. **Juliane Kaminski:** This Lassie effect, this idea that, yeah, the dog is your helping friend and needs to tolerate everything and be good and **da da da**. Most dogs that I've ever met have definitely their limitations. And then there's this new trend of animal-assisted therapy. And I'm not saying that

that's necessarily a bad thing, but again, really testing the limits of what most dogs can do. **Hardly** any dog that I've met can really tolerate all of that.

POWER OF WORDS

Kaminski provides the example of Kanzi the bonobo, who had a fantastic understanding of verbal **cues**. However, some dogs may well improve their results with more training. **Juliane Kaminski:** We've got Kanzi, so a bonobo who learned a series of lexigrams. But yeah, when we take Chaser, the border collie, who at four years of age knew more than one thousand objects, that is the only animal individual that has been described to ever be able to do this. And I'm very sure Rico's owners simply decided to stop at some point because they thought they were **overdoing** it. But they could have easily also reached one thousand, maybe two thousand objects, if they would have wanted to.

TABOO

And Kaminski talked more about the bonobo Kanzi. **Juliane Kaminski:** He had, like, more than two hundred objects and they all had unique names. "Bring me the **seahorse**, bring me the star, bring me the **whatever**." The owner could be in a separate room, so we would place all the objects in the kitchen, for example, and the owner and I would sit in the living room, and she would send the dog into the kitchen and say, "Bring me the **starfish**. Bring me the **whatever**... **seahorse**." And he would just always come **back and forth** with the correct object. And so there was no other information that he could use but the spoken word.

GREAT SUCCESS

Humans have been using the intelligence of dogs to their advantage for thousands of years, and not just to teach them impressive tricks! Since dogs were first domesticated, about thirty thousand years ago, they have worked for humans as **hunters** and protectors. And today, they have many career options. They work as guide dogs, helping blind people to navigate the

world; police dogs, helping to find missing people and detect drugs; and medical detection dogs, using their powerful sense of smell to detect **diseases** such a type 1 diabetes. Why have dogs been so successful in the world of work, and in our domestic world? **Juliane Kaminski:** Let's not forget that the way that we are looking at dogs, that's a cultural phenomenon typical for [of] specific societies. So it's not necessarily that the whole human population looks at dogs that way. So if we look at how the Western world treats dogs as family members, that's a relatively recent development as well, so [the fact] that we allowed dogs to come that close is not necessarily something that has been happening for a long time. But I think it's a mixture of we needed dogs, dogs helped us to survive to some extent, and definitely we form a **bond** with them, which is very similar to the **bond** that we form with human infants.

LIGHTS, CAMERA, BARK!

Dogs have also played an important role in Hollywood, often starring in films and TV shows. The most famous dog in film history is Rin Tin Tin, a German **shepherd** who was in twenty-seven silent films in the 1920s. He is one of the three dogs who have a star on the Hollywood Walk of Fame. The others are Strongheart, another German **shepherd** who worked in silent films, and Lassie, who was played by a male collie called Pal in the 1940s and 50s; his descendants continue to play Lassie to this day!

Glossary

- **hunters** = cacciatori
- **further** = ulteriormente
- **whatever** = qualsiasi cosa
- **unlike** = a differenza di
- **triggers** = provocare
- **starfish** = stella marina
- **back and forth** = avanti e indietro
- **BARK** = abbaiare
- **bond** = creare un legame
- **I'm aware** = essere consapevole
- **seahorse** = cavalluccio marino
- **diseases** = malattie
- **dog breed** = razza di cane
- **eyebrow** = sopracciglio
- **nurturing response** = reazione protettiva, premurosa
- **biased** = orientati verso, inclini
- **cross** = incrocio
- **overdoing** = esagerare
- **puppy dog eyes** = occhi da cucciolo
- **otherwise** = altrimenti
- **struggle** = avere difficoltà
- **da da da** = bla bla bla
- **behavioural psychologist** = psicologo comportamentale
- **[dog] shelter** = canile
- **cute** = carino
- **cues** = segnali
- **shepherd** = pastore
- **retrieve** = riportare
- **stuffed animals** = animali di peluche
- **pug** = carlino
- **Hardly** = quasi nessuno