GOGOL STATE UNIVERSITY AT NIZHYN
GERMANIC PHILOLOGY DEPARTMENT

REFERENCE E-BOOK

Present-day English Constructions for Speaking and Writing

Thematic section

FUTURE SECTION CONSTRUCTIONS

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Immediate constructions (in bold type) are word combinations with the dependent units on the left and on the right.

Extended constructions (underlined in the examples) include the immediate constructions into an utterance or text.

Nizhyn – May 2018

Contents

1. Speaking/writing about space exploration

*space – constructions

"We each carry a radiation monitor with us the entire **time** we're **in space**…
Even when I went outside on my **space walks**, **I brought it with me in my space suit**."
"**From space** the Northern lights look very different to the Southern lights," he explains.
"The Northern Lights from the **Space Station's point of view** were always this thin band off in the distance and the Southern Lights were always this much bigger cloud, much closer to the **space station**."
Of his 215 **days in space**, this sight has stayed with him.

http://www.bbc.com/future/story/20180208-what-its-like-in-the-bermuda-triangle-of-space

*space exploration – constructions

"That'll be a really important thing for future **space exploration**."
Europa is perhaps the most **well-known target for exploration.**
Esa is building a spacecraft known as Juice, which stands for Jupiter Icy Moons Explorer – possibly the worst acronym in **space exploration** (I am reliably informed the name was conceived late at night in a bar and may be changed).
This robotic space probe is designed to fly past Europa some 40 times and **make a detailed study of its surface.**
While we may have to wait decades for a return to Enceladus, Europa will soon **be studied in detail**.
Finding any life – however small – on worlds once considered dead moons, would be one of the most **fundamental discoveries** of all time.

http://www.bbc.com/future/story/20170717-the-search-for-the-solar-systems-second-genesis

*astronaut – constructions

Astronauts fly through an anomaly with such high levels of radiation, computers stop working.
"Before I **became an astronaut**, I had seen **stories of astronauts** who had seen white flashes from radiation while they flew in space," says Terry Virts, **a former** Nasa **astronaut**.
As manned space flights become more common and **astronauts become more reliant on** computers, the challenges SAA poses could become only more acute.

As well as the white flashes that **astronauts report** seeing, their computers get affected.

On the ISS, the **astronauts use** a "water wall".

"It's just a bunch of these big 50lb [23kg] water bags," he says – though they aren't wrapped around the **astronauts' sleeping quarters**.

http://www.bbc.com/future/story/20180208-what-its-like-in-the-bermuda-triangle-of-space

*space flight – construction

"Before I became an astronaut, I had seen stories of astronauts who had seen white flashes from radiation while they **flew in space**," says Terry Virts, a former Nasa astronaut.

As more entrepreneurs dabble in **space flight** – like SpaceX CEO Elon Musk, who just launched his new Heavy rocket in Florida – they'll find they have to contend with these kinds of bizarre phenomena.

As **manned space flights** become more common and astronauts become more reliant on computers, the challenges SAA poses could become only more acute.

No matter how beautiful the view, as **spaceflight** becomes more common and missions more distant, spacecraft need to improve their resilience to SAA and its radiation exposure.

http://www.bbc.com/future/story/20180208-what-its-like-in-the-bermuda-triangle-of-space

*spacecraft – construction

But it causes havoc to any satellites and other **spacecraft** such the International **Space Station** (ISS) that pass through the area, as well as to the people on board – something Virts knows all too well from both his 2010 flight and his time aboard the ISS in 2014.

So how do **spacecraft** and their passengers **protect** themselves from this pummelling of radiation?

No matter how beautiful the view, as spaceflight becomes more common and missions more distant, **spacecraft** need to improve their resilience to SAA and its radiation exposure.

Esa is **building a spacecraft** known as Juice, which stands for Jupiter Icy Moons Explorer – possibly the worst acronym in space exploration (I am reliably informed the name was conceived late at night in a bar and may be changed).

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*satellites – constructions

But it causes havoc to any **satellites** and other spacecraft such the International Space Station (ISS) that pass through the area, as well as to the people on board – something Virts knows all too well from both his 2010 flight and his time aboard the ISS in 2014.

Meanwhile, at the Jet Propulsion Laboratory (JPL) in Pasadena, engineers are already working on the next step: designing **robotic landers** and sampling systems for these icy worlds.

"This is a well-known area where all different types of **satellites** – not just a space station with people, but normal communication **satellites** and others – have problems," he adds.

At the moment, the **Hubble Space Telescope**, for example, cannot take astronomical observations while flying through the region.

Investigated by the joint Nasa and European Space Agency (Esa) Cassini **space probe**, the moon is spewing out plumes of water from its south pole – most likely from a liquid ocean several kilometres beneath the surface.

http://www.bbc.com/future/story/20180208-what-its-like-in-the-bermuda-triangle-of-space

*launch – constructions

As more entrepreneurs dabble in space flight – like SpaceX CEO Elon Musk, who just **launched his new Heavy rocket** in Florida – they'll find they have to contend with these kinds of bizarre phenomena.

As more **spacecraft are launched**, they will have to be more resilient to the triangle's effect.

http://www.bbc.com/future/story/20180208-what-its-like-in-the-bermuda-triangle-of-space

*mission – constructions

This **proposed mission** is currently in competition for Nasa funds with five other future missions – to comets, asteroids and planets.

"We have **developed a new mission** to do that, a mission that will fly low and slow through the plume, collect a huge sample and search for evidence of life."

"We've built some prototypes in the lab but a mission is at least 15-20 years away," says Nayar, "I don't think we have a solution that I'm sure will work yet, but that gives us time to **develop the missions."**

Nayar **envisages** a series of **lander missions**, culminating in a robot that could drill through the ice to collect samples.

On the fifth night of his first flight – **a 2010 mission** with the Space Shuttle Endeavour – he had just got into bed.

The radiation is closely monitored for the duration of **space missions.**

I kept that in my pocket for my **entire mission**, on both of my **missions.**

"As we go deeper into the Solar System and further away from Earth, we won't have **mission control** to help us instantly," Virts says.

http://www.bbc.com/future/story/20180208-what-its-like-in-the-bermuda-triangle-of-space

*sample – constructions

We have developed a new mission to do that, a mission that will fly low and slow through the plume, **collect a huge sample** and search for evidence of life.

Nayar envisages a series of lander missions, culminating in a robot that could drill through the ice to **collect samples**.

Technologies to **take samples from** beneath the surface include a nuclear-heated robot that could melt its way through the crust.

Another design employs a drill to cut through the ice and **shuttle samples back** up a tube for analysis.

That means ensuring **multiple samples** are taken and that the spacecraft is completely free of microbes, so any life sampled comes from the icy moons rather than being introduced from Earth.

http://www.bbc.com/future/story/20170717-the-search-for-the-solar-systems-second-genesis

2. Speaking/writing about space phenomena

*life on the other planets – constructions

"I was obsessed with **life on Mars** for many years," confesses the Nasa planetary scientist, who has spent most of his career searching for **signs of life** on the red planet.

Cassini probe found that the water on Mars contains all the **ingredients for life**.

There are also other planets in our solar system that may be haven for **alien life**.

Jupiter's moon Europa is thought to be one of the most likely places in the solar system to **harbour life**.

Even the distant moon of Neptune, Triton, might **be habitable for extreme life.**

But I think we've got a damned good story: we're going to **find life**, what are you going to find?

Enceladus, however, is just one of several ice-covered worlds in the Solar System with liquid water – and possibly **microscopic life**.

It's intrinsic to **the search for life** that you want the answer to be yes," says McKay.

http://www.bbc.com/future/story/20170717-the-search-for-the-solar-systems-second-genesis

*space phenomenon – constructions

Astronauts fly through an **anomaly** with such high levels of radiation, computers stop working.

As more entrepreneurs dabble in space flight – like SpaceX CEO Elon Musk, who just launched his new Heavy rocket in Florida – they'll find they have to contend with these kinds of **bizarre phenomena.**

This fight between the Earth's magnetic field and the solar wind also has another surprising effect: **the Aurora**, or **the Northern and Southern Lights**.

On Earth, people travel thousands of miles to **see the Aurora.**

"**The Northern Lights** from the Space Station's point of view were always this thin band off in the distance and **the Southern Lights** were always this much bigger cloud, much closer to the space station."

http://www.bbc.com/future/story/20180208-what-its-like-in-the-bermuda-triangle-of-space

*radiation – constructions

"The Sun **puts out** a huge amount of radiation," says Virts, "and a lot of it is particles like electrons shot off the Sun's surface."

No matter how beautiful the view, as spaceflight becomes more common and missions more distant, spacecraft need to **improve their resilience to** SAA and its **radiation exposure**.

Astronauts fly through an anomaly with such high levels of **radiation**, computers stop working.

"Before I became an astronaut, I had seen stories of astronauts who had seen white flashes from **radiation** while they flew in space," says Terry Virts, a former Nasa astronaut.

It wreaks havoc on computers in the vicinity and **exposes** nearby humans **to** higher **radiation levels** – something that has earned it its nickname 'the Bermuda Triangle of space'.

http://www.bbc.com/future/story/20180208-what-its-like-in-the-bermuda-triangle-of-space

*radiation belt – constructions

To understand the SAA, you must first understand **the Van Allen radiation belts**.

When it gets to Earth, it gets trapped in our magnetic field and **forms these radiation belts** out in space."

The SAA is where **the inner Van Allen radiation belt** is at its lowest altitude and so at its closest point to the Earth.

The good news is that the **Van Allen belts** protect the Earth from these highly charged electronic particles thrown from the Sun.

The Earth's magnetic poles also aren't completely in line with its geographical poles, and so it is tilted, resulting in the **Van Allen belts** also being tilted.

http://www.bbc.com/future/story/20180208-what-its-like-in-the-bermuda-triangle-of-space

*magnetic field/pole – constructions

These are two doughnut-shaped areas of charged particles that surround the Earth and **are held in place by** its **magnetic field.**

All of this material gets shot out in space and **the Sun's magnetic field** can bend it.

When it gets to Earth, it **gets trapped in** our **magnetic field** and forms these radiation belts out in space."

The Earth's magnetic poles also aren't completely in line with its geographical poles, and so it is tilted, resulting in the Van Allen belts also being tilted.

This fight between **the Earth's magnetic field** and the solar wind also has another surprising effect: the Aurora, or the Northern and Southern Lights.

Due to the tilt, the **magnetic field** is strongest in the North, leaving an area above the South Atlantic and Brazil right in the path of the Van Allen belt.

http://www.bbc.com/future/story/20180208-what-its-like-in-the-bermuda-triangle-of-space

3. Speaking/writing about problems in space and solutions to them

*problems in space – constructions

Astronauts fly through an anomaly with such high levels of radiation, **computers stop working**.

It wreaks havoc on computers in the vicinity and **exposes** nearby **humans to higher radiation levels** – something that has earned it its nickname 'the Bermuda Triangle of space'.

As manned space flights become more common and astronauts become more reliant on computers, the **challenges** SAA poses **could become** only more **acute**.

As well as the white flashes that astronauts report seeing, their **computers get affected**.

It just means your **computer hiccups** and it happens fairly often.

At the moment, the Hubble Space Telescope, for example, **cannot take astronomical observations** while flying through the region.

http://www.bbc.com/future/story/20180208-what-its-like-in-the-bermuda-triangle-of-space

*havoc – constructions

It **wreaks havoc on** computers in the vicinity and exposes nearby humans to higher radiation levels – something that has earned it its nickname 'the Bermuda Triangle of space'.

But it **causes havoc to** any satellites and other spacecraft such the International Space Station (ISS) that pass through the area, as well as to the people on board – something Virts knows all too well from both his 2010 flight and his time aboard the ISS in 2014.

http://www.bbc.com/future/story/20180208-what-its-like-in-the-bermuda-triangle-of-space

*what to do with radiation – constructions

So how do spacecraft and their passengers **protect themselves from** this pummelling of **radiation**?

The **radiation is** closely **monitored** for the duration of space missions.

"There are several electronic radiation detectors that just **count radiation hits** and send the data back to Earth," says Virts.

No matter how beautiful the view, as spaceflight becomes more common and missions more distant, spacecraft need to **improve their resilience** to SAA and its **radiation exposure**.

Water is the best shield, says Virts.

On the ISS, the astronauts **use a "water wall".**

http://www.bbc.com/future/story/20180208-what-its-like-in-the-bermuda-triangle-of-space

4. Speaking/writing about geniuses

*talent – constructions

There's mounting evidence that brain damage has the power to **unlock extraordinary creative talents.**

The question of where **creative insights** come from – and how to get more of them – has remained a subject of great speculation for thousands of years.

It's possible that he had "sudden savant syndrome", in which **exceptional abilities** emerge after a brain injury or disease.

Psychedelic drugs are thought to **enhance creativity** by increasing the levels of serotonin, the so-called "happiness hormone", in the brain.

This is backed up by several other studies, including one in which **creative insight was roused** in healthy volunteers by temporarily dialling down activity in the left hemisphere and increasing it in the right.

As our understanding of sudden savant syndrome improves, eventually it's hoped that we might all be able to **unlock our hidden mental powers** – perhaps with the help of smart drugs or hardware.

Could the theory **explain their talents**, too?

From Daniel Tammet, who can perform mind-boggling mathematical calculations at stupendous speed, to Gottfried Mind, the "Cat Raphael", who drew the animal with an astonishing level of realism, so-called "autistic savants" can **have superhuman skills** to rival those of the Renaissance polymaths.

http://www.bbc.com/future/story/20180116-the-mystery-of-why-some-people-become-sudden-geniuses

*prodigy – constructions

He abandoned bookselling and became a photographer, one of the most famous in the world. He was also a **prolific inventor**.

The **prodigies** themselves have other, even less convincing ideas.

It's possible that he had "sudden **savant** syndrome", in which exceptional abilities emerge after a brain injury or disease.

But what about more **mainstream geniuses**? Could the theory explain their talents, too?

From Daniel Tammet, who can perform mind-boggling mathematical calculations at stupendous speed, to Gottfried Mind, the "Cat Raphael", who drew the animal with an astonishing level of realism, so-called "autistic savants" can have superhuman skills to rival those of the Renaissance **polymaths**.

And though it's difficult to prove, it's been speculated that numerous **intellectual giants**, including Einstein, Newton, Mozart, Darwin and Michelangelo, were on the spectrum.

http://www.bbc.com/future/story/20180116-the-mystery-of-why-some-people-become-sudden-geniuses

5. Speaking/writing about brain

*brain – constructions

"It tends to be the **dominant brain region**," says Brogaard.

The theory goes that as the patients' **left hemispheres** became progressively more damaged, their **right hemispheres** were free to flourish.

Just like with sudden savant syndrome, this allows the **right hemisphere** to become more active.

There's mounting evidence that **brain damage** has the power to unlock extraordinary creative talents.

http://www.bbc.com/future/story/20180116-the-mystery-of-why-some-people-become-sudden-geniuses

*illusions – constructions

How **body illusions** can warp our mind.

The "**rubber hand illusion**" – is one of the weirdest and most-studied illusions in neuroscience.

A team from Sweden and their **Barbie doll illusion** can fool your brain into inhabiting a Barbie doll or a giant mannequin, so they felt like their body had shrunk or grown.

Scientists are looking at whether these **embodiment illusions** could alter things like implicit racism.

http://www.bbc.com/future/story/20141107-mind-bending-body-illusions

6. Speaking/writing about accents

*accent – constructions

We can't listen to it because it was not recorded, but we know this: the broadcast was read in **flawless received pronunciation** (RP), commonly known as the Queen's English.

We often can identify **a person's accent** as soon they say hello.

RP English is said to sound posh and powerful, whereas people who speak Cockney English, the **accent of working-class** Londoners, often experience prejudice.

When it comes to **trusting accents**, there seem to be two things at play.

If, however, a person spoke with the **'trusted' accent** and they went on to behave in an untrustworthy manner, they were deemed even less trustworthy than the person who had both an 'untrustworthy' accent *and* behaviour.

Of course, says the University of Manchester's Alexander Baratta, while some people find **regional accents** to sound less educated, others think they sound more in-touch, sincere and friendly and that **posh accents** are more cold or arrogant.

http://www.bbc.com/future/story/20180307-what-does-your-accent-say-about-you

During my secondary school's production of An Ideal Husband by Oscar Wilde, I used what I thought was **flawless Queen's English** for my character.

Meryl Streep's **flawless English** in her portrayal of Margaret Thatcher is but one example.

The UK has a rich bag of **eclectic accents** and each come with their own particular stereotypes.

After all, you can wear professional-looking clothes and behave in a way appropriate to your job, but as soon as you open your mouth, your **accent** betrays your upbringing.

Why we do so gives us **a window into the fundamental role our voices play** in our social world.

http://www.bbc.com/future/story/20180315-the-people-who-fake-their-accents

*changing accents – constructions

I moved to Scotland from the Netherlands as a child and was lucky to learn English young enough to **lose any traces of a Dutch accent**.

You would think that one benefit of my upbringing would be an adeptness at **moulding my accent** at will.

Years later a friend from school told me that not only did I sound awful – embarrassingly I was the only one who had enthusiastically **adopted a fake accent** for a role.

Of course, you only need to watch Oscar-winning actors to note that **accents** can be **changed** at will.

Ironic, perhaps, as Thatcher famously **tweaked her own Lincolnshire voice** to sound a bit posher.

But for most of us, **changing our accents** can be tiring and unnatural.

As a result, some people purposely choose to **change their accents**.

In Sicily politicians **change their accent** depending on the class of their listeners, and **tweak it again** when they are speaking to politicians from other parts of Italy.

Baratta discovered that some trainee teachers were asked to **tone down their thick accents**.

http://www.bbc.com/future/story/20180315-the-people-who-fake-their-accents

*identity – constructions

They tie us to our **identity** in a similar way that our gender and race does.

For some children, accent can be a more powerful indicator of **group identity** than race, she has found.

First, an accent **represents part of your identity**.

http://www.bbc.com/future/story/20180307-what-does-your-accent-say-about-you

Our accent says a lot about our **identity**, but can also make us prone to stereotypes.

http://www.bbc.com/future/story/20180315-the-people-who-fake-their-accents

*prejudice – constructions

Accents can be subject to subtle **forms of prejudice**, but does that mean some are more appealing and trustworthy than others?

"Right away in the first year of life babies are starting to show this **social preference** – moving towards someone who speaks in a way that's familiar to them," says the study's lead researcher Katherine Kinzler, now at Cornell University.

At this age, they don't have the motivation to **control prejudice** in the way adults do, says Kinzler.

RP English is said to sound posh and powerful, whereas people who speak Cockney English, the accent of working-class Londoners, often **experience prejudice**.

http://www.bbc.com/future/story/20180307-what-does-your-accent-say-about-you

British accents lend themselves to all **sorts of preconceptions and biases**, as I recently explored.

http://www.bbc.com/future/story/20180315-the-people-who-fake-their-accents