

# aim HIGH

issue 1 (59) 20/21

WIĘCEJ NIŻ SZKOŁA



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A Doberman, a Golden Retriever and a cat died and met God. God said to them, "Tell me why I should let you into heaven."

The Doberman said, "I'll protect you with my life."

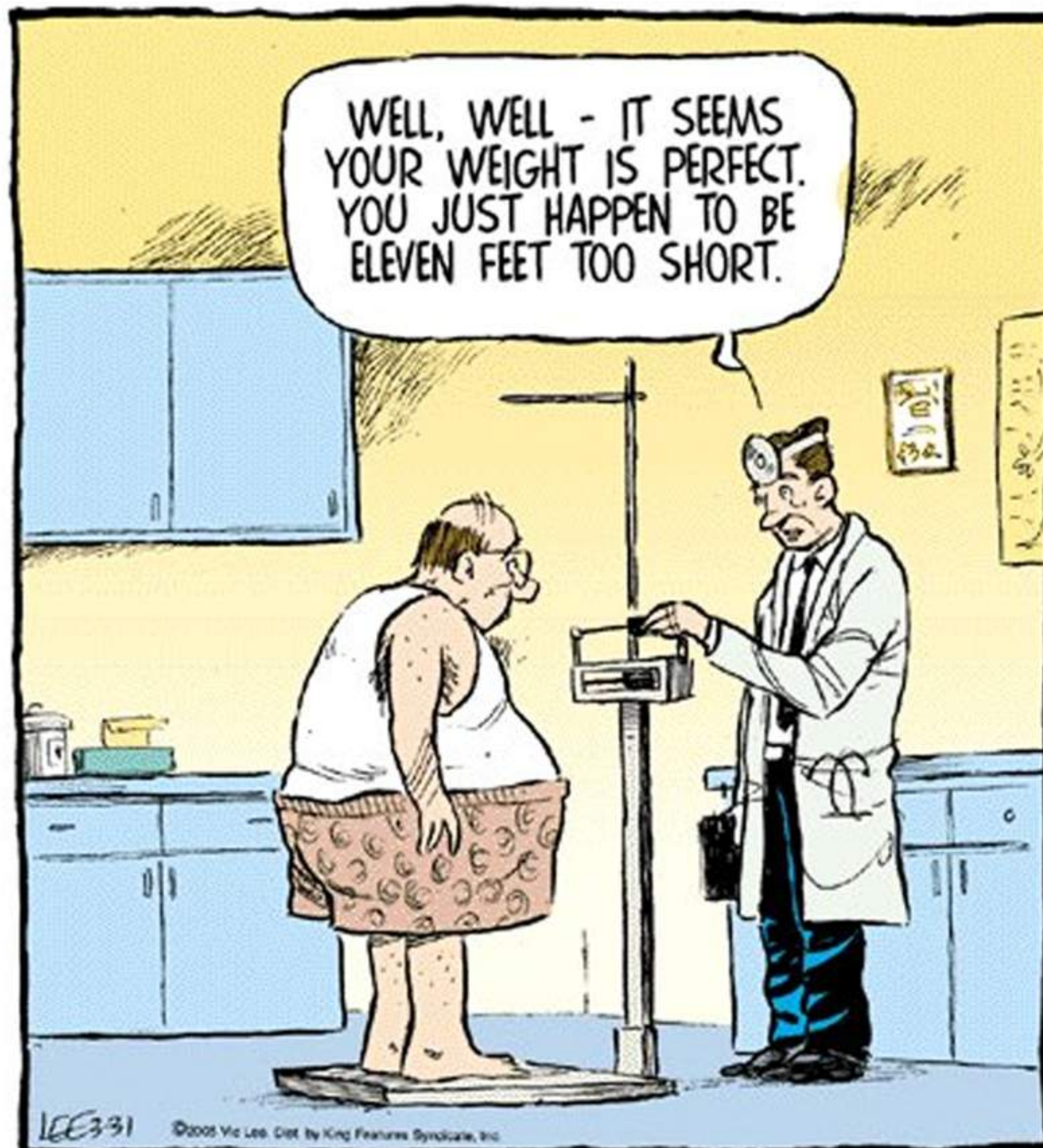
God said, "You can sit at my right side."

The Golden Retriever said, "I will fetch your slippers and anything else you ask me to."

God said, "Then you can sit at my left side."

Finally, God looked at the cat and said, "And what will you do?"

The cat said, "Excuse me. I think you're sitting in my seat."





# 82 years ago America was attacked by aliens



On October 30, 1938, the Americans left their homes in panic, trying to escape an alien invasion. "War of the Worlds", the famous radio play by Orson Welles caused incredible emotions and unexpected reactions among the audience.

At 8 pm many people in the United States sat down comfortably in armchairs to listen to the weekly program "Mercury Theater on the Air" - a live radio play. The radio play was an adaptation of the novel by the English writer Herbert George Wells, who is considered to be the father of science fiction. It was one of the first books to talk about the conflict between humanity and the extraterrestrials.

The authors of the broadcast took care of the details: in the background you could hear the screams of frightened people, and the sound of police sirens. The radio play was so realistic that people started to panic. Everybody was scared of the alien attack and extinction of humanity. It has been reported that residents of nearby towns left their homes in panic, and several people died of a heart attack. The police also noted cases of nervous breakdown. Many people thought that was the end of the world.

Today we can experience the fear of the audience by reading "War of the Worlds" or watching one of adaptations of the novel.

(Magda Kudlewska)







# MEDIEVAL AGES: UNUSUAL TRIALS



When we think about The Middle Ages, certain words come to our mind. Those are: fortified castles, noble knights, deadly tournaments and (probably most often) regression times, especially in terms of science. However, we tend to skip some of the most interesting and funny aspects of those times. Every time has some odd traditions and behaviours connected with it. The Middle Ages aren't an exception, so I would like to focus on one specific custom: animal trials.

Let's travel back in time to Falaise in Normandy. This place might be known from modern history (World War II), but there's another interesting story concerning it. In the beginning of January 1386 a sow was accused of murdering a three-month-old child. After a nine-day long trial it was found guilty and executed by mutilation, hanging, dragging on the ground and finally burning down. What makes this event even "funnier" is that during the interrogation the pig had a defence lawyer, moreover, it was locked in a cell during the whole lawsuit and the death sentence was read before the execution. The local vice-count ordered to bring all of the pigs nearby to watch as the convicted die. When it comes to the owner of the pig: he wasn't held liable for his sow's actions and didn't have to repay the trial costs. The only punishment he received was watching the execution. Another interesting thing is that this event was depicted in the local church. It's said that it showed the eaten child in a cradle, the scaffold, the sow dressed in human clothes and the previously mentioned vice-count on a horse.

It's worth mentioning that it wasn't the only case of such a trial. Michel Pastoureau counted 60 cases in years 1266 – 1586 only in France. Among the suspects we can find: cattle, horses, donkeys, dogs, wild animals (such as boars and wolves), rodents and even insects. Tamed animals were often accused of hurting people and the wild ones of devastation of fields. When it came to insects and other smaller creatures, religious authorities were asked for help. For example, in 1120 the bishop of Bathelm excommunicated mice and caterpillars. In 1516 in Villenauxe bishop threatened that he would excommunicate locusts if they don't leave certain area.

After investigating this topic you might ask yourself the question: "Why would they do that?". By analysing some clues we can solve this riddle. The first thing is a fragment of the Bible, more precisely, the book of Exodus. It says: "If a bull gores a man or woman to death, the bull is to be stoned to death, and its meat must not be eaten. But the owner of the bull will not be held responsible" (Exodus 21,28). If we look at the described trial, we can see that the owner of the pig wasn't punished, just as intended in the Bible. However, the Bible doesn't describe any kind of trial leading to a public execution.

We have to go a little bit further. What was the medieval attitude to animals? Saint Thomas Aquinas said that they have a specific type of soul which makes them unable to think abstractly and know what's bad or good. So, it collides with the concept of the animal trial (treating animals like normally thinking creatures). At last, we come to the conclusion that the purpose of it was to be an example. An example of how justice is always served, that no one can escape the punishment.

This interesting story, hopefully, proves that the Middle Ages aren't as boring as they are thought to be. Who knows what will be the future generation's opinion of our trends and culture? Maybe they will find them as strange and hilarious as we find those medieval ones. One thing is certain: history was, is and will be a field of science with some unknown stories that can really shock and give everyone a good laugh. (Dawid Mazur)



# BLACK HOLES



Black holes are extremely mysterious and unpredictable phenomena. Even with current technology and knowledge we don't know much about them and the things that we know are uncertain. It is a very distant subject but once we're starting to get it, the theory becomes fascinating and luring.

Stars are very massive collections of atoms – mostly hydrogen – that collapse from enormous gas clouds under their own gravity. These atoms (in the core) collide with each other creating helium and releasing huge amounts of energy (radiation). That reaction is called fusion and as long it's happening, the star remains stable because the energy pushes against gravity causing the forces to maintain balance.

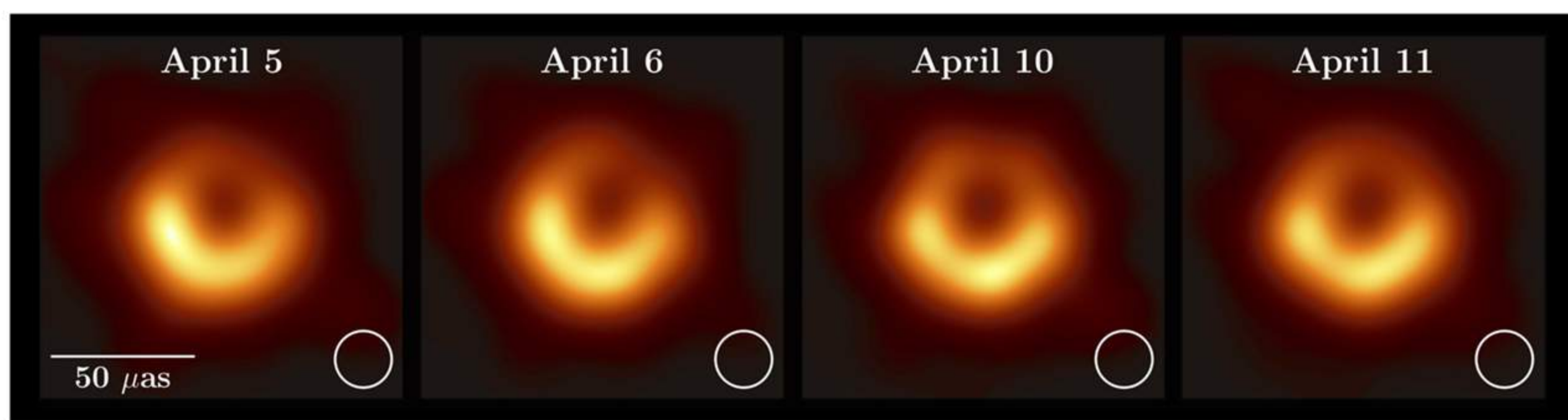
For stars much bigger than our Sun, their own gravity is much stronger allowing its core to fuse much heavier elements. When such are created, they fuse into bigger and bigger atoms until they get to iron. Unlike the elements created before, the fusion creating iron doesn't release any energy. Its particles build up in the core until they get to a critical amount causing the core to collapse because there is no force to balance gravity. The star implodes moving with about a quarter of the speed of light concentrating even more mass than it had before. The result of this is either a neutron star (pulsar) or a black hole.

Once a black hole is formed it is impossible to actually see it because the gravity is so strong, even light can't escape it. What we can see is matter falling into a black hole but only over the surface. Because time runs much slower (for a non-inertial observer) when an object is moving very fast we will never see anything crossing the event horizon (black holes' surface). From our perspective, if we drop an apple into a black hole, we will never see it go in – it will stop over the event horizon, slowly turn red and disappear (I will talk about it in a different article, explaining how, potentially, it happens).

The core of a black hole is called the singularity. We're not sure what it is exactly. It may be infinitely dense meaning it's a point in a universe with no surface or volume. It can also be something completely different and right now there's not much we can do to find out.

Black holes may be of different sizes. A black hole the same mass as our Sun would be the size of an asteroid and while the smallest can be less than one atom wide, the biggest black hole we currently know (S5 0014+81) is roughly 40 billion times the mass of our Sun with a diameter 47 times the distance from Sun to Pluto.

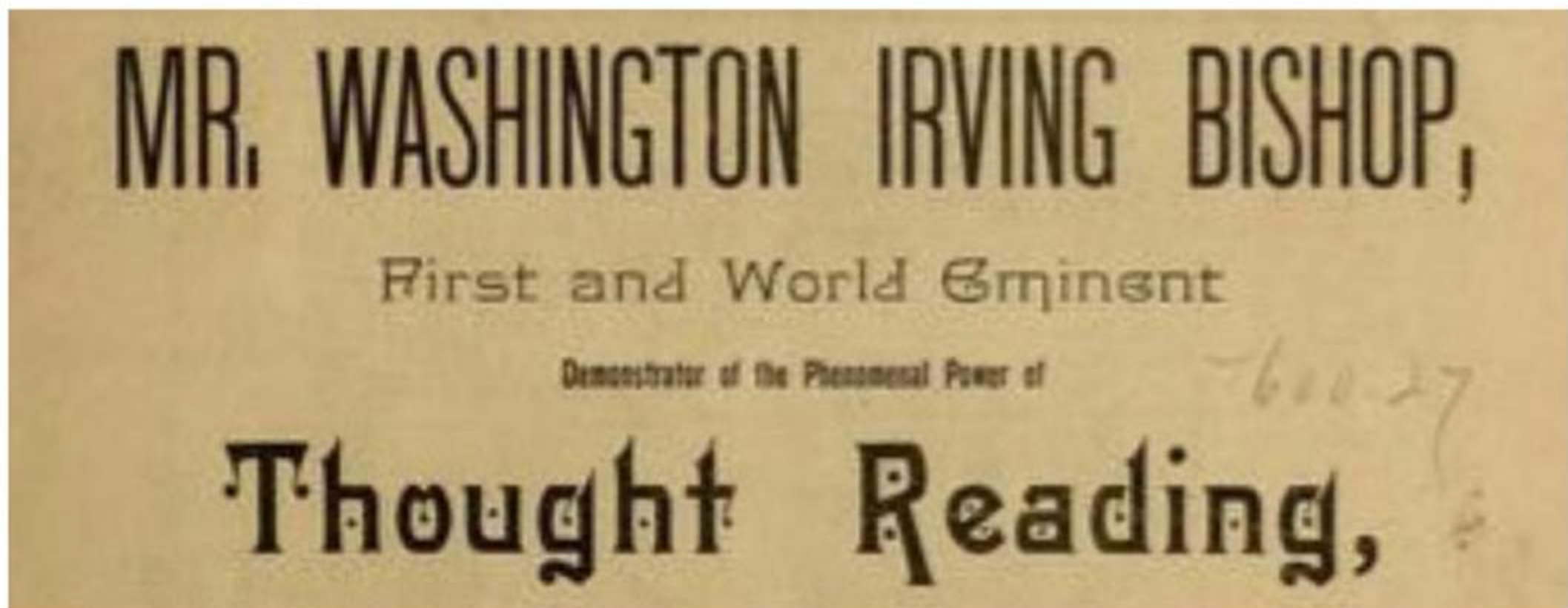
The science of black holes is yet to be known for sure but the beauty is undeniable. I will continue with more mathematic side of this topic in the future and I hope I haven't bored you to death. [Antek Lodkowski]







# THE MINDREADER



Washington Irving Bishop, also known as Wellington, was born in 1855. His parents were both devout spiritualists. He was the manager of Anna Eva Fay, a famous psychic. He revealed all her secrets in his book and then started to perform to show the audience how she did all of her tricks. Due to the argument with Anna, he made his stage debut himself and announced that he was the first man in history to read minds.

He learnt the techniques by observing other performances. The one technique he used was called „Muscle Reading“. During Muscle Reading the performer can be blindfolded and while holding the hand of an audience member is able to locate hidden objects. Bishop built this into quite a phenomenon, but without the physical connection he always failed.

He apparently suffered from catalepsy, as Bishop passed out during the performance. Catalepsy symptoms include slowing down of bodily functions, such as breathing, to the point where it can be mistaken with death. That's why he carried a note informing whoever found him that under no circumstances should an autopsy be performed. He did not wake up and his wife, who found him in the funeral home, saw his body and she was horrified - the autopsy had been performed. His skull had been cut open and the brain removed. He was killed and the note was found after the autopsy.

Bishop entertained people with mindreading but the true mindreaders and psychics don't exist. Life is unpredictable but you can learn the techniques, just like Wellington did. It all comes to reading body language and clever communication. You can actually spot mindreaders. One day sit in class in the back and try to scream something loudly in your head and watch if someone flinches or turns his/her head. (Aga Szydło)



# HOW TO FIGHT AUTUMN BLUES?



*Personally, I truly like cold and gloomy seasons, like autumn or winter. But I know from my friends and family that I'm in the minority. Most of people hate when the weather is rainy, windy, cloudy or snowy. That's why I'm coming with help. I found in the internet some ways not to feel depressed in this time.*

## *1. Good sleep*

*It sounds like some hackneyed advice, but it's really true. Good sleep is essential for proper functioning. If you have trouble with falling asleep, you should drink warm milk or some herbs, for example Melissa, air the room and take a hot bath before you go to bed.*

## *2. Proper diet*

*The products that will improve your mood are those with high amount of vitamin B (like dairy, eggs, fish or banana) and magnesium (like dark chocolate, nuts or legumes).*

## *3. Music*

*I think that I'm not the only one who can say that music has a very important and special place in my life. If you also agree with that, use your favourite music to relax and to feel better.*

## *4. Sport*

*With school and shorter days we have a little less options to work out; additionally because of the CIVID-19 virus the gyms are closed. But it should not stop us from moving. We can train alone in our houses with special aps that you can download to your phones or youtube videos. And if you don't like this type of activity, you can always go for a long walk. Don't let the rain, wind or cold stop you. Maybe you will notice how beautiful and colourful autumn can be.*

## *5. Relaxation techniques*

*There are also relaxation techniques, like yoga or breathing exercises. They help reduce stress, so if you a have problem with that, maybe you should read more about it. And if you don't want to try those professional methods, you can always do drawing or reading, they are helpful too.*

*Indulging in small pleasures also might do the trick. You should find for yourself what makes you happy and do that whenever you are feeling down. Keep warm! (Klara Przondo)*



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# WINTER BREAK ACTIVITIES



As we all know a winter break is the time, in which we don't have to wake up every day and rush into our classes at school. The winter break's time teenagers can spend on being productive, in terms of school work, and having fun and enjoying their free time with friends and family. This article will present some ideas of how we could use this leisure time to make the most of it and relax before the next semester.

Firstly, the frosty time of the year is great for ice-skating, snowboarding, skiing and other winter sports. Throughout the winter season ski slopes are open and give an amazing opportunity to enjoy activities outside, even when the weather is cold. In Poland, the most popular places to go to have some fun on snow are Zakopane and Zieleniec. However, when it comes to other countries, it is really worth seeing the Alps in resorts, such as Switzerland, France and Austria. These areas provide visitors with an amazing atmosphere, incredible views and a beautiful weather.

Secondly, if you are a student in high school, the winter break can be a great time to study for upcoming exams that will take place in May. The winter holidays lasts two weeks so it gives students a lot of time to prepare and revise from previous school years. It is also a good time to consider where to go to university and look at options that are available in- and out- side of the country.

Lastly, to take advantage of the leisure time, young people can go for winter camps. During such events, they can improve their sporty skills and meet new friends. Moreover, it is a great way to travel to new places and make friends with people from all around the world. On some of these kind of camps, people can get their instructor licenses by passing a specific course. However, it takes more than one exam to be done till someone can be fully named an instructor. For example, to have a ski instructor certificate individuals have to pass four courses and participate in some of regional tournaments.

To conclude, the winter break gives youth a super opportunity to expand their snow sports skills and have a good time with their friends. Additionally, it is important to mention that during this time of the year people who take part in winter camps, can make new friendships that last forever. The winter break is amazing for students to take their minds off the school work and focus on their passions and hobbies. Nevertheless, third year students of high school can take some time to study for their exams, but also to relax. (Dominika Denes)



# YOUR CAT'S FASCINATING MEOW



*Animal language in general is a topic that sparks quite the curiosity in many people and that has endlessly been investigated by researchers. This, unsurprisingly, also involves your cat, so it's obvious that science has made a significant development in this area. According to many studies, the different tones of the ever so popular meow all have their strict meaning, although it's pretty difficult to precisely recognize. While a series of short meows is generally a form of greeting or pleading for food, longer and lower or higher pitched ones usually express discontent or a very well-mannered reaction to you stepping on their tail. Purring in turn is also known to be a specific signal - either for contentment or... pain. Yes, cats are very precise, got to give them that. They usually recompensate this unclear message through body language - dilated pupils, drawn back ears and a puffed-up tail all are signs of anger, being frightened or simply excited - context is key to interpretation.*

*However, all of this is de facto not the topic of this article - a mobile app is. It's called MeowTalk - a program that supposedly unravels your cat's "words" with a pretty high accuracy. This probably seems like a scam, and with good reason - but the fact that it's been developed by no one other than Javier Sanchez can pretty much make us feel assured. Why such a statement? It might seem bold, but this man is a former employee of Amazon who's worked in the past on the company's Alexa. Currently, a project manager at the tech company Akvelon, he's taken the course of conquering the feline part of the world. MeowTalk, inducing machine learning technology that learns your cat's voice and the option of end-user feedback on the accuracy of the translation makes it a unique idea that, surprisingly, might work. I've personally tried testing it on two furballs but my smartphone's microphone doesn't seem to be sensitive enough to pick up my cats' pretty quiet meows - in turn, it translates some of my cat-mimicking vocalizations to, most of the time, the phrase "I'm in love". Hm, not a bad guess. As the app is available for both iOS and Android, you can download the app right now and also test Sanchez's project - and perhaps finally get to know your cat better (or yourself). (Luke Magierowski)*







# Neanderthals rediscovered



The sight of a Neanderthal in a popular opinion is that of a stereotypical caveman – a brute, stupid, primitive being that spends his days in a cave in the middle of ice, with brief breaks for hunting mammoths. While this kind of Neanderthal was created in 19th century, the modern scientific opinion differs a lot from this interpretation.

Neanderthal was first described in 1864. The description was of a fossil found in the Neanderthal valley, hence the name (Neader was a surname of a protestant pastor Joachim Neander and Tal is the German for valley). It immediately got the interest of scientific community because it was the first pre-historic human species ever discovered (the second one, Pithecanthropus, now known as Homo erectus, was discovered in 1899) and due to the social and scientific changes during that time, such as colonialism and newly announced theory of evolution that had caused the interest in human origins. Scientists at the time, under the influence of these ideas, described Neanderthals as more primitive, lower (both on the evolutionary tree and in the terms of morality and intelligence) species of a man. By the time of early 20th century, this image of Neanderthals had been reinforced by discovery of “The Old Man” in La Chapelle-aux-Saints, France. The specimen in question was of an old, diseased individual in very poor health, having arthritis, healed injuries and missing many teeth. Owing to the fact, that it was the most complete skeleton found at the time, reconstructions then showed this species as hunchbacked and with bent knees, with similar personality as the popular vision of a caveman. Neanderthal stopped being seen as an ancestor – this role was taken by other discoveries, like the mentioned before Homo erectus or so called Piltdown man, that was seen as the closest ancestor of Europeans, rather as an evolutionary dead end.

With Piltdown man turning out to be a hoax, this conception started being questioned in 1950s. After re-examining remains of “The Old Man” it was understood that he wasn’t a proper example of Neanderthal anatomy in general. Now we know that they weren’t that much different from anatomically modern humans, with only a handful of variations from our anatomy. But re-examining gave us more than mere anatomical news. Other individual found in Iraq, known as Shanidar 1, as it was concluded, couldn’t live on his own - not only was he in bad physical shape, he also was blind on one eye, deaf and unable to chew by himself - yet he must have survived for a long time, despite his injuries (all of them were healed and the body itself was probably buried in a grave). This was understood as a sign of altruism in Neanderthals, proving that they were much more emotional and caring than thought before.

The grave itself is one of the most controversial part, and while not widely accepted in the scientific community, Shanidar or La Chapelle-aux-Saints aren’t the only known examples. Other burials have been discovered to poses not only the body of Neanderthal specimen, but also objects such as stone or bone artefacts. One burial site in Shanidar cave has been discovered to have a great amount of pollen which could indicate flowers being put into the grave, or just being left by rodents living nearby. Either way, this shows the possibility of Neanderthals having some spiritual beliefs. They could also have some artistic minds. There is evidence to prove that Neanderthals wore necklaces made from talons of predatory birds, that they used pigments on some object (and even bodies) or carried colourful geodes and stones.

While Neanderthals might not have been the direct ancestors of Homo sapiens, they certainly mixed. Hybrids like these have been discovered and all human populations around the globe have from 1 to 4% percent of Neanderthal DNA (with the exception of Sub-Saharan Africa), which means that they not only mixed, but did this from time to time, since a singular event like this would be lost in the scale of tens of thousands of years that two populations lived near each other.

Genes that we inherited from them have both positive and negative effect - some of them, like malaria severity, coeliac disease, were negative but it is believed that modern immune system was influenced by them, just like- fat distribution throughout the body, sugar metabolism and even some functions of the brain. Discoveries like these show how Neanderthal was much different and human-like than what is commonly believed. [Mikołaj Lewczuk]



# CULTURE OF JAPAN



Japan is home to 127 million people in an area not much larger than that of Poland. In Tokyo 6363,90 people live (on average) on a square kilometer. The crowds are so large that underground workers call „oshiya” shove passengers into the underground.

## Toilet slippers

Japan is a diverse and surprising nation. One such example to prove it is the use of toilet slippers. In fact, the whole toilet is different from the European one. For example, the toilet seat is heated and can be set to play music. The toilet slippers they can only be used in the toilet/bathroom. Such slippers can be found mainly in traditional Japanese houses.

## Number four

An interesting fact is that in Japan number four is considered unlucky, as is the number thirteen in many countries. In the country of the Blooming Cherry Tree, the fourth-floor apartments are the cheapest. Interesting fact – the words ‘four’ and ‘death’ sound similar, but they are spelled differently. But the way, it’s worth knowing that not only in Japan, the number four isn’t welcome, similarly, in China, Vietnam and Korea.

## Geisha

The geishas, ‘ladies for company’, are very well educated, because they are required to entertain the guests with conversation and artistic skills, for example: dancing or playing an instrument. At first the role of geisha was played by men, called „taiko-mochi”. But then the role was taken over by women.

## Respect

Japanese culture is about showing respect. Not only in words but also in gestures. Bowing is very popular. If someone is higher in the social hierarchy, the bow is deeper. In Japan, eating anything, even a snack, while walking is absolutely unacceptable and considered sloppy. While eating ramen or other noodle meals, the Japanese are very sluggish. It isn’t in any way ill-mannered, which means they like their meal very much. In Japan you pay more in cash than with a card. Don’t put money or business cards in the back pocket, because it means disrespect. [Malwina Świtalska]



# HOW TO MOTIVATE YOURSELF?

## TIPS FOR STUDENTS



School time is a wonderful time in a young person's life. There, students learn and learn how to be a good person. However, for many students, school is associated with the words: test and exam. They feel stress and insecurity. What to do in order not to be afraid before the exam?

Firstly, set aside enough hours to sleep. Sleep is very important and has a huge impact on our body. Seven or eight hours of restful sleep is the best way to boost your energy for the next day. Sleep also helps to remember material faster.

Secondly, learn in small steps. Divide your learning over several days. Don't leave everything to the last minute. It's better to learn in stages and repeat everything at the end. This is the key to success in the school test.

Next thing is learning in group. Learn with other people who will motivate you. You can help each other and you will be well prepared for the exam. Ask yourself sample questions and test your knowledge. Learning in company is very enjoyable.

It is important to take care of your morning. Eat a nutritious breakfast full of vitamins and healthy ingredients. It will give you strength and energy for the whole day.

Relaxation is also important. Learning is important but not the most important. You have to find time to rest and enjoy yourself. Find a free time to listen to music, run, walk or clean. Do something pleasant for yourself as your mind needs to rest.

When you get some success, reward yourself.

Buy yourself something cool, go out with friends, take care of yourself.

Take the school seriously. You have to go to school. Thanks to it you can achieve something in life. You can study at school. The school will show you how to cope with life. The teachers will help you acquire knowledge and develop your passions.

Remember all these tips. You have to believe in yourself and never give up. You learn for yourself, not for others. Learning is very important. Remember that your future depends on it. [Julia Mikolajczyk]





# Ins and outs of being a writer



After reading Gerald's game written by Stephen King a few years ago I promised myself I won't touch any of his books ever again. So far I have managed to keep my word. I'm delicate and horrors are simply not my genre...

It doesn't mean that I undervalue his work. Who am I do to this? On the contrary, I highly respect his immense contribution to modern literature. Stephen King is the author of nearly 50 books, many of them became world bestsellers and were made into movies.

The fact that I stopped reading King's books wasn't equal to losing interest in the author himself. About that time I googled him for the first time and watched one of interviews available online. Just like that, I fell for his personality.

Surprisingly, the father of the most terrifying characters to find in literature is this hilarious guy, who, out of the blue flashes, his witty reflections on life and writing. One of my favourites is the one about how during interviews he always gets asked about his childhood, as if the reporter was looking for the reasons of King's madness. I admit I also was sure his childhood must have been pretty traumatic. But King always says, it was the most beautiful and innocent time of his life and admits the ridiculous question never gets old. But he also says:

People want to know why I do this, why I write such gross stuff. I like to tell them I have the heart of a small boy... and I keep it in the jar on my desk.

About writing itself, Stephen King has many thoughts worth knowing, especially for those who desire to create stories, just like him. Often the problem of writers-to-be is their abandon their pieces before finishing them. What does King have to say about this?

Sometimes you have to go on when you don't feel like it and sometimes you're doing good work when it feels like all you're managing to do is shovel shit from a sitting position.

Stephen King also marks the truth that should be clear to everyone. Excellent writers must be readers in the first place:

If you don't have time to read, you don't have time (or the tools) to write. It's that simple.

Stephen King reveals himself as a very humble person. In one of interviews he talks about how in the times of his first few books' success (like *Carrie* and *The Shining*) he was going to the movies with his wife. They ran onto a well-dressed man standing in front of his car. Inside was sitting a woman wearing a fur. The man approached King and told him he would pay him a few dollars for changing the tyre! King, who was a very wealthy person at that time, agreed and with gained money he paid for his movie ticket.

He also likes to tell the story of how he went into a grocery store and an elderly woman approached him saying, „You are the horror writer. I don't read anything that you do. I just like things more genuine, like *Shawshank Redemption*.” He said, „I wrote that”. And she said, „No, you didn't”. And she just walked off and went her way.

Stephen King is undeniably a great author and I hope even if just like me you aren't keen on horror books, I have managed to get you interested in the author. I would like to share with you one last thought of King, accurate not only for the aspiring novel writers:

When you find something at which you have talent, you do that thing (whatever it is) until your fingers bleed or your eyes pop out of your head. (Hania Stefanska)



# Christmas in Italy



*Very soon, we'll be getting ready to the most celebrated festival the whole year. Let's have a look at how it is celebrated in Italy.*  
*By Sebastian Prestini.*

In Italy, instead of Christmas Eve, there is a dinner after which the whole family gives out presents. Then they drink coffee together with a little of a cake. The first dish that everyone must try is the fish soup that is eaten for an hour because all the fish which is in the soup is full of bones, so it is difficult to eat it. For the second course the Italians eat traditional Italian pasta. Most often served with homemade sauce (at least in my family's case). Panettone or pandoro is usually served for dessert. Finally, the family gives each other presents and wishes.

## *New Year celebrated in Italy*

New Years Eve in Italy is celebrated extremely loudly. Like in Poland, it involves celebrating with good dinner, a glass of champagne (in the case of Italians it is usually prosecco or spumante) and fireworks.

One of the Italian customs during New Years Eve is to eat a specific meal. It consists of a lentil stew (small grains symbolize coins, so their consumption ensures prosperity and prosperity in the coming year) and pork, usually served in a very spectacular way, because ... in the pig's leg, including the proudly protruding hoof.

In addition to dinner, according to the Italian custom, around midnight you should eat 12 grapes - each fruit is to ensure happiness for the coming year.

Apparently, the best way is to swallow the grapes, not to chew them; then, according to the tradition in Italy, happiness will be guaranteed.

