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# Covid and Trade

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We have already heard a lot about the unseen effects of Covid 19 on world trade.

Covid has led to massive port disruption due to lack of workers and lockdowns. The result is that supply chains for ports are blocked. This continued disruption due to port closures impacts on coastal and feeder shipping, resulting in congestion at ports worldwide including China and US.

Shipping constraints have led to full cold stores, which has the potential to impact on production as no storage is available.

The other result is increased freight costs: congestion. demurrage and detention charges; relocation costs; surging freight rates. Shipping lines are favouring Hemisphere Northern routes leading to shortage of containers and what are there are in the wrong ports.

Ports of Auckland are running at full capacity with container ships having to wait up to two weeks before unlading.



This has led many to simply by pass New Zealand as our market is small in the overall picture.

Trucks entering the port have a two hour downtime before loading so transport firms are increasing charges to compensate.

Air freight is no help as most air freight, at extremely high cost was on passenger planes.

Covid has led to a massive reduction of passenger flights meaning much reduced capacity for air freight.

If all of that was not bad enough there has now been the effect of global vaccination. The big fear in the initial vaccine roll out was having enough syringes, needles and PPE.

An unforeseen problem in the pharmaceutical world is that the vaccine has sucked up excipients used in pharmaceutical products, especially common preservatives. The upshot of this is that manufacturers world wide are struggling to keep up with product demand, especially for sterile injectables.

Governments tend to blame previous administrations for far too long in covering up their own shortcomings.

However it does seem that we will be legitimately blaming Covid for some considerable time yet.

#### Sentience or Sapience

Philosophers and psychologists have debated the meaning of sentience for decades. Sentience is one of those words in the English language that has the ability to come to mean different things to different people depending upon their personal agendas.

This is similar to the word organic that has a simple chemical origin (relating to or derived from living matter, i.e. compounds containing carbon in covalent bonds) but has been hijacked so that it means something different to most of the population. Ever eaten an inorganic chicken?

In 1997 the concept of animal sentience was written into the basic law of the European Union. The legally binding protocol annexed to the Treaty of Amsterdam recognises that animals are "sentient beings", and requires the EU and its member states to "pay full regard to the welfare requirements of animals".

This statement, especially considering the many different languages in the EU, is open to interpretation. Some writers differentiate between the mere ability to per-



Capability for thought - Sapience

Modern philosophy guru David Chalmers states a conscious creature "senses and feels". That is, it is sentient. He makes a terminological distinction between sentience and sapience: sentience = phenomenal consciousness, sapience = psychological consciousness.

ceive sensations, such as light or pain, with the ability to perceive emotions, such as love or suffering.

Some in the animal rights movement contend that the ability to experience pleasure and pain implies sentience. Animal-welfare advocates typically argue that any sentient being is entitled, at a minimum, to protection from unnecessary suffering, though animalrights advocates may differ on what rights (e.g., the right to life) may be entailed by simple sentience.

There is the quote from the 2005 documentary Earthlings, "Granted, these animals do not have all the desires we humans have; granted, they do not comprehend everything we humans comprehend; nevertheless, we and they do have some of the same desires and do comprehend some of the same things. The desires for food and water, shelter and companionship, freedom of movement and avoidance of pain."

A 1973 book by Peter Tomkins, The Secret Life of Plants, introduced the concept of plant sentience. The phenomenon of talking trees came into existence when it

> was found plants, when wounded. emitted volatile that compounds seemed to be ล warning to other plants. In 2018 a study found that when a leaf was eaten its cells send messages to other parts of the plant.

However, although plants can detect light they cannot see, hear, taste or smell. They do not have consciousness so, by extension would also lack sentience. Which is a really good thing or else vegans would have nothing to eat.

Sentience has been described as a minimalistic way of defining consciousness, which includes further features such as creativity, intelligence, sapience, self-awareness, and intentionality (the ability to

"Which is a really good thing or else vegans would have nothing to eat."

have thoughts about something). These further features of consciousness may not be necessary for sentience, which rests on the capacity to feel sensations and emotions.

According to the Cambridge Declaration of Consciousness in 2012 consciousness is that which requires specialized neural structures, chiefly neuroanatomical, neurochemical, and neurophysiological substrates, which manifests in more complex organisms as the central nervous system, to exhibit consciousness.

Therefore, only organisms that possess these substrates, all within the animal kingdom, are said to be conscious.

Sponges, placozoans, and mesozoans, with simple body plans and no nervous system, are the only members of the animal kingdom that possess no consciousness.

There is the argument that while animals do not have all the desires and ability to comprehend as do humans, they do share the desires for food and water, shelter and companionship, freedom of movement and avoidance of pain. Com-

#### Sentience or Sapience

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prehension is known as sapience as distinct from sentience itself and this is an important distinction.

The pithiest definition of sapience, or wisdom, is the ability to foresee the consequences of action (allowing one to avoid negative consequences and produce the desired positive ones.)

Any horse owner can tell you of the companionship horses develop between themselves or even with other species, dogs also show emotions such as affection and loyalty. Clearly this is sentience.

However when we see the horse involved in the Sydney riots that was punched by the brain dead protestor we see two reactions. One



is that the horse bit the protestor thus showing a sentient reaction and then the next day the horse received loads of carrots and apples from a sympathetic public.

Our sentient horse would have appreciated the goodies but would have absolutely no idea as to the whys and wherefores.

All species, especially prey species, experience fear and this emotion is entirely normal and is what helps them to stay alive. Some ardent fishermen absurdly claim that cold blooded species do not feel pain and also are not sentient.

However an anecdote in a July copy of The Listener stated that recently the University of Florida have postulated that crayfish be-

> haviour may be affected by antidepressant waste flushed into waterways. Apparently one in eight people in the US takes the selective serotonin reuptake inhibitor fluoxetine, which is designed to maintain serotonin levels in the brain.

Excreted through urine into rivers and lakes traces of serotonin have the effect of making crayfish less fearful, spending less time hiding making them vulnerable to predators as they emerge from their shelters.

So even cold-blooded invertebrate animals can be sentient but this is not sapience.

Militant activists tend to confuse the terminology, sometimes willfully similar to the way the words use and abuse are sometimes willfully muddled.

The predator/prey relationship has been around since the dawn of time and in nature even apex predators can end up as prey, no matter their sentience.

Alligators eat humans and humans eat alligators, and further down the food chain survival is an everyday battle.

Therefore it is normal and an integral part of nature for human beings to use sentient animals for various purposes, but abuse is never OK.

As the sapient beings we owe them a duty of care.

# Relief

Nagy had had a big day at the races, winning \$1000. He celebrated by going to the local pub with his mates.

He woke the next morning with a raging hangover and less than \$5 in his pocket.

He went back to the pub the next evening.

"Tell me," he said to the barman, "Was I in here yesterday?"

"You sure were," said the barman.

"You shouted drinks all round and we all had an awesome time."

:Thank goodness for that," said Nagy, "I thought that I had squandered it."

#### Gender

Gender according to Tom Jones:

- XX Female
- XY Male
- YYY Delilah



# Archaic Therapy

There are many examples in the past of the old adage "the cure is worse than the disease". There are some horrendous stories of remedies, many composed of simple quackery, which did more harm than good, or some harm and no good at all.

As well as some of the old human beliefs veterinary science has also had its share of questionable practices. Firing of horses' tendons was rife before and into the 20th century. This thankfully faded into history but even in the mid and late 20th century blistering of tendons was commonplace. The word "counterirritant" was very much in vogue and represented more than simple liniments. Compounds such as mercuric iodide were applied to the skin resulting in acute inflammation, a lot of pain and zero healing.

Fortunately we now live in an age where animal welfare is the forefront of therapy but some archaic practices still exist, more out of ignorance than lack of care. Oral calcium supplements for cattle fall into this category.

Several decades ago practitioners tried dosing cows with calcium

chloride but, although symptoms of milk fever subsided cattle did not thrive because they did not eat. This was due to the caustic effects of the chemical ulcerating the gastric mucosa, something not readily evident from outside the cow.

In the early 90s an oil emulsion of calcium chloride solved the gastric irritation problem. This resulted in many copy cat preparations, all of which failed in the market place as they did not address the issue at hand.

While monetary issues such as returning to milking have dominated in the past we now, thankfully, have welfare coming to the fore as an issue in itself. In fact some aqueous based calcium mixtures have been banned overseas purely on the grounds of animal welfare.

Fashion gurus know that our being on the far side of the planet from mainstream Europe means we are always a season behind and, as far as animal remedies go, we can be a decade behind in some instances. We see that clearly with the arrival of calcium boluses being touted as new. They are far from new in Europe and have been demonstrated nearly 20 years ago by a group



of Danish veterinarians to be just as irritant, or even more so, than the already discredited calcium gels. (Højbjerg A, Dyekjær P and Henriksen P, Side effects of oral calcium products administered to healthy cattle with normal rumen function, personal communication).

"Cows have lower intakes of dry matter and reduced rumen activity around the time of calving. This can extenuate these side effects."

The issue with calcium boluses is that they gravitate to the floor of the rumen and so an extremely high concentration of the highly irritant salt is in constant direct contact with the ruminal mucosa. This causes significant damage, particularly in a cow around calving time.

Cows have lower intakes of dry matter and reduced rumen activity around the time of calving. This can extenuate these side effects. The lower the level of rumen activity the greater would be the tendency for the products with the greatest density and poorest dispersion characteristics, such as boluses, to have increased contact time with the mucus membrane of the reticulo-rumen. This may be manifested as increased irritation.

The fact that boluses have no safety data addressing the issue of gastric irritation is a concern from an animal welfare aspect, and modern farmers are aware of such issues. Apart from the duty of care there is also the effect on the animal's overall recovery as raising calcium levels is only part of the story. The cow has to be back eating and putting milk in the vat.

Tellingly the most recent trial data quoted (KI Roberts, J Bennison

#### Archaic Therapy

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and S McDougall, Effect of treatment with oral Ca boluses following calving on concentrations of Ca in serum in pasture-based dairy cows, New Zealand Veterinary Journal 67(1), 20–26, 2019) noted that they did not see the anticipated effect on energy metabolic indicators normally associated with raising calcium levels in cows with hypocalcaemia. However they did not check for gastric damage which may have answered their question.

Primum non nocere (first do no harm) is reputed to be a corner-



stone of the Hippocratic oath, it seems that calcium boluses in cattle fall well short in this respect.

# The Test of Time

Yes it may have been around for a long time but there is a very good reason for that.

Despite all the science behind the product and all company marketing there is one simple reason why Calol has stayed top of the tree and that simply is because it works.

Science and marketing mean little once a product is actually in the marketplace and Calol has weathered a storm of competitors over the years, all trying to highlight perceived weaknesses but all have failed for that one reason, they do not actually work whereas Calol does.

It has been proven it is not a matter of how quick the product pours but how rapidly it gets cows to their feet. The oily nature protects mucosa as well as aiding efficacy.

Mobilizing whole body calcium makes Calol the supreme product in a niche area. It only claims to treat milk fever but does that with unsurpassed efficiency.

### Texting

A woman sends a text to her husband.

"Honey, don't forget to buy bread when you come home from work and your girlfriend Valerie says hello."

Husband: "Who is Valerie."

Wife: "Nobody, I just wanted you to answer, to have confirmation that you saw my text."

Husband: "But I'm with Valerie

right now, I thought you saw me."

Wife: "What? Where are you?"

Husband: "Near the bakery."

Wife: "Wait, I'm coming right now!"

After 5 minutes his wife sends a message, "I'm at the bakery, where are you."

Husband: "I'm at work. Now that you are at the bakery buy the bread, XX"





# What is RSV?

Just what is RSV and how does it compare to Covid 19? First of all, RSV (respiratory syncytial virus) is, like Covid 10, a pathogenic virus affecting the respiratory system in humans.

Unlike Covid 19 it has been around for aeons, almost all children will have had an RSV infection by their second birthday.

If it recurs in healthy adults and older children, RSV symptoms are mild and similar to the common cold. However, in infants, the virus can cause serious illness including bronchiolitis and pneumonia and they may need hospital care.

RSV has only come to dominate headlines recently in New Zealand as there is an outbreak of the disease being put down to lowered



immunity in the general population after the Covid lockdowns of last year.

The major difference from Covid 19, and one which affects aetiology and control, is that RSV is from a totally different family of viruses; Covid 19 is a corona virus whereas RSV is a paramyxovirus.

A common feature of the families Paramyxoviridae and Coronaviridae is that they contain viruses that are ubiquitous respiratory tract pathogens. Other known paramyxoviruses are measles and mumps and, in the veterinary world, canine distemper and Hendra virus.

The paramyxoviruses and coronaviruses are quite distinct viruses with different biological potential. The paramyxoviruses are negativesense RNA viruses, which do not recombine, whereas the coronaviruses are positive-sense RNA viruses, which undergo recombination at high frequency. This makes these viruses particularly good candidates as emerging pathogens.

In other words, while RSV has been around for a long time it is a known enemy, whereas corona viruses have the potential to throw up surprises as we have seen with the Covid 19 outbreak. What is surprising, taking this fact into consideration, is that there has so far been no vaccine developed for RSV, unlike the rapid development of vaccines for Covid 19.

"The good news as far as prevention goes is that both corona viruses and paramyxoviruses are enveloped viruses"

This may however not be a factor of the virus itself but simply because RSV, despite the latest virulent outbreak, normally causes mild symptoms and so the huge financial effort that has been put into Covid 19 vaccines has not materialized for RSV.

The good news as far as prevention goes is that both corona viruses and paramyxoviruses are enveloped viruses, i.e. they have a protective lipopolysaccharide layer that is easily stripped by detergents and surfactants.

Therefore normal hygiene, such as hand washing, will greatly reduce cross contamination and utilizing a high powered disinfectant containing anionic disinfectants and surfactants, such as SteriGENE, will prove highly effective in controlling transmission.

#### The Train Tunnel

The train was rattling towards a long tunnel and in one compartment sat an Englishman, an Irishman, a pretty young woman and an old lady.

The train entered the tunnel and all went black, followed by a loud kiss and an even louder smack.

When the train emerged from the

tunnel the four occupants sat in their seats and were busy with their own thoughts about what had happened.

The pretty young woman was thinking, "Why would that Irishman kiss that old lady?"

The old lady was thinking, "What a hussy just sitting there as if noth-

ing had happened when I know that Englishman was kissing her."

The Englishman was thinking, "I did not do a damn thing so why should I get my face slapped?"

And the Irishman was thinking, "How about that! I kiss my own hand, smack an Englishman in the mouth and get away with it!"

## 3 ml Rheumocam Available

The good news is that Rheumocam for cats is now available in the popular 3 ml size. Rheumocam Suspension is 0.5 mg/ml meloxicam for cats, complementing the 10 ml size and the 5 mg/ml injection. The range is rounded out by the 20 mg/ ml injection and 1.5 mg/ml suspension for dogs.

The 3 ml bottle has proved to be very popular for clinicians in dispensing meloxicam to cat owners without the need for excess product resulting in the risks of wastage, overdosing or client hoarding for the future.

While it may sound a simple fix developing a 3 ml size is not that easy for two reasons.

First of all sourcing a suitable 3 ml bottle is remarkably difficult. Secondly registration authorities world wide require any stability data to be generated by the smallest size marketed.

This is due to the surface to area ratio of product to container being greater in smaller sizes, which could lead to increased risk of oxygenation.

Thus, despite the 10 ml size having undergone strict stability testing the new 3 ml size had to regenerate that data all over again.

This clearly is quite a time consuming process but Chanelle, with all their professionalism, managed to do that to the satisfaction of authorities and the new size is now available to NZ practitioners with full registration authority confidence behind it.

Not only has it proven quality the price pointing has it situated very well.

Cats Rheumocam 0.5 mg/ ml Suspension for cats is thus effective, practical and moreover very economical for clients.

# <text>

# The Capital City

Why does the capital have so many one way streets?

It is so that all those civil servants coming in to work late won't collide with those going home early!



# Bliss

I'll never forget how happy I was when I saw my missus walking down the aisle towards me. My heart was beating fast and the excitement was unbearable. It seemed to take an age but eventually, there she was, standing beside me.

I gave her a loving smile and said, "Bring that trolley over here love. They're doing three cartons of beer for the price of two!"



#### News

After the morning service the church treasurer addressed the congregation. "I have a piece of bad news, then a piece of good news followed by another piece of bad news.

The bad news is that we require a new roof and it is going to cost quite a lot of money. The good news is that we already have the money. The other bad news is that it is still in your pockets!"



# **Disorder in Court**

ATTORNEY: What is your date of birth? WITNESS: July 18th. ATTORNEY: What year? WITNESS: Every year.

ATTORNEY: How old is your son, the one living with you? WITNESS: Thirty-eight or thirty-five, I can't remember which ATTORNEY: How long has he lived with you? WITNESS: Forty-five years.

ATTORNEY: Now doctor, isn't it true that when a person dies in his sleep, he doesn't know about it until the next morning?

WITNESS: Did you actually pass the bar exam?

ATTORNEY: The youngest son, the 20year-old, how old is he? WITNESS: He's 20. Like to your IQ. ATTORNEY: She had three children, right? WITNESS: Yes. ATTORNEY: How many were boys? WITNESS: None. ATTORNEY: Were there any girls? WITNESS: Your Honor, I need a different attorney. Can I get a new attorney? ATTORNEY: How was your first marriage terminated? WITNESS: By death.

ATTORNEY: And by whose death was it terminated? WITNESS: Take a guess.

ATTORNEY: Do you recall the time that you examined the body? WITNESS: The autopsy started around 8:30 PM. ATTORNEY: And Mr. Denton was dead at the time? WITNESS: If not, he was by the time I finished. ATTORNEY: Doctor, before you performed the autopsy, did you check for a pulse? WITNESS: No.

ATTORNEY: Did you check for blood pressure?

WITNESS: No.

ATTORNEY: Did you check for breathing?

WITNESS: No.

ATTORNEY: So, then it is possible that the patient was alive when you began the autopsy?

WITNESS: No.

ATTORNEY: How can you be so sure, Doctor?

WITNESS: Because his brain was sitting on my desk in a jar.

ATTORNEY: I see, but could the patient have still been alive, nevertheless? WITNESS: Yes, it is possible that he could have been alive, and practicing law