# PSYCHLINGO

EXPLORING ENGLISH THROUGH PSYCHOLOGY

APRIL 2024
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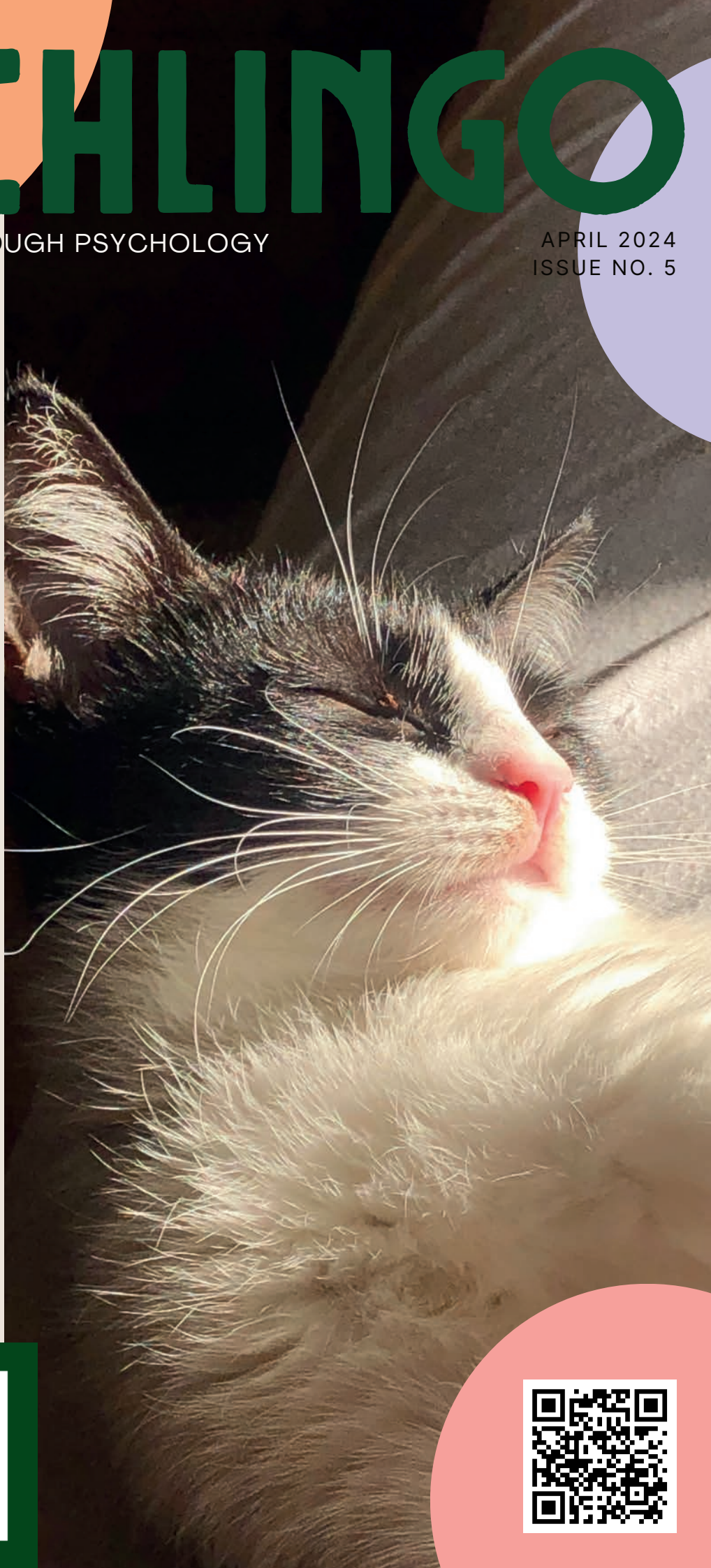

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Akademia Pedagogiki Specjalnej
im. Marii Grzegorzewskiej
rok założenia 1922

# DO YOU NEED PSYCHOLOGICAL HELP?


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# IN THIS ISSUE



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We extend our gratitude to the **Rector of the Maria Grzegorzewska University**, **Professor Barbara Marcinkowska** for her support and contribution towards subsidising the printing of this magazine.


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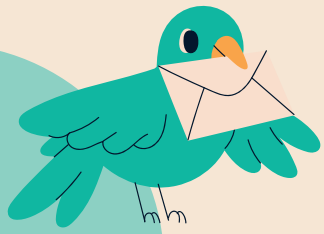

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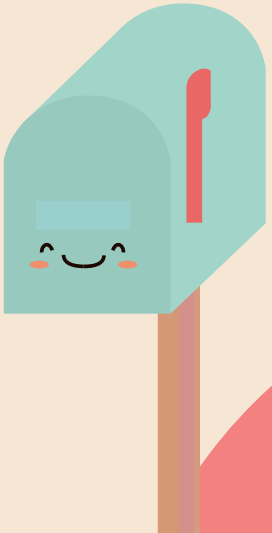
# Letter from the Editor

*Dear readers,*

As you may have noticed, we touch upon various topics connected by or based on psychology. This month is no different. Last time, we talked about children and provided you with some reading material, so this month, we've decided to offer you a lighter read and give you a little break. When it comes to a break, what is a better way to unwind than with a leisurely walk in the park? And who is a better companion than a dog? While we often view walks with dogs as a simple pleasure, they can mean a lot more.

This month, we delve into the complexities of dogs' perception of the world and animals' perspectives overall. We examine their communication, way of life, challenges, and their reciprocal impact on us. Our focus extends beyond dogs alone, recognising that while they are significant, they are not the only ones out there.

A special thanks to Magdalena Łuszcz and Samanta Świerk for providing us with insightful interviews on "the ways of the dogs." And, of course, heartfelt gratitude to our entire team for their dedication and hard work.



Jan Jolicki

**Editor-in-Chief**

# MOUSE UTOPIA

By Kazimierz Kwiatek

Scan and watch the footage from the experiment!


**Sources:**
https://eprints.lse.ac.uk/22514/1/2308Ramadams.pdf
https://www.the-scientist.com/universe-25-1968-1973-69941
https://www.sciencehistory.org/stories/magazine/mouse-heaven-or-mouse-hell/
https://www.youtube.com/watch?v=NgGLFozNM2o
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1644264/
https://pubmed.ncbi.nlm.nih.gov/18730425/


Among the scientific works of the 20th century, there are those few iconic ones that, even many years after being published, remain some sort of mouthpieces of their fields of science; physics has got Einstein's theory of relativity and the big bang theory, chemistry – the discovery of quantum mechanics, biology – the discovery of the structure of the DNA, mathematics – the infamous Riemann's hypothesis and psychology – especially the social psychology – has got many interesting experiments such as the Milgram's experiment on obedience to authority, the Asch's conformity experiment and Calhoun's experiments on mice better known as the mouse utopia experiments. The last one is especially interesting since most, if not all, of the scientific community widely accepts the mentioned works and their conclusions, and they generate minimal controversy, if any. The mouse utopia experiment, on the other hand, is different, as it is inconclusive yet intriguing, thought-provoking and very influential when it comes to predicting the future of mankind.

## Historical context

After World War II, many people began participating in the environmentalist movement, which aimed to convince world leaders not to overexploit the planet's non-renewable resources. In the movement were people known as neo-Malthusians, named after Thomas Malthus, an English economist. Mathus claimed that the population grows much faster than the amount of food that can be produced, thus leading to famine and massive deaths – a phenomenon referred to as the Malthusian catastrophe. During the 1940s and 1950s, a time of booming economy and rapidly growing population, a fierce discussion began: when would mankind hit the point of the Malthusian catastrophe, and if it didn't – how would the densely crowded world look and how would humans function in it?

The last question (how would people function in such a world?) intrigued a scientist named John Calhoun. Born in 1917 in Tennessee, Calhoun was an incredibly talented person.

Initially fascinated by ornithology, he published his first scientific article when he was fifteen. Later, he shifted his interests to ethology by the time he got his Ph.D. After completing his education, he started working at Johns Hopkins University. In 1947, shortly after joining the institution, Calhoun conducted the first of the whole series of experiments on population density, using mice as the object of research.

## The rat city

Calhoun was a part of the Rodent Ecology Project, which aimed to find ways of eliminating unwanted rodents from

the cities. To understand the factors driving rodent population growth, he prepared an ¼ acre habitat behind his house supplied with food, water, and plenty of shelters to hide from the predators. There were no limitations for the Norway rats (as Calhoun used this species in his Rat-City experiment), but one – they could not leave the enclosure.

He estimated that the habitat could be home to approximately five thousand individuals. At the beginning of the experiment, Calhoun placed five pregnant females in the enclosure in order to ensure sufficient genetic diversity. Then, he simply observed the rats' behaviour. The rat population grew very quickly, yet instead of reaching the possible five thousand members, it levelled off at around one hundred fifty individuals and, throughout the experiment, did not exceed two hundred. Calhoun decided to end the project after two years and four months.

During that time, Calhoun noted some interesting behaviours. Firstly, rats did not populate the whole habitat – the population stopped growing before reaching the theoretically possible number of members largely due to high infant mortality. As the population grew, females began neglecting their offspring. Secondly, the rats seemed more eager to gather around certain feeding spots and didn't use the others. Intrigued by all this, Calhoun pursued this path and found the explanation for what happened during the rat city experiment.

**National Institute of Mental Health**

In 1954, John B. Calhoun was employed by the National Institute of Mental Health (NIMH). He received the necessary resources and money to conduct more specific and thorough research. Calhoun spent his time improving enclosures, creating a more controlled research environment, and repeating the experiment under various conditions. After eight years of such activity, in 1962, Scientific American published Calhoun's article titled "Population Density and Social Pathology". In the introduction to this article, Calhoun quoted Thomas Malthus' work, pointing out that people tend to overestimate the impact of "misery", such as lack of water and food, and illness, while underestimating the role of "vice", or social (or anti-social) behaviour of the individuals, in limiting population growth. The article was shocking and became widely commented on by the American intellectual community.

Calhoun described six experiments, all conducted similarly and with similar results. For those experiments, he designed special enclosures. Rectangle in shape, they were divided into four equal parts. Rats could get from section A to B, from B to C and from C to D, but there was no direct access from section D to A and vice versa. As a result, the cage was like a tunnel with two middle sections and two outer ones.

Half of the experiments involved thirty-two rats, while the other half involved fifty-six. There was an equal number of males and females in all of them. Besides the number of rats, another difference between the experiments was that Calhoun supplied half of the cages with powdered food and the other half with hard food placed in wire feeders.

None of the cages lacked water, food, or anything else the rats may have wanted or needed to survive. Calhoun estimated that those enclosures would be comfortable habitats for approximately forty rats but didn't plan to intervene when the population grew bigger than that.

As soon as the experiment began, rats spread evenly across the sections, but it changed quickly. Rodents naturally form hierarchical communities. After establishing the "social order", it turned out that less dominant rats from Calhoun's experiment would wake up earlier to find food before the alpha males woke up. Due to the cage design, they usually ended up in the middle sections (C and D) of the cage. Once the alphas woke up, they started guarding the crossings between the middle and the outer sections, preventing the less dominant males from returning. Sections A and D became the harems of the dominant males, as they gathered most of the females there; only a few non-alpha males remained in those parts of the enclosure.

Calhoun noticed that the remaining males started to exhibit weird behaviour. They usually stayed with the females, as if hiding from the dominant male, yet they completely gave up on mating with them. Instead, they tried to mate with the alpha male. And quite surprisingly, the alpha did not resist these attempts.

Another interesting phenomenon occurred in the cages with wire feeders. Since eating from such feeders was much harder and time-consuming, rats often ate together, being slowly conditioned to associate eating with company. Over time, the rats refused to eat unless they were in a group. Because there were more rats in the B and C sections, the rats often went there to eat, thus crowding them even more. In the experiments with powdered food, such behaviours rarely happened, if at all.

**The behavioural sink**

Having observed all that, Calhoun coined the term "behavioural sink" to describe the pathological behaviours induced by living in densely populated environments. These behaviours manifested differently

depending on the sex of the individual. Females tended to exhibit a reduced capacity for rearing their young and building nests.

As rodent infants are utterly dependent on their mothers, they hardly ever grow to adulthood when neglected and placed in scarce, improper nests. Females neglected their young in order to engage in other social activities.

However, high infant mortality was not only a result of female behaviour. When a female rodent is ready to mate with males, increasingly dominant and aggressive males can sense it. This limited, closed habitat resulted in females being constantly advanced by the males and often forced to copulate several times, each time with a different male. All these factors combined contributed to an extremely high infant mortality, reaching up to 96% in some cases.

The effects of the behavioural sink were different and much more diverse in male behaviour. The dominant males often engaged in aggression and started fights with other members of the group, including infants, sometimes causing severe wounds. These fights seldom needed a reason. Calhoun categorised the lower-class males into three groups: "homosexuals" or "pansexuals" who made sexual advances towards every rat they encountered (sex and age didn't matter) and rarely competed for social status; 'somnambulists" who wandered around the habitat, ignoring other rats and being ignored in return, exhibiting behaviour unnatural for social creatures; and "probers" who were often violated by the alpha males. The "probers" were sexually overactive and "pansexual" and they developed a habit of following the females into their nests to mate with them. In addition, the "probers" were cannibals as they ate bodies of the dead, improperly reared infants.

Calhoun decided to end the project at this point. He anticipated that the colonies would eventually die due to the effects of the behavioural sink. To demonstrate this, he selected four healthiest males and four healthiest females and allowed them to breed in a new enclosure. It turned out that their behaviour was irreversibly changed, making them incapable of rearing the young ones; none of their offspring survived to adulthood.

**Reception**

The article quickly became famous and was widely commented on. Many saw in it an explanation for all the social pathologies of the densely populated cities (which was especially important in the USA, which didn't and still doesn't lack them). Even though experiments conducted on the human population were inconclusive or sometimes contradictory, as people tended to react differently or even in the exact opposite manner than rats, this work paved the way for Calhoun's scientific success. He decided not to waste this chance and conducted one more final experiment.

**The death squared**

Calhoun's opus magnum was published eleven years later, in 1973, in the Journal *of the Royal Society of Medicine*. Its title was *The Death Squared,* and it started with the following sentence, "I shall largely speak of mice, but my thoughts are on men, on healing, on life and its evolution."

The experiment described in this work was similar to the previous ones. Calhoun provided rats with a safe habitat full of food, water and other resources, such as materials needed to build nests. However, there were some differences. This time, Calhoun used albino house mice instead of Norway rats. Those animals were taken from the special group bred in American health institutes and were immune to communicable diseases.

Another thing that had undergone a big alteration was the design of the enclosures. This time, they were much bigger and contained no facilities that would encourage mice to stay in one place or discourage them from staying elsewhere. Rodents lived in sixteen vertical "walk-up apartments", as Calhoun called them. Under each "apartment" there was a storage of food, water and nesting material – a seemingly unlimited source of supplies. Calhoun estimated that one enclosure would accommodate up to 3840 mice.

The experiment began with four males and four females placed in the enclosure. Then four phases occurred.

Phase A, called "Adjustment," lasted for 104 days. It ended when the first infants were born. Those days "were marked with considerable social turmoil among these eight mice until they became adjusted to each other and to their expanded surroundings". Phase B, termed "Exploitation," started after establishing the hierarchy and social order, and the first new mice were born.

It spanned from day 104 to day 315. During this phase, the mice's population doubled every 55 days. After day 315, the doubling rate slowed to 145 days. That is when phase C began.

It was labelled "Stagnation" and lasted from day 315 to day 560. At this time, the low-class males outcasted from the community started to gather in the middle of the enclosure. They were characterised by their lack of activity (referred to as "somnambulists") and bore many wounds and scars. From time to time, one of the males lashed out in violence and attacked others. Having nowhere to escape, the victims succumbed to these

attacks and did not try to prevent them or fight back. Females rejected by the community did not join these males but stayed in higher "apartments" and lived together.

During C phase, a behavioural sink occurred. Mice started to form groups around some feeders, and some individuals remained alone and outcasted. As the number of young mice grew, the leaders of these social groups were constantly challenged. In the beginning, it was not a big issue, but over time, the winners of initial fights grew tired and became incapable of defending their territory, as well as their females and nests. Because of that, the females were forced to protect the nests on their own, leading to neglect of the infants and a rise in infant mortality. In addition, females were increasingly frustrated and aggressive. Eventually, taking out their frustration on the young ones, they often pushed them out of the nest before it was the right time. The end of phase C was marked by "the death of the societal organisation."

Calhoun labelled phase D the "Death" phase. A key role in this phase was played by the mice, who were thrown out of the nest before maturing enough to create healthy social relationships. Consequently, females from that generation bore fewer offspring. Those who became pregnant lacked maternal instincts and were incapable of rearing their young. Calhoun also observed the emergence of the "beautiful ones" - males who never made any sexual attempts and never fought but instead focused on self-care. As the last individuals grew too old to have any children, Calhoun decided to end the experiment.

### Criticism

Some scientists pointed out that Calhoun's experiments were conducted in an utterly unnatural environment, which had an impact on rodents' physiology, circadian rhythm, stress responses, brain activity and many other factors. It makes the experiments' results hard to be generalised on bigger populations. In addition, it is often said that rodents are too different from humans and studies of mice's or rats' behaviour cannot be used to extrapolate or explain human behaviour.

### Replications

Because of that, scientists repeated Calhoun's experiments on groups of humans. They studied the effects of the behavioural sink in some specific locations, such as hospitals or dormitories of universities. However, the most fruitful experiments were conducted in prisons, as social interactions in both prisons and Calhoun's enclosures are involuntary, tense, prolonged and inescapable. This helped scientists to explain some of the phenomena that occur in prisons, such as psychopathy, stress, violence and suicides, and link them with over-socialization.

Further and thorough research led to differentiating physical density and social density. The first one describes the amount of space per person, the second one – how many people occupy a space. Apparently, social density has got by far bigger impact on human psyche and behaviour than physical density. This knowledge can be used in designing different facilities that are supposed to house many people.

### Pop-science and politics

Outside of the scientific discourse Calhoun's experiments are often mentioned either in pop-science or political-ideological debates. The first one tends to seek sensation and in order to catch attention it exaggerates the meaning of the results of the mouse utopia experiments. In the second case Calhoun's experiments are used to support the views of one side and belittle the views of the other. Obviously, both sides bend the results and, therefore, distort the real message of Calhoun's work; some cite them when they want to convince people they shouldn't have children, as this leads to overpopulation; some do it when they want to prove that "deviant" behaviour is a result of social structure; all that cynical approaches should be labelled as such by the scientists, who need to be very attentive when it comes to using science to manipulate the people. If one wants to speak of such delicate and complex matters as overpopulation or social pathologies, they need to know more than one article by one scientist, otherwise they will always come to unjustified conclusions.

## Glossary

**non-renewable resources** – resources, such as coal, natural gas and oil that can't be replaced in a short time
**rodent** – a small animal with large, sharp teeth, such as a mouse or rat
**habitat** – the natural environment or home of an animal
**predator** – an animal that preys on other animals for food
**enclosure** – a fenced-off area for keeping animals
**offspring** – the young or babies produced by an animal
**misery** – unhappiness, suffering
**vice** – bad habit or behaviour
**mate (with)** – animals coming together to reproduce or make babies
**rear** – raise (offspring)
**immune (to)** – not affected by something
**lash out (at)** – to express anger or emotion suddenly or violently towards someone
**succumb** – give in to something
**differentiate** – to see or understand the differences between things
**undermine** – to weaken or damage something gradually

# Mental Health Disorders

## In Animal Kingdom

By Julia Nowakowska

*And why do some of them appear only among certain species?*

Humans are a part of the animal kingdom, a fact widely recognised despite occasional expressions like "Stop acting like an animal!" It is a fact grounded in the Darwin's evolution theory and the study of biological systematics. There are, of course, many differences between us and other creatures. But we also have A LOT in common, especially with other mammals, when it comes to habits, anatomy, society-related matters and even mental issues. What is the difference between humans' and other animals' psychological disorders?

**Anxiety, stress and mood-related troubles**

**Depression** is one of the most prevalent illnesses worldwide. Unfortunately, even our pets can suffer from it, which has been discovered by Martin Seligman and his colleagues in an experiment with dogs (not exactly an ethical one). It is hard to speculate about causes – sometimes, they can be connected to the pet's unmet needs or a new situation that the animal has to deal with (e.g. the loss of a human or pet companion, or relocation). However, the symptoms are rather clear. Usually, we can observe low mood (such as a lack of interest in previously enjoyed activities), apathy, and decreased appetite.

Animals can also experience **anxiety** and high levels of **stress**, often leading them to exhibit behaviours such as attempting to run away, hide, or trembling. An anxious animal can't relax, is very nervous and can be easily triggered by certain stimuli, such as the presence of other animals or loud noises. **Separation anxiety** is another significant concern, particularly when pets are left alone by their owners for longer than usual. This phenomenon was highly observed after the pandemic when people came back to work. Additionally, many species can experience **PTSD** – it works just like in humans but rather relates to situations that aren't typically traumatising for us – for example, the sound of fireworks, which animals like dogs or cats may struggle to perceive as non-threatening.

**Eating disorders – symptoms that may be observed among non-humans**

Some illnesses manifest in humans in certain situations that are not experienced by other animals, even though they may exhibit similar symptoms. For example, when it comes to **eating disorders**, they are often caused by beauty standards and can lead to serious health conditions. In the case of other animals, the symptoms of, for example, anorexia (referred to as **activity anorexia – AA** in this case) have been observed among rats – this can hardly be linked to beauty standards. According to researchers, rats cutting down on the amount of food they eat while increasing exercise levels may be attributed to their wild habits with running simulating foraging behaviour – an activity that follows smaller food intake).

*Photo by Lute on Unsplash*

Another phenomenon known as **thin sow syndrome (TSS)**, which can occur during a sow's lactation or early pregnancy, resembles AA. Pigs affected by TSS exhibit high levels of physical activity while consuming small amounts of food, which can even lead to their death. Also, they may suffer from hypothermia. Why is that so? It is so mainly due to stress experienced by sows during pregnancy and confinement in gestation crates. This presents a complex issue as pigs are very aggressive during pregnancy and should be kept together, but those crates are definitely not good for them.

**Other disorders and why only a human can develop schizophrenia?**

Other mental problems can affect animals as well. Consider **dementia**, a condition connected to memory loss. It is most common in dogs and cats, and sadly, it can't be cured or even diagnosed with a specific test. Animals with dementia can be disorientated, forgetful, and exhibit behaviours such as staring into space. Moreover, animals can become **addicted** to certain substances, such as sugar or display symptoms similar to **OCD**. But, surprisingly, there is one illness that can't appear among species other than humans – **schizophrenia**. Why is that so?

As simple as it can be, it is all about genetics and evolution. The researchers led by Dr Joel Dudley have discovered that schizophrenia is related to HARs – segments of our genome that were conserved in other species but underwent rapid evolution in humans.

It turned out that HARs can even increase schizophrenia risk!

*"Our findings support the hypothesis that **evolution** of our advanced cognitive abilities may have come at a cost — a **predisposition to schizophrenia**." said the researcher.*

So, it seems that schizophrenia is highly connected to our evolution.

**Zoochosis – an illness of captive wild animals**

While schizophrenia doesn't appear among animals other than humans, there is a condition similar to psychosis in animals known as **zoochosis**. This condition occurs in wild animals held captive in zoos or circuses. What does it look like? Well, animals show some stereotypical behaviours, such as pacing, swaying, bobbing, rocking, and even self-mutilation performed repetitively without any specific purpose. An example from my life – when I was a child, I was told that if zoo animals go around, especially wild cats, they are just hungry. However, the reality is more cruel. Zoochosis appears because of boredom, sensory deprivation, and loneliness, which are prevalent in captive environments. It is worth noting that those behaviours **do not appear in animals' natural habitats**. It means that only captivated animals suffer from zoochosis.

There are many resources on the Internet showing what zoochosis is, including a **documentary film by Nana Påskesen**, which I've linked in the QR code below. You can also find other short videos by searching for phrases like "zoochosis disorder" or "zoochosis disease" in your browser (there is also a game called "Zoochosis", so I recommend including a second word in your search).

scan to watch the video!

**So, what can we do?**

When it comes to the pets we care for, we have to observe their behaviour closely because any change in habits can be a cause for concern. Unfortunately, in many cases, our ability to intervene is limited. From a common person's standpoint, it is important to support animal rescue organisations that work to prevent animal suffering. Also, we can always spread information about animals' real lives in circuses and most zoos. The sad fact is that most mental issues are caused by humans – the least we can do is help other animals based on the remaining possibilities available to us.

## Glossary

**prevalent** – common or widespread
**exhibit** – to show or display (e.g. a symptom)
**hypothermia** – a medical condition characterised by dangerously low body temperature
**confinement** – a state of being restricted to a limited space
**gestation** – pregnancy
**psychosis** – a condition of the mind that results in difficulties distinguishing what is real and what is not
**pace** – to walk back and forth repeatedly, often because of anxiety or worry
**bob** – to move up and down quickly
**self-mutilation** – intentional self-harm
**sensory deprivation** – reduction or removal of sensory stimuli
**captive environment** – an enclosed space where animals are kept

**Sources:**
https://money.com/pet-mental-health/
https://www.idausa.org/campaign/elephants/experts-agree-zoos-harm-good/what-is-zoochosis/#what-causes-zoochosis
https://en.wikipedia.org/wiki/Animal_psychopathology#Zoochosis
https://www.scientificamerican.com/article/why-don-t-animals-get-schizophrenia-and-how-come-we-do/

*Photo by Sophia Simoes on Unsplash*

# The Complexities of Orca's Social Behaviour

By Weronika Piebiak

Photo by Iswanto Arif on Unsplash

We, as humans, like to think about ourselves as an organism that is so unique and complex that it can't be compared with other animals. We have language, culture and traditions that make us who we are and separate us from other mammals, right? Every year, scientists report new discoveries that confirm that we're not as unique as we previously thought. Recent marine mammal research shows just how much we have in common with animals we typically don't see as close to us. I believe orcas are one of those animals, as they can be observed displaying incredibly complex social structures and behaviours similar to humans.

Orcas – and more precisely – resident orcas live in family units called pods. They usually consist of around 14 or more members; one is an older female called "the matriarch", and the rest are her descendants. They usually stay near shorelines. Those family groups are wildly effective. The way they hunt their prey and the level of coordination needed for doing it so precisely made scientists think that they're able to communicate complex messages to each other.

And that is exactly what they have found. Killer whales emit three main kinds of sound: clicks, whistles, and calls. The first ones are used for echolocation, and as far as we know, they do not serve primarily as a communication method. The second ones don't travel far underwater, so they can't be used as an alarm call or a warning. Orcas use them to "speak" directly to each other and to coordinate their attacks in relative secrecy. Calls are loud and can echo miles in the ocean. What's interesting is that those calls are not genetically programmed. Scientists observed young orcas' vocalisations, finding that they bear no resemblance to the calls of adult orcas. While many animals can convey distress or "there is danger nearby" messages, the complexity and learned nature of these sounds make it seem like we're not the only ones to communicate with an actual language.

Their language also serves another purpose – it shapes group identity. Most pods of killer whales live in close proximity to each other but live completely different lifestyles. They eat different foods – certain pods restrict themselves to eating only one type of fish or marine mammals. They have different hunting strategies, which they teach to their young and pass on to further generations. They also speak differently – the way they emit clicks, whistles and calls varies per pod, which means that orcas have their own dialects. That also means they usually can't communicate well outside the pod.

Photo by Iswanto Arif on Unsplash

Thanks to all of those changes, orcas can fill a lot of various ecological niches. Because the environment did not force their differences, orcas might be the second (after humans) animals whose evolution is driven by culture.

We can actually observe this in real-time. There is another, less common, and less-talked-about "type" of killer whale known as the transient orca. They usually hunt marine mammals (while resident orcas prefer fish) in 3-member groups. They travel huge distances, are much quieter, and communicate less. They do not interact with resident orcas even though resident orcas interact with different pods of their kind. It is important to note that these are the same species. There is no physiological or genetic difference, but those two kinds are so distinct that scientists think it may only be a matter of time before they diverge into separate species. It's not the geography that will separate them, but the culture will.

As we can see, culture, tradition, language usage, and complex social structures are not exclusive to humans but occur in animals that are so different from us. Studying animals that experience the world in a similar manner helps us revise our place in it. The research continues and we will soon gain more insight into those magnificent animals' lives.

## Glossary

**descendant** – a person, plant, or animal that is related to a certain ancestor, family, group, etc
**bear a resemblance to** – to look similar to something or someone
**convey** – to communicate or express something
**distress** – extreme sadness, pain, or suffering
**proximity** – being close to or near something or someone
**distinct** – visibly different or separate from others
**diverge** – to become different from each other

*Photo by Iswanto Arif on Unsplash*

# ALEX
# The Wise Parrot

By Kazimierz Kwiatek

Many scientists refer to humans as animals. Extraordinarily complex, but still animals. Yet that complexity, even if huge, seems insufficient to explain the differences between humans and other species. Russian developmental psychologist Lev Vygotsky claimed that humans are capable of abstract thinking, thus performing operations much more complex than any other animal can execute, because of our linguistic skills, which we possess due to the very efficient organisation of our brain. In language, he saw the foundation of human evolutionary success. Still, even though humans exhibit more complex behaviour than animals, it turns out that we may not be as special and not as different from animals as we think we are, at least in terms of language acquisition and its use.

In the mid-1970s, a British neuropsychologist, Nicholas Humphrey, proposed that intelligence is a consequence of social, rather than natural, environment; the more complex the animal's social life, the more intelligence it needs. At the time, most scientists conducted experiments concerning intelligence on primates, especially chimpanzees. Even though apes proved to be highly intelligent in terms of kinaesthetic and spatial intelligence, they seemed to lack linguistic skills. Later, it turned out that it was due to primates' lack of proper vocal tools to produce sounds humans use to communicate.

The novel approach of Nicholas Humphrey intrigued a young American researcher named Irene Pepperberg. She decided to follow this path and conduct an experiment. She needed to find a species living in social groups and capable of emulating the sounds of the human language. Her choice was a parrot, more specifically, an African Gray parrot she named Alex, which is an acronym for Avian Learning Experiment, which she used as the name for her project.

Dr Pepperberg bought Alex in a pet shop when he was one year old and started to teach him English. She used a special method called model/rival method, which is also used to teach children with learning difficulties, e.g., autistic children, children with difficulties in understanding numerical concepts, learning language, or even empathy.

The method involves three individuals: two trainers and one student. One trainer gives instructions and the other serves as a model for correct and incorrect responses as well as a student's rival for the teacher's attention. In Alex's case correct responses were not rewarded with food, which is a common practice in training animals, but with items. When a model or a parrot named an object correctly they received that object as a reward. Models sometimes make mistakes on purpose to show the student what happens when they exhibit an incorrect response – the object is taken away from them.

*Photo by Ahmed Zayan on Unsplash*

*Photo by Frames For Your Heart on Unsplash*

It proved to be an efficient method, as Alex acquired 150 words and knew the names of 50 objects. He was also capable of identifying their colours, shapes, and describing their properties (e.g., whether they were hard or soft). In addition he could ask for things but rejected items offered to him if he hadn't asked for them. He also understood concepts such as "bigger", "smaller", "same" and "different". Moreover, Alex passed the test measuring if he developed Piaget's object permanence; he would show anger or surprise if a hidden object turned out to be different from what researchers had made him believe it was. Dr Pepperberg said he would also apologise if he annoyed the scientists.

But did he really understand what he said? Maybe it was just simple conditioning, and Alex didn't really understand those concepts but learned to correctly use the vocabulary without associating the sound with the feature of the object? Maybe it was another example of the "Clever Hans' effect"? Dr Pepperberg says that wasn't the case, as Alex exhibited the same behaviour towards everyone regardless of who asked the question or who was in the room – while being able to tell the difference between people, and there were many of them.

Some researchers believe that Alex's skills were a product of core learning rather than a result of abstract thinking, but the majority of the scientific world agrees with Dr Pepperberg: humans don't have a monopoly on complex cognition and communicative skills.

Alex lived to the age of 31. The last time Dr Pepperberg talked to him was before leaving the lab for the night. "You be good, I love you." "I love you, too." "You'll be in tomorrow?" "Yes, I'll be in tomorrow."

**Sources:**
https://www.sciencedaily.com/releases/2005/07/050711013845.htm
https://www.economist.com/obituary/2007/09/20/alex-the-african-grey

## Glossary

**language acquisition** – the natural process by which children learn their mother tongue
**primates** – a mammal of the group that includes humans, apes, monkeys, and lemurs
**apes** – primates without a tail, such as chimpanzees, gorillas, orangutans, and gibbons
**emulate** – to imitate
**properties** – characteristics of an object or substance, such as size, shape, colour, etc.
**object permanence** – the understanding that an object exists even when it can no longer be seen
**core learning** – fundamental aspects of learning

**Scan and see how amazing Alex was!**

# Can Pets Improve *Your Mental Health?*

**by Maria Mucha**

Most pet owners, including myself, cherish their animal's company. We tend to treat them like valued family members and give our best efforts to ensure their well-being, which is quite a phenomenon since only humans can bond so closely with members of other species. Although it is a pleasure to snuggle up to a furry friend, owning a pet comes with many responsibilities and burdens – financial, temporal and emotional. In the light of this, why do we care for our pets so much? And how do we benefit from owning them?

Sharing our lives with our pets results in joy, affection and amusement. The pleasure is mutual – both humans and animals benefit from the symbiotic relationship based on companionship. Pets have an emotional attachment to their owners and other family members. They have evolved to be attuned to our emotions and behaviour. For example, dogs can correctly interpret around 160 words and even more gestures and voice tones, allowing them to estimate our emotional state and figure out our thoughts and feelings. They tend to do it quicker than other humans, which is one of the factors resulting in such deep human-animal bonds.

As we can assume, empathy, combined with other qualities and behaviours of our pets, reduces loneliness and encourages us to remain playful. Furthermore, pets live in the moment, teaching us to be more mindful, which helps to minimise the adverse effects of stress, anxiety and depression. They fill us with joy and unconditional love, raising our self-esteem by loving us just the way we are.

The main determinant of health and happiness is physical activity. Thankfully, pets help us increase our motivation to exercise through the sense of responsibility in caring for them. Our dogs need daily walks and a lot of running and playing to live a fulfilling life, thus keeping us motivated to get up every morning and head out the door. Meeting our daily exercise requirements is one of the basic moderators of our mental health and mood.

As extended research shows, pets play an important role in human life since they improve people's psychological and social health. Our pets might come as a great help for starting and maintaining new friendships. Amongst all, dogs are considered the best promoters for initiating

*Photo by Mel Elías on Unsplash*

shared interpersonal interactions, often during walks, hikes or in dog parks, which enhance social networks. Cats and other animals can also help spark new connections since their owners meet in pet stores, clubs and training classes.

Based on various analyses, we can certainly state that animals have a positive impact on our mental health. As previously stated, they motivate us to remain physically active and help minimise the negative effects of stress. Pets also enhance our social life, thus benefiting our need for social relationships and a sense of belonging. In conclusion, the companionship of pets helps us sustain a healthy lifestyle, which can substantially boost our moods and ease any adverse effects of anxiety and depression. In other words, it notably improves our mental health.

**Sources:**
https://calmerry.com/blog/love/people-who-love-animals-more-than-people-psychology-of-empathy/
https://www.masterclass.com/articles/how-many-words-can-a-dog-learn
https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2023.1196199/full
https://www.helpguide.org/articles/mental-health/mood-boosting-power-of-dogs.htm

## Glossary

**cherish** – to care for affectionately
**snuggle up (to)** – to get close to someone or something in an affectionate way, as for warmth
**attune (to)** – to bring into harmony with something else, adjust or adapt
**mindful** – aware or conscious of something
**adverse** – unfavourable or harmful
**spark** – to trigger or initiate
**enhance** – to improve or increase

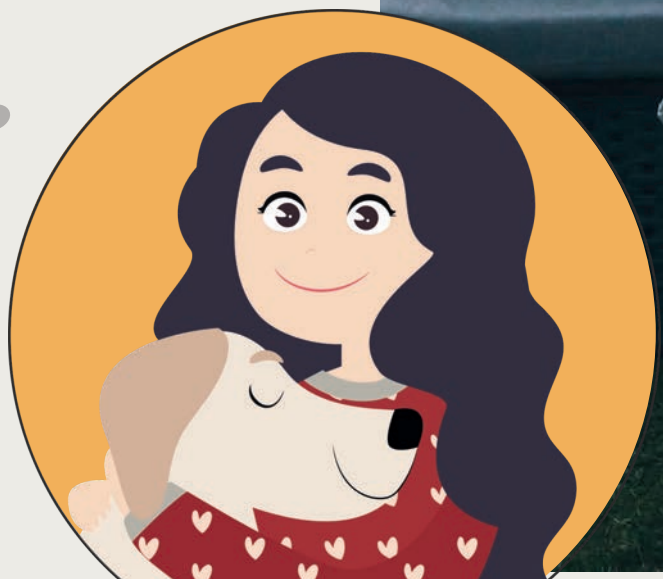


*Photo by Roberto Nickson on Unsplash*

By Jan Wolicki

# Interview with a Dog Behaviourist and a PhD Student in Animal Studies

*Samanta is a PhD student in animal studies and an assistant at the University of Agriculture. She's also a dog photographer (check out her Instagram account @barwnepieski). Fascinated by dogs, she's adopted two with trauma and constantly works with them. Magdalena, on the other hand, is a dog behaviourist who works with dogs daily. She helps them adjust to life in today's world, which brings new challenges. Magdalena assists dogs in overcoming trauma, socialising, and improving their quality of life. You can see her work on Instagram as @szczekaczka.team, and I also encourage you to visit her profile, as you can learn a lot. Samanta and Magdalena are connected by their love and passion for dogs. Both have given me insight into dogs' lives and problems, how they emerge, and how we can address them. Hopefully, you'll find this useful.*

***Samanta Świerk & Magdalena Łuszcz***

**Jan Wolicki:** What does the work of a behaviourist entail?

**Magdalena Łuszcz:** Someone comes to you with various issues concerning their dog, such as excessive barking, fearfulness, aggression, separation anxiety, or leash pulling. My role is to identify the cause of these problems and find solutions. However, I approach these issues holistically, not just relying on dog training and assuming the dog will figure it out. I have to consider whether the dog is healthy, has recent medical examinations, is vaccinated, has emotional problems, what its daily routine looks like, and what diet it has. You should approach the dog holistically, adjust patterns and work on the entire spectrum of the factors involved.

**JW:** Does it also involve working with the owner?

**MŁ:** Yes, because the owner's emotions often strongly influence the dog's emotions. It often happens that it's not the dog that has a problem but the owner, which can manifest in the dog's behaviour.

**Samanta Świerk:** They don't necessarily have to have the same problem as the dog, but if a person has a problem with something, for example, they're irritated by traffic, the dog feels it and gets angry and then, for example, takes it out on other dogs.

**MŁ:** Then there are the owner's expectations. The owner may have unrealistic expectations from the dog, and their frustrations about the dog "not getting it" or the training not progressing may get projected onto the dog. The innocent dog doesn't know what's going on, but the leash becomes a transmitter of emotions between the owner and the dog. If the owner is annoyed from the get-go at the dog, the dog will become frustrated and may, for example, chase cars or eat garbage and sticks. Often, the problem lies not with the dog. The change in the owner's behaviour and thinking is important.

**JW:** So it's kind of a vicious circle, right? The owner is angry, the dog is angry because of the owner, the owner is angry that the dog is angry, and so on.

**MŁ:** It's not always like that, but yet, it happens.

**JW:** From your perspective as a behaviourist, what strikes you the most in everyday life?

**MŁ:** Well, it is improving, as more people are aware of dogs' needs. However, there is still a lack of respect for other dog owners' space. I think the so-called "rusher ups" are the most visible problem. Then we have dogs that may develop aggression towards other dogs because, for example, another dog rushed up to them when they were puppies. From the start, this puppy, now grown up, may intimidate and keep other dogs at a distance. The number of anxious dogs is increasing. Few people pay attention to it. I'm not even talking about fear aggression. Often, these dogs are withdrawn from the world but are not necessarily problematic. They may not bark or bother anyone. They simply withdraw and refuse to leave the house. People don't work with such dogs because they're not embarrassed by them. If they bark, you get annoyed because people see it, but this type of dog will stay quiet and show no signs of distress.

**SŚ:** One may think that it's a perfect dog, but often, many issues need addressing, but again, it doesn't cause you problems. So nobody works with it. After all, it doesn't destroy anything, it doesn't bark, even though it's constantly stressed.

**MŁ:** Health problems may occur later. Stress lowers immunity, and the dog gets sick.

**JW:** Do dogs also experience long-term stress?

**MŁ:** Yes. For example, when my adopted dog goes through a stressful situation, it bites its paws for about two weeks. It's getting better now, but in the beginning, it was terrible.

**SŚ:** I would also add that a behaviourist develops correct patterns. They don't only solve problems but also care about the pet's well-being and help to keep it. A behaviourist can explain many things to you. They offer information on how to coexist with a dog. If you have a good relationship with the dog, it will follow you rather than run away.

**MŁ:** Additionally, they educate before adopting or buying a dog so that you know what to expect.

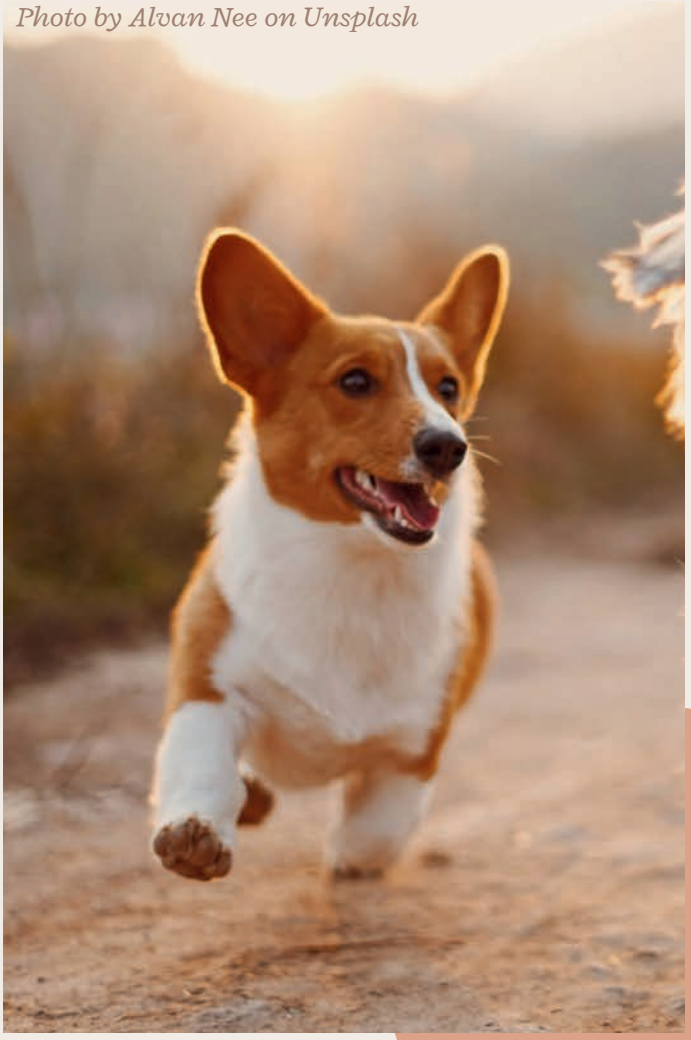
**JW:** How do you prepare to have such a dog at home?

**MŁ:** Go to a behaviourist.

**SŚ:** There are many things to consider, such as preparing the space, checking if we have access to good walking areas, whether the dog will be limited to walking around a block of flats because we are not mobile and access to a good vet. Not necessarily one in your neighbourhood. Sometimes, vets switch professions without proper preparation. They may have specialised in farm animals but moved to the city and started treating dogs. You should be aware of nutrition. Feeding the dog "anything" almost never ends well. It may lead not only to health but also behavioural problems. Over time, nutritional deficiencies occur. For example, if a dog lacks iron, it may have periodic anaemic states.

Photo by Milada Vigerova on Unsplash

*Photo by Alvan Nee on Unsplash*



**MŁ:** Or too much protein and not using up the energy coming from it, and we end up with a reactive dog.

**JW:** And what about psychological disorders in dogs? People believe that a dog will get scared, and that's it, but you're talking about anxiety disorders in dogs. What does the spectrum of these disorders look like?

**MŁ:** That's a very broad question. We could talk and talk about it. An anxious dog may refuse to eat, making you believe it is a picky eater. He may pee in the house, and you think it hasn't learned to pee outdoors. But it may be due to stress or a behavioural problem. The dog may stop going outside, tremble, and vomit, and again, it may be a behavioural problem. The dog may bark at everything that moves because it's scared or poorly socialised. It may bite holes in walls. Medical symptoms may appear, and the dog may be unable to learn and retain information. Everything can be caused by stress. Changes in the dog's coat may appear, and so on.

**SŚ:** I would say that the spectrum is not as broad as in humans, but there are many disorders. The dogs may struggle with depression, obsessive-compulsive disorders or eating disorders. This is still a new topic, but we're learning more and more about dogs. This part of science is slowly developing, and so is the awareness that not only humans can have mental problems.

**JW:** I didn't know that. If you were to identify the most damaging stereotypes regarding dog upbringing, what would they be? One thing that comes to mind is that a dog will eat anything and should eat what's left on the table.

**SŚ:** Your example is the least of the problems. It's a health issue related to improper nutrition. But many things can have a more negative impact on a dog's life.

**MŁ:** The first thought that came to mind is that the dog must greet everyone. I think that's the biggest stereotype.

**SŚ:** People who have dogs but are unaware of dog communication, lifestyle, and needs think that a dog must greet everyone, both people and dogs, during a walk. While it may not seem detrimental if the dog becomes withdrawn, this behaviour can potentially escalate into aggression.

**MŁ:** It also teaches the dog that every person and dog will cross its boundary and fail to respect its space.

**SŚ:** It's better for the environment when the dog becomes withdrawn, but it's healthier for the dog to release that aggression as it reduces self-harm. Unfortunately, this belief is deeply entrenched in society. It's commonly practised, especially when the dog is young. Owners may then retract from this practice, but the dog is conditioned to expect social interactions. If it can't approach other people or dogs, it expresses its frustration by biting the leash, the owner or excessively barking.

**JW:** What about puppies? It appears that when someone has a puppy, everyone who visits them must pet, hold, and kiss it. Should this be the norm?

**MŁ:** No. It's the worst thing you can do to this puppy. It learns that it's not respected and that its boundaries are crossed, which can lead to the issues we discussed earlier.

**SŚ:** If the puppy wants to, it's fine because it's harmless, but it can become bothersome for us. Some dogs may later perceive all people and dogs as sources of entertainment, but it can be exhausting for those around. At some point, we might find it frustrating that the dog constantly rushes up to others or violates someone's space and may get hit. So, unlimited fussing over the puppy is never good. It needs to be managed and controlled.

**MŁ:** It's good to offer alternative solutions to the dog. When we notice that the dog's emotions are already very high, we can give it, for example, a chew toy to calm it down. Otherwise, it won't be long before the dog will pee at the sight of people, chew on walls, destroy toys, etc.

Photo by Jesse Schoff on Unsplash

**JW:** Previously, there was a common belief that "a dog just acts like that," but now we're seeking out causes and solutions for behaviours, aren't we?

**MŁ:** Exactly. The dog is not coping and reacts in some way.

**JW:** And adhering to the belief that "a dog just acts like that" is like living in the Middle Ages.

**SŚ:** Indeed.

**JW:** Could you identify the most important aspects of raising a dog?

**SŚ:** I would say we have three basic options. Firstly, we take an adult, well-behaved dog that is already well-settled. It may have minor problems, but life won't surprise it any longer. Secondly, we take a younger dog with problems we don't know about or ones we are aware of, requiring immediate and intensive training from the outset. Thirdly, we choose a puppy, taking full responsibility for its upbringing.

**MŁ:** I think that the most important thing is to establish clear rules for yourself and people living in the same place as a dog that everyone will adhere to. Is it allowed to sleep on the bed or enter certain rooms? Should it wait when the door is opened, who takes it for walks, can it be fed, and if so, with what, etc? And they must really apply to everyone. They should be suitable for each person and remain consistent regardless of mood.

Another thing is teaching the dog to relax and stay alone at home. Socialisation is important, but it should be done reasonably. We just can't throw the dog into difficult situations where it may struggle. For example, I've taken the dog for social training today, and tomorrow, I will let it rest and sleep off the stress. This process should be gradual without putting the dog in situations where it can't cope. It also depends on the dog's breed. For working dogs, some training can be done independently or with a trainer, but only after the dog has matured a bit. Initially, the focus should be on building the caregiver-dog relationship, socialisation, and providing adequate rest.

**JW:** Can a dog raised at home, where these rules are followed without formal training, become emotionally stable and calm?

**SŚ:** For a dog, life is a continuous training. They draw conclusions from everything that happens, much like humans do. You can't separate life from training. While a dog may not receive formal sports training or behavioural guidance from a professional, it doesn't mean they're not undergoing training in some form. Even a simple walk around a block of flats can be a life lesson. Homeless dogs are constantly taught life lessons. They learn that no one will coddle them; nobody will call them if they walk too close to the road. They must adapt quickly and well. Some say these dogs have the perfect life, but they had a very hard time learning how to function. The situation is different for dogs in rural areas, where they can enjoy more freedom. These dogs are allowed more, they can also show more natural behaviours. They don't have, for instance, problems with other dogs, forming social groups, or emotional problems. The rural environment is simply more natural for a dog.

**MŁ:** There are not as many stimuli as in the city. If a rural dog is provided with regular walks, food, and human companionship, it has almost everything it needs. But the city has trams, fireworks, cars, and constant stress.

**SŚ:** In rural areas, dog owners bear less responsibility and play a smaller role in adjusting their dogs to life compared to urban dog owners. In the city, nearly all responsibility for the type of dog a puppy becomes rests with the owner. It isn't advisable to take the dog on a two-hour walk to expose it to various stimuli. Only a fraction of dogs will handle such situations well, while most will experience trauma and stress. It's important to adapt the dog to everything, but gradually.

**MŁ:** A real-life example: when I first socialised my puppy, 30 minutes in the park was enough. She didn't react with any emotions at home. But after 35 minutes, it was as if Armageddon had taken place.

**JW:** Do you have any advice for dog owners?

**SŚ:** Less often means more. Let's respect our dogs and those of others. What's the point of planning a great training session if other people don't pay attention, and a dog from the other end of the park comes running up to our dog, whose owner can't call it back, and runs into ours? All the effort goes to waste.

**MŁ:** I believe we should appreciate the small successes of our dogs more and avoid expecting too much from them.

**JW:** Thank you very much.

## Glossary

**take sth out (on)** – to express anger or frustration towards someone or something that is not the cause of those feelings
**intimidate** – to frighten or threaten
**withdrawn** – introverted, avoiding social interaction
**nutrition** – the process by which an organism uses food to support its life
**deficiency** – not enough of something important
**picky eater** – a person or an animal that is selective or fussy about what they eat
**ratain** – keep
**coat** – furry covering on an animal
**detrimental** – causing harm or damage
**release** – let go of or express emotions in some way
**entrenched** – firmly established or fixed
**retract** – stop doing something that was previously done
**bear responsibility** – be responsible for something

**Scan and see our interviewees' Instagram profiles!**

@barwnepieski

@szczekaczka.team

Photo by Xan Griffin on Unsplash

# COMMUNICATION AMONG *Dolphins*

By Daria Fruń

Playful, social and considered extremely intelligent, dolphins remain widely researched marine mammals. Scientists have observed their behaviours for years, both in captivity and in the wilderness. Their complex and extensive communication is possibly what allows them to form and maintain intricate social bonds – dolphins create networks of relationships consisting of very close associates (with partners, mothers or calves) and members of the same larger group. These groups, known as pods, primarily serve for hunting and protection. Depending on the type of dolphins, they typically consist of anywhere from 2 to 500 individuals.

Sound travels approximately five times faster in water than in air. It's no surprise that dolphins mainly rely on sound for communication, given that their hearing range spans from 2 to 200,000 Hz – ten times wider than the upper limit of human adults. They use sounds mainly in two ways. First, through vocalisations, which consist primarily of different clicks, chirps and whistles. Most important among them are signature whistles – modulated patterns of high-pitched sounds that serve as means of individual identification. Moreover, they are used to establish which pod members are nearby, keep track of each other, and possibly even communicate one's mental state. There have been documented instances where dolphins emitted their distinctive whistles loudly and repeatedly when distressed.

Signature whistles are also exchanged during random encounters between separate pods as a way to facilitate socialising. Dolphins usually develop their own distinctive whistles between the ages of one and two, although some may alter them later in life. Simultaneously, they learn to imitate other dolphins' whistles, using them to attract the attention of specific individuals. For example, it allows separated calves and mothers to reunite.

When it comes to determining the locations of objects of interest, however, vocalisations are not the most efficient. That title belongs to echolocation – the process by which dolphins examine their surroundings through sound waves reflecting from objects back to the emitting

*Photo by Talia Cohen on Unsplash*

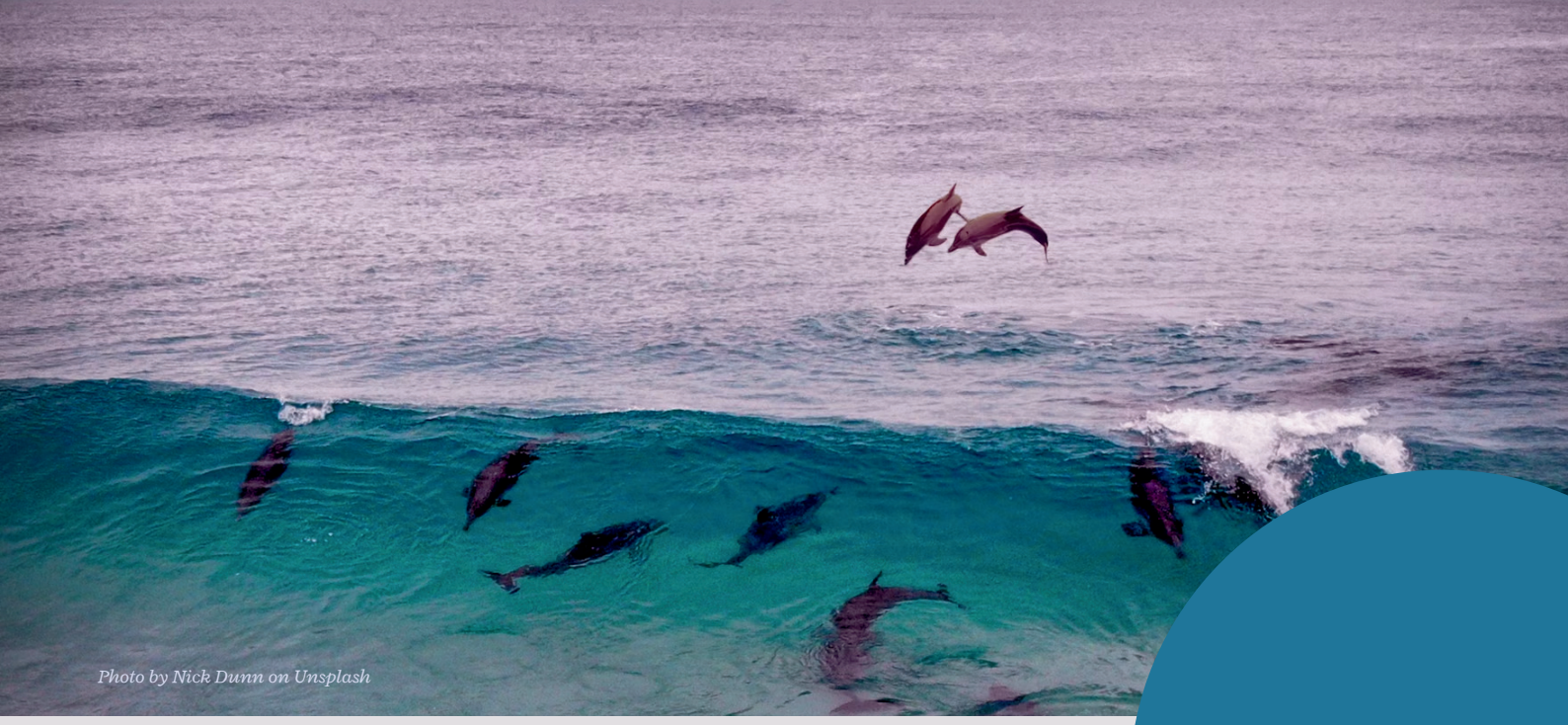


*Photo by Nick Dunn on Unsplash*

dolphins. It allows these animals to differentiate between objects as small as golf balls by evaluating their density, speed, direction of motion, size and distance up to 200 meters. Precise estimation of prey and other hunters makes foraging for food much easier than relying solely on visual cues. It also helps to avoid larger predators.

Another way of communication practised by dolphins is through touch, although to a much lesser extent. Calves brush against their mothers' flanks and fins, which may serve to strengthen their bond. Touch is also prominent during courtship, however it is usually rougher – dolphins use their teeth to make parallel scratches on the skin of the intended partner.

For humans, around 70% of information's content is conveyed through nonverbal communication. When it comes to dolphins, it appears that body language doesn't hold the same importance. Researchers theorise that it may come into play only during close contact, as water and all that floats within it may interfere with visual communication. There is also no consistent interpretation of the meanings of any specific body movements. While much is still unknown about dolphin communication, that part remains an inscrutable mystery.

## Glossary

**captivity** – the state of being kept somewhere and not permitted to leave
**emit** – to release or give off (e.g. light, sound or gas)
**float** – to stay on the water surface without sinking
**marine** – relating to the sea or ocean
**intricate** – having many small or complicated parts
**pod** – a group of marine mammals, such as dolphins or whales
**high-pitched** – used of sounds and voices: high
**distinctive** – something that stands out because it's unique
**prey** – an animal that is hunted and killed for food by another animal;
**forage** – search for food
**cue** – a signal
**courtship** – the behaviour by which different species select their partners
**inscrutable** – mysterious, enigmatic

**Sources:**
https://www.dolphinsplus.com/blog/how-do-dolphins-communicate
https://dolphins.org/communication

# Lifestyle corner

# TO BE
# *The Lucky One*

Even if it's better than it was in the past, a lot of pets are being mistreated and abused by their owners. Years ago, around my neighbourhood, it was common to see abandoned young dogs, especially during the summer holidays. People were going on holidays, leaving pets near the woods, and never returning. It doesn't seem to be happening nowadays, which doesn't mean that pets aren't abandoned anymore.

My first dog, Teodor, was dropped off at the vet's doorstep when he was just a few weeks old. He got adopted days later and quickly adjusted to his new home. The story of my second dog is quite different.

The first time I met Fado, a few-year-old Labrador, was in front of my friend's flat. It was September, and the weather started to get colder. He was sleeping nearby and eating what friendly people gave him. But nobody from the block of flats could take him in, so I decided I could bring in another dog.

It wasn't that easy, though.

I couldn't take him on my own, so my grandfather helped me. The only problem was that Fado was afraid of men – we couldn't catch him together.

In the end, my friend managed to bring Fado to my house, but it took him some time to get used to both my father and grandfather. He was also afraid my other dog would eat his food, so Fado's bowl was quickly emptied every morning. During his first visit to the vet and every subsequent one, Fado was terrified of being abandoned again, so it wasn't easy to get him to enter a car and stay still during the ride or examination. It turned out that throughout his life, he had several bones broken, which grew together in a wrong way – without a doubt, he had been beaten and abused, causing him to fear men.

Two and a half years have passed, and now Fado is a different dog – he craves physical contact with my father, grandfather and the rest of the family. His fur is strong and shiny, and his belly is always full. He really is a lucky one. But sometimes it makes me wonder – how many animals out there are being treated the way Fado was treated, how many of them are homeless, starving and wishing to be the lucky ones.

*Wiktoria Wiśniewska*

## Pun Please

What's the difference between a psychologist and a magician?
A magician pulls rabbits out of hats, whereas a psychologist pulls habits out of rats.

"Why don't oysters donate to charity?"
"Because they are shellfish!"

# Whimsical LANGUAGE

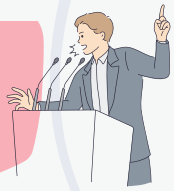
## Idioms

### A little bird told me

Someone told me, but I will not reveal their identity.

### All bark and no bite

Full of big talk, but no action is taken.



### Butterfly in one's stomach

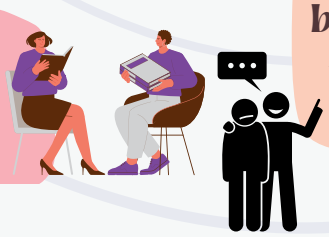
Having a strong nervous or anxious feeling.

### Cat's got your tongue

At a loss for words or unusually quiet.

### The elephant in the room

A sensitive issue or problem that everyone is aware of but no one wants to discuss openly.



### Kill two birds with one stone

To accomplish two things at the same time with a single action.

### A bee in your bonnet

To be obsessed with an idea you can't stop thinking about.

## Proverbs

### Birds of the same feather flock together

People with common characteristics always end up together.

### The fish rots from the head

Bad leaders harm an organisation.

### You can lead a horse to water, but you can't make him drink it

You can try to help someone by giving good advice, but you can't force them to accept it or follow it

### A bird in hand is worth two in the bush

The certainty of having something in hand is better than the mere probability of having even more things.

### Don't count your chickens before they hatch

Don't make plans based on future events that may not happen.

# Culture Club


## "Gorillas in the Mist"

Recently, I revisited a classic film from my childhood *Gorillas in the Mist*, directed by Michael Apted in 1988. I remember watching it for the first time with my father, captivated by the stunning landscapes of Africa and the beautiful animals there. However, upon this recent viewing, I discovered a depth to the film that I had overlooked as a child. Below, I will give you a glimpse at the underlying themes of the film, now available to me, including the treatment of animals and the profound influence of individual actions.

We are often presented with a certain perception of scientists, and as soon as we become even slightly entangled in academic life, we may start to see a path that must be followed – a proper way of doing things, some may say a dull way. We are often trapped in the belief that we have to do something to become a certain thing, and while it seems acceptable, it can lead to feelings of unhappiness and anxiety.

You don't have to become this or that even after obtaining your diploma. For example, you can pursue a career as a zoologist after completing therapeutic studies and working in a hospital for a few years. This is what Dian Fossey (Sigourney Weaver) did. She became a specialist and later obtained a PhD in a very different field. She went off to Africa to study gorillas and their behaviour.

As she found herself in a conflicted and deprived area of the world in which gorillas were seen as material goods that could be sold, she also got involved in protecting them from illegal hunting.

I know that films about scientists can be boring (with a few exceptions, such as this year's Oscar winner *Oppenheimer*), but this one defies that stereotype. Only those who haven't seen it might mistake it for a National Geographic documentary.

*Gorillas in the Mist* has it all: a moving story about a person who fights for a change, moral and romantic dilemmas, and it is based on a true story, giving inspiration and a nostalgic feeling. I wholeheartedly recommend this film.

## "Why Zebras Don't Get Ulcers"

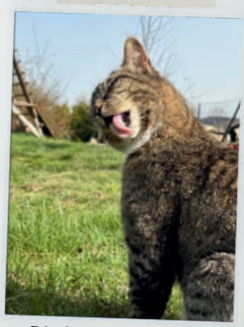
### A Guide to Stress, Stress-Related Diseases, and Coping


*Why Zebras Don't Get Ulcers?* poses an intriguing question. While the title may seem misleading at first glance, Robert M. Sapolsky, the author, provides an insightful explanation. The point is that they experience it much less frequently than humans do. Why is that? Mostly stress. It's a complex issue because, not too long ago, nobody paid much attention to it. It was considered a natural aspect of life, but then it became viewed as extremely harmful and destructive, almost as if it came from the devil himself. However, it's not as clear-cut as that. Stress is often not a direct cause of illness or disorder, but it is strongly associated with the likelihood of developing them, or even recovering from them, sometimes in ways we wouldn't expect. Numerous studies delve into different aspects of stress, but this book, being scientific in nature, consolidates the most significant ones and presents them in a comprehensible manner. The comparison, "If you are a zebra and you are running away from a lion ....," is used throughout the book so the title is not arbitrary. Research on animals is one of the most effective methods for understanding our neurobiological functions, shedding light on the origins of stress. It may not be an easy read, but I can assure you that it's rewarding, and you won't regret the time spent.

**Reviews by Jan Wolicki**

# Meet the pet friends of our *university community!*

Lala, the cat of Martyna Lekan



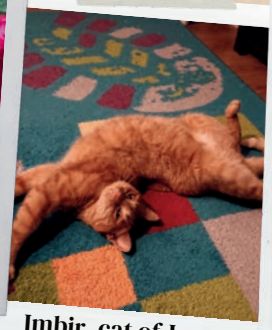
Globus, the cat of Martyna Lekan

Maria Antonina, the charming parrot companion of Agnieszka Bieńkowska, PhD, the Director of Studies

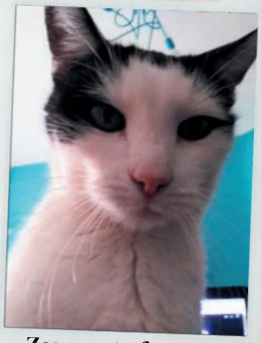
Rudi, the cat of Prof. Joanna Zalewska

Fifi, the playful dog of Elżbieta Grabińska, MA, the Director of the Foreign Language Studies Department

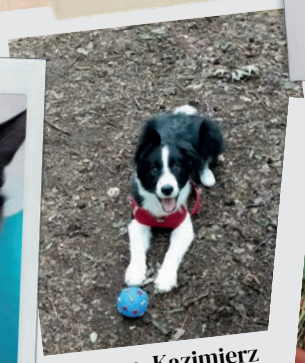
One of the squirrels who often visits the balcony of Prof. Danuta Duch-Krzystoszek, the Director of the Institute of Philosophy and Sociology



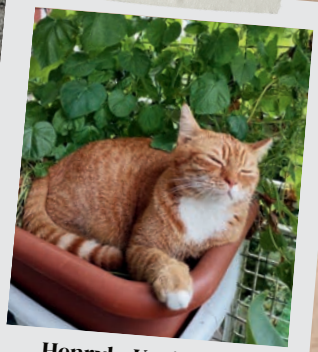
Imbir, cat of Joanna Świderska, PhD



Zeus, cat of Joanna Świderska, PhD

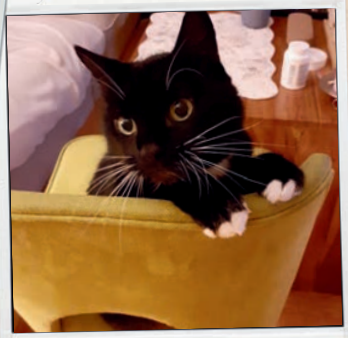


Morus, Kazimierz Kwiatek's dog

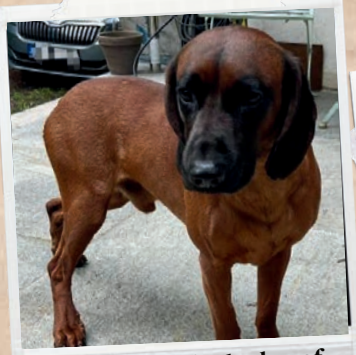


Henryk, Kazimierz Kwiatek's cat

Daughter of Beata Wiśniewska, MA, with her pet hen Sprinter



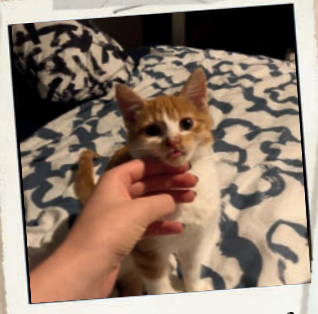
Lucynka, the cat of Dorota Trefoń-Bykowska, MA



Fender, the lively dog of Dorota Kożuchowska, MA

Bezi, the snail of Amelia Anielska-Mazur's friend

Fala, the cat of Julia Nowakowska



Flora, another cat of Julia Nowakowska

Kropka & Chilli, dogs of Joanna Łukasiewicz

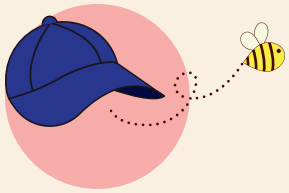
Martin, one of Amelia Anielska-Mazur's dogs

# Language Exercises

## Exercise 1.

Guess the idioms based on the given images.

Answers on page 34

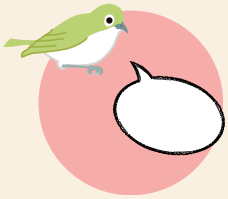


1. .....

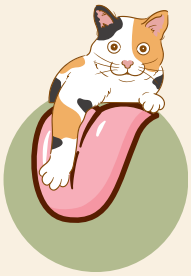
2. .....

3. .....

4. .....



5. .....



6. .....

## Exercise 2.

Complete the sentences below using the verbs provided in their correct form.

forage | mate | rear | exhibit | emulate | take out | intimidate

1. Squirrels _____ for food in parks, gardens, and even on people's balconies when winter draws near.
2. The mother bear _____ her cubs alone, protecting and teaching them how to swim and find food.
3. Despite the large dog's attempts to _____ the small dog, the small one thought nothing of it and wanted to play.
4. Sparrows form strong bonds with their partners and _____ for life.
5. The parrot's ability to _____ a wide range of sounds amazed everyone.
6. When his dog gets stressed, it _____ its frustration on its favourite toy and shreds it to pieces.
7. Everyone watched with delight as dolphins _____ their amazing swimming abilities, played with beach balls and interacted with one another.

## Exercise 3.

Fill in the gaps with the same word to create collocations. Afterwards, choose one of the collocations you have created and use it to complete the sentence below.

**A**

_____ responsibility
_____ a resemblance

At first glance, robins and sparrows _____ to one another but take a closer look and you'll see they're very different.

**B**

_____ animals
_____ environment

_____ may exhibit all sorts of untypical behaviours, from pacing back and forth to picking at their hair or features.

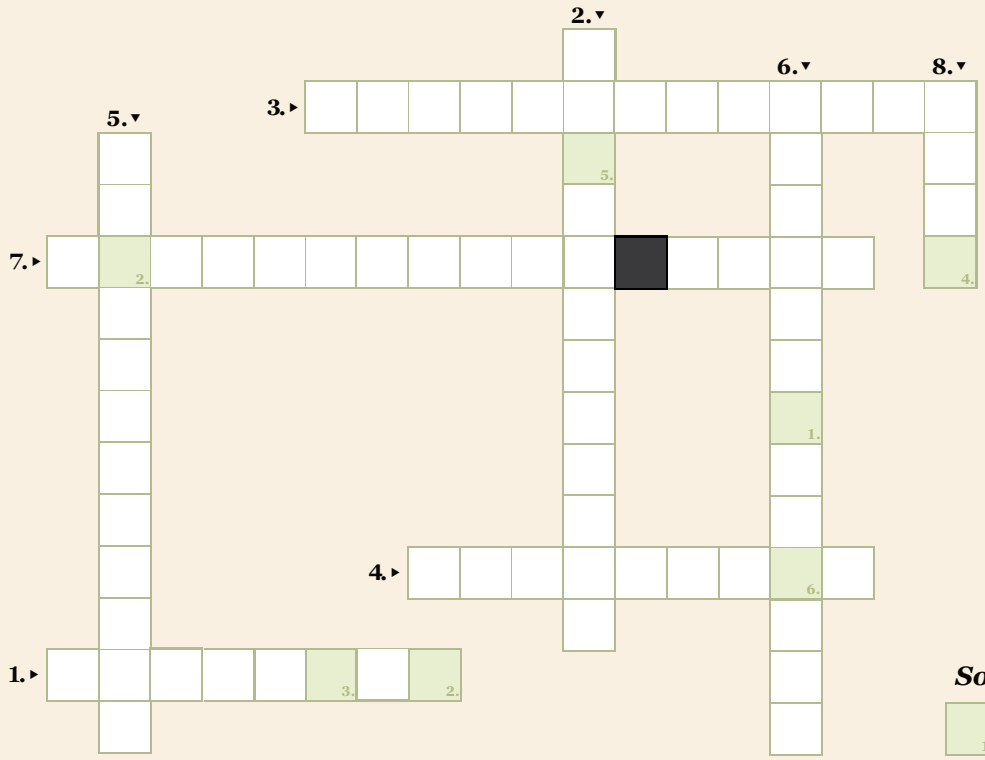
**C**

_____-mutilation
_____-care

If you have a dog that is constantly chewing on its paws, be aware that it may be a form of _____ and a sign that it is experiencing stress or anxiety.

# Exercise 4.

*Complete the crossword puzzle using the provided clues. The solution is indicated by the numbers in the green squares.*




1. The foundation of human evolutionary success, according to Lev Vygotsky.
2. Nicholas Humphrey proposed that [...] is a consequence of social, rather than natural, environment.
3. The basis of a symbiotic relationship between a human and an animal.
4. A condition similar to psychosis occurring in wild animals held captive in zoos or circuses.
5. Adjective describing a type of community that is naturally formed by rodents.
6. A type of rat from Calhun's experiment which wandered around the habitat, ignoring other rats and being ignored in return, exhibiting behaviour unnatural for social creatures.
7. A term used to describe the pathological behaviours induced by living in densely populated environments.
8. Family units formed by resident orcas consisting of at least fourteen orcas.

# Exercise 5.

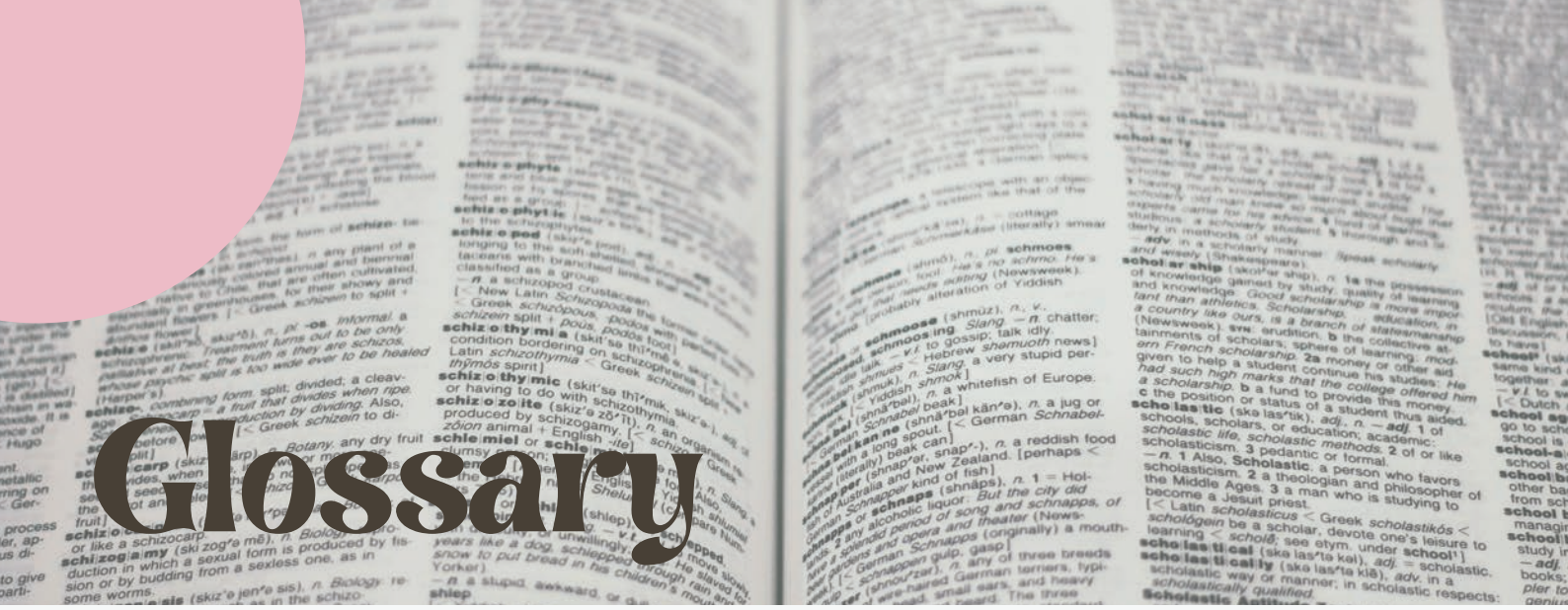
*Replace the underlined words with the ones provided below. Change their form if needed. Some words are redundant.*

| | | | | |
|---|---|---|---|---|
| exhibit | control | attune | raise | acquisition |
| spark | succumb | welfare | communicate | expose |

Animal learning studies date back at least to French philosopher Julien Offray de La Mettrie, who argued that there is no major difference between humans and animals. Like humans, animals can also think and <u>convey</u> (1) their feelings and needs. La Mettrie believed that apes cannot speak not because they are inferior to people but because of "some defect in the organs of speech". He was also convinced that a young ape could be trained to <u>show</u> (2) complex cognitive abilities and learn a language if <u>subjected</u> (3) to it extensively.

The first experiment to teach an ape human words took place in the 1930s when scientists Luella and Winthrop Kellogg brought up their son with a female chimp, Gua. In the 1950s, behavioural psychologists Keith and Cathy Hayes similarly <u>reared</u> (4) an infant chimp called Viki. Although both chimpanzees reportedly understood some spoken language, they could never produce recognisable words. In the 1960s, Beatrix and Allen Gardner began working with a chimp named Washoe. This time, the caretakers didn't try to make a chimp speak but to teach her sign language. With her vocabulary of about 200 signs, Washoe became famous as the first chimp to acquire human sign language. <u>Inspired</u> (5) by her success, many other experiments of this kind followed, and one of the most famous is that of a chimpanzee, Nim Chimpsky. The experiment, known as "Project Nim", was intended to settle a long-standing argument between Noam Chomsky and B.F. Skinner about whether language <u>learning</u> (6) is an innate ability or learned behaviour.

The Project had a mixed success. On the one hand, Nim did acquire some sign language skills, but on the other he was unable to produce recognisable spoken words. It also raised important questions about the treatment and <u>well-being</u> (7) of animals in <u>monitored</u> (8) research environments, similar to other experiments of its kind.



# Glossary

## Mouse Utopia

**non-renewable resources** – resources, such as coal, natural gas and oil that can't be replaced in a short time
**rodent** – a small animal with large, sharp teeth, such as a mouse or rat
**habitat** – the natural environment or home of an animal
**predator** – an animal that preys on other animals for food
**enclosure** – a fenced-off area for keeping animals
**offspring** – the young or babies produced by an animal
**misery** – unhappiness, suffering
**vice** – bad habit or behaviour
**mate (with)** – animals coming together to reproduce or make babies
**rear** – raise (offspring)
**immune (to)** – not affected by something
**lash out (at)** – to express anger or emotion suddenly or violently towards someone
**succumb** – give in to something
**differentiate** – to see or understand the differences between things
**undermine** – to weaken or damage something gradually

## Mental Health Disorders in the Animal Kingdom

**prevalent** – common or widespread
**exhibit** – to show or display (e.g. a symptom)
**hypothermia** – a medical condition characterised by dangerously low body temperature
**confinement** – a state of being restricted to a limited space
**gestation** – pregnancy
**psychosis** – a condition of the mind that results in difficulties distinguishing what is real and what is not
**pace** – to walk back and forth repeatedly, often because of anxiety or worry
**bob** – to move up and down quickly
**self-mutilation** – intentional self-harm
**sensory deprivation** – reduction or removal of sensory stimuli
**captive environment** – an enclosed space where animals are kept

## The Complexities of Orca's Social Behaviour

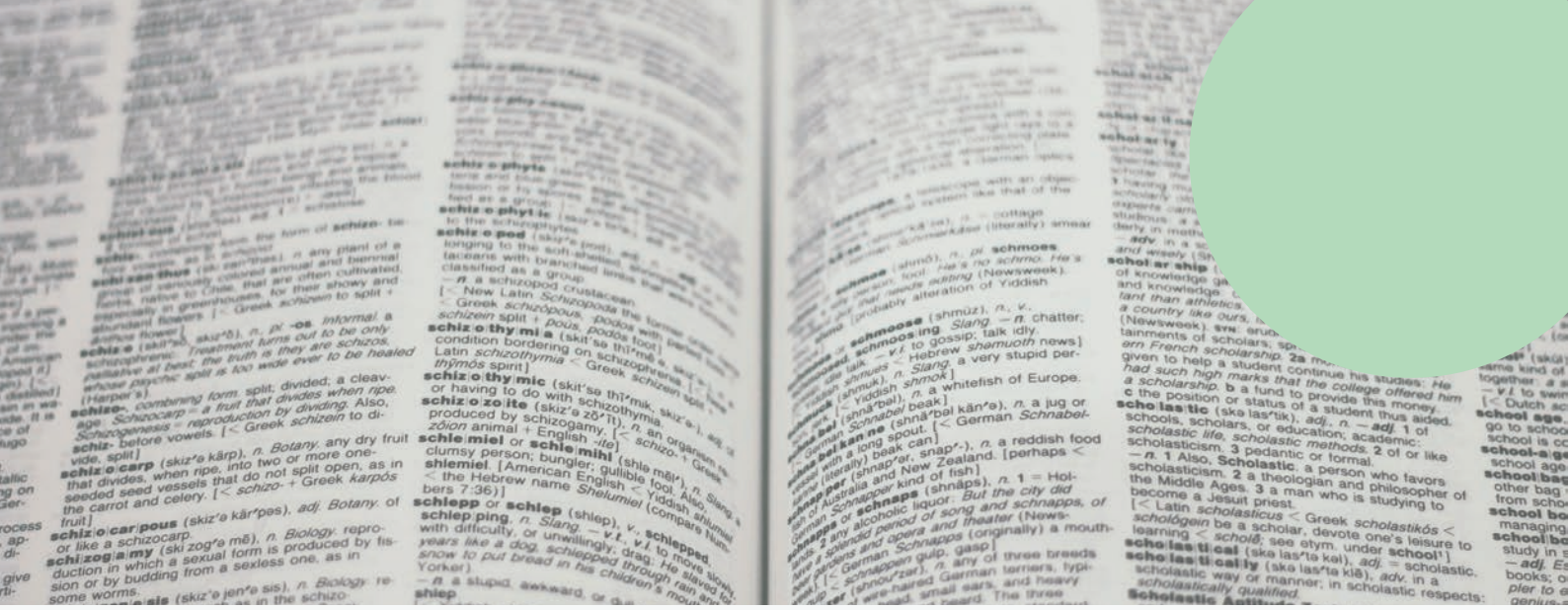
**descendant** – a person, plant, or animal that is related to a certain ancestor, family, group, etc
**bear a resemblance to** – to look similar to something or someone
**convey** – to communicate or express something
**distress** – extreme sadness, pain, or suffering
**proximity** – being close to or near something or someone
**distinct** – visibly different or separate from others
**diverge** – to become different from each other

## Alex The Wise Parrot

**language acquisition** – the natural process by which children learn their mother tongue
**primates** – a mammal of the group that includes humans, apes, monkeys, and lemurs
**apes** – primates without a tail, such as chimpanzees, gorillas, orangutans, and gibbons
**emulate** – to imitate
**properties** – characteristics of an object or substance, such as size, shape, colour, etc.
**object permanence** – the understanding that an object exists even when it can no longer be seen
**core learning** – fundamental aspects of learning

## Can Pets Improve Our Mental Health?

**cherish** – to care for affectionately
**snuggle up (to)** – to get close to someone or something in an affectionate way, as for warmth
**attune (to)** – to bring into harmony with something else, adjust or adapt
**mindful** – aware or conscious of something
**adverse** – unfavourable or harmful
**spark** – to trigger or initiate
**enhance** – to improve or increase



## Interview

**take sth out (on)** – to express anger or frustration towards someone or something that is not the cause of those feelings
**intimidate** – to frighten or threaten
**withdrawn** – introverted, avoiding social interaction
**nutrition** – the process by which an organism uses food to support its life
**deficiency** – not enough of something important
**picky eater** – a person or an animal that is selective or fussy about what they eat
**ratain** – keep
**coat** – furry covering on an animal
**detrimental** – causing harm or damage
**release** – let go of or express emotions in some way
**entrenched** – firmly established or fixed
**retract** – stop doing something that was previously done
**bear responsibility** – be responsible for something

## Communication Among Dolphins

**captivity** – the state of being kept somewhere and not permitted to leave
**emit** – to release or give off (e.g. light, sound or gas)
**float** – to stay on the water surface without sinking
**marine** – relating to the sea or ocean
**intricate** – having many small or complicated parts
**pod** – a group of marine mammals, such as dolphins or whales
**high-pitched** – used of sounds and voices: high
**distinctive** – something that stands out because it's unique
**prey** – an animal that is hunted and killed for food by another animal;
**forage** – search for food
**cue** – a signal
**courtship** – the behaviour by which different species select their partners
**inscrutable** – mysterious, enigmatic

## Whimsical Language

**a little bird told me** – someone told me, but I will not reveal their identity
**all bark and no bite** – full of big talk, but no action is taken
**butterfly in one's stomach** – having a strong nervous or anxious feeling
**cat's got your tongue** – at a loss for words or unusually quiet
**the elephant in the room** – a sensitive issue or problem that everyone is aware of but no one wants to discuss openly
**kill two birds with one stone** – to accomplish two things at the same time with a single action
**a bee in your bonnet** – to be obsessed with an idea you can't stop thinking about

***Birds of the same feather flock together.*** – people with common characteristics always end up together.
***The fish rots from the head.*** – bad leaders harm an organisation
***You can lead a horse to water, but you can't make him drink it.*** – you can try to help someone by giving good advice, but you can't force them to accept it or follow it
***A bird in hand is worth two in the bush.*** – the certainty of having something in hand is better than the mere probability of having even more things
***Don't count your chickens before they hatch.*** – don't make plans based on future events that may not happen

# Last but not least...


TED

## What are animals thinking and feeling?

*Carl Safina, October 2015*

What's going on inside the brains of animals? Can we know what, or if, they're thinking and feeling? Carl Safina thinks we can. Using discoveries and anecdotes that span ecology, biology and behavioral science, he weaves together stories of whales, wolves, elephants and albatrosses to argue that just as we think, feel, use tools and express emotions, so too do the other creatures – and minds – that share the Earth with us.

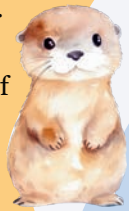
**Watch here!**

## Rock & Love

### Did you know...

...when male penguins are searching for their mate, they meticulously look for the smoothest, prettiest pebble in the ice (even if it means stealing from other penguins) and then offer it to their "date" as a token of their love, which truly resembles how us humans propose...

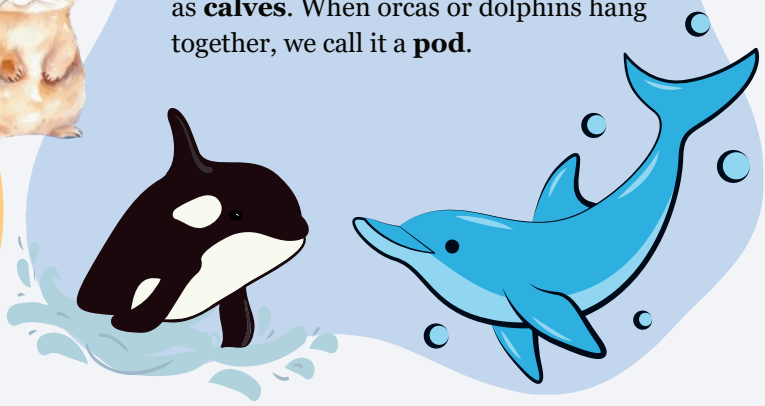
### but also



...rocks are an important part of an otter's life. As one of the very few mammals they use tools! Because a good rock is a versitile instrument, when otters finally find their favorite pebble out there, they carry it at all times in a little pouch, which is actually a loose skin patch under their armpits. Otters use their rocks for opening hard shellfish, building dams or shelters, but also for comfort and entertainment! Somtimes they even form a bond with their pebbles so strong that they sleep with them, groom them and cuddle them.

## Linguistic Tidbit

Animal names can be puzzling at times. Take orcas or dolphins - their names may lead us to mistake them for farm animals. Males are referred to as **bulls**, females as **cows** while the young ones as **calves**. When orcas or dolphins hang together, we call it a **pod**.



## Answers to exercises

### Exercise 1.

1. a bee in your bonnet
2. butterfly in one's stomach
3. kill two birds with one stone
4. the elephant in the room
5. a little bird told me
6. cat's got your tongue

### Exercise 2.

1. forage
2. rearing
3. intimidate
4. mate
5. emulate
6. take out
7. exhibited

### Exercise 3.

a) bear; bear a resemblance
b) captive; captive animals
c) self; self-mutilation

### Exercise 4.

1. language
2. intelligence
3. companionship
4. zoohosis
5. hierarchical
6. somnambulists
7. behavioural sink
8. pods

*Solution*: beastie

### Exercise 5.

1. communicate
2. exhibit
3. exposed
4. raised
5. Sparked
6. acquisition
7. wellfare
8. controlled

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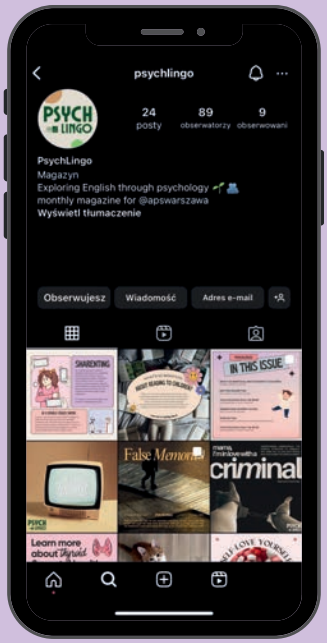


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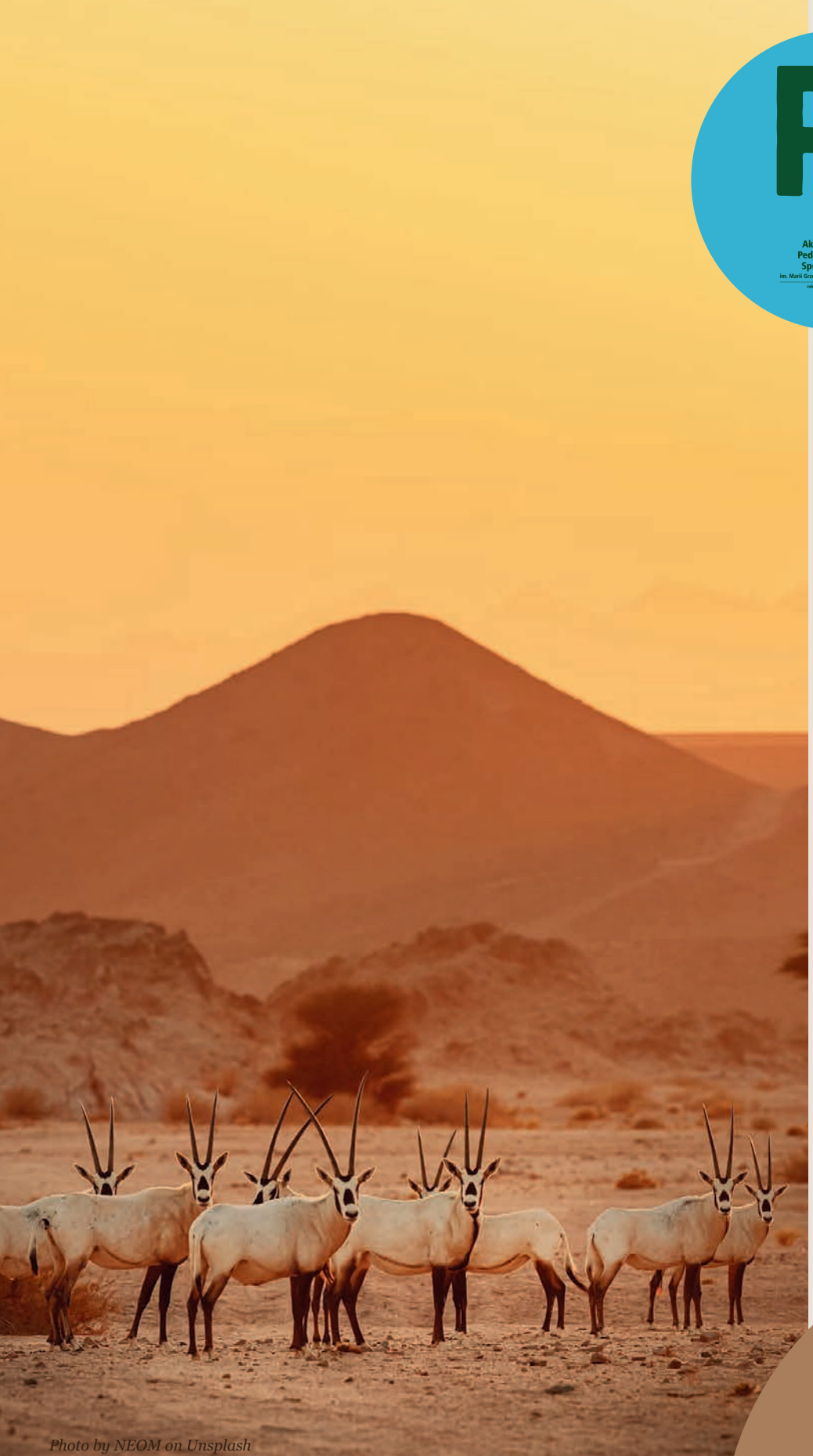

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