

Now Tony, you know saying "Can someone work that one out for me?" re the Greek dude bashing the Asian students is just a red rag to a bull for a philosopher like me. But before I make good on that challenge, a couple of points on the de-sal and climate-change topics (I called at about 11:35, but you already had too many callers waiting to take any more! ONYA!!).

1. de-sal

First, de-sal. Salt used to be really valuable. That's why a wage is called a "salary". "Sal" is the Latin word for salt, and Roman soldiers were actually paid in salt. Salt not only makes crap food tolerable, but is also in fact essential to metabolism. Too much hardens your arteries and gives you a heart-attack; but with none at all you get real weak and woozy, your electrolyte balance being whacked-out which causes some crucial chemical reactions all over your body grind to a halt. Actually, likewise with plants and hence the soil - too much salt kills plants; but not enough and they can't grow at all (fertilizers are mostly salts of nitrogen, phosphorous and potassium).

The main environmental problem with the de-sal plant is that the process generates a highly concentrated salt brine. This is pumped straight back into the ocean and raises the salinity of the local waters, killing local coastal marine life and causing under-sea desertification.

I thought that the Earth's oceans had been gradually getting saltier over the millenia. Rain falling on the land and also underground sources welling up leech out the earth's salts, wash them into rivers and into the sea, where the sun evaporates off fresh water, slowly increasing the salinity, you'd think. This was actually one early way used to estimate the age of the Earth by a guy called Edmond Halley, who was no slouch - how many people get a comet named after them? (http://en.wikipedia.org/wiki/Edmond_Halley). But Halley got it wrong, in because he didn't realize that there are sources of salt going straight into the ocean from the sea-bed, but also because there are sinks where salt sediments and gets trapped in the sea-bed. This is the current wisdom:

"Ocean salinity has been stable for billions of years, most likely as a consequence of a chemical/tectonic system which removes as much salt as is deposited; for instance, sodium and chloride sinks include evaporate deposits, pore water burial, and reactions with sea-floor basalts. Since the ocean's formation, sodium is no longer leached out of the ocean floor, but instead is captured in sedimentary layers covering the bed of the ocean. One theory is that plate tectonics result in salt being forced under the continental land masses, where it is again slowly leached to the surface." (<http://en.wikipedia.org/wiki/Seawater>)

A couple more interesting links:

<http://mygeologypage.ucdavis.edu/cowen/~gel115/salt.html>

<http://www.saltinstitute.org>

<http://www.mnsu.edu/emuseum/history/trade/salt.htm>

So the problem is not so much upsetting global ocean salinity levels, but the local impact (couple of kilometer radius) of highly saline water, which creates an under-sea desert (the most extreme example of which is the Dead Sea in the middle east). As one caller said, whales hang out there - what will be the impact on them? And every smaller creature on down the chain? No research is being done, so no one knows (enter Radio Marinara). But what with the pulp mill to the south and the de-sal plant to the north, Bass Strait is about to get much more polluted, complicated by the fact that it is in fact a

massive submerged bay opening to the west, in the days when you could walk from Wilson's prom to the north-east tip of Tassie.

Now as the other caller pointed out, shouldn't we dry the brine and harvest the salt, solving any environmental impact, and also adding value to the plant? The obvious answer is yes, so why isn't it happening? Especially since the Chinese seem to be short on it and can never get enough of the stuff:

<http://english.cri.cn/6909/2009/06/24/1781s496289.htm>

http://goliath.ecnext.com/coms2/gi_0199-2365503/Sustained-price-rise-of-raw.html

Two possibilities present themselves. Either to dry, harvest, store and transport the salt must cost more than the salt is worth; or, some more powerful vested interest (current salt sources?) are preventing this potential competition, which would lead to a fall in salt price. So the first question: what's the price of salt on the open market?

And this turns out to be surprisingly hard to find out, at least without paying for the information.

Check these out for all the background and some really fascinating stuff, but no actual price:

http://www.salt.org.il/frame_econ.html

http://salt.org.il/news_arch.htm

In the USA where they put it on the roads when it snows (this lowers the temperature due to chemical reactions, and stops them getting sloppy and slippery and gives better grip, and also makes car-makers happy because cars rust out much quicker in salty environments), it sells for anywhere between \$40 and \$140 a ton:

<http://www.chicagobreakingnews.com/2009/03/economics-and-weather-led-to-rock-salt-price-hike.html>

<http://www.stateline.org/live/details/story?contentId=355117>

These are relevant, but again, still no price:

<http://www.chemlink.com.au/salt.htm>

<http://rspas.anu.edu.au/rmap/newmandala/2008/07/07/the-price-of-salt-in-myanmar>

<http://www.mizzima.com/nargis-impact/1050-salt-prices-remain-trebled-following-nargis.html>

The answer is I think that we import most of our salt: this from <http://www.chemlink.com.au/chemhist.htm>

"With abundant oil and gas reserves, coal and minerals in an increasingly competitive country, Australia has outstanding potential to manufacture a broad range of chemicals. World class capital-intensive titanium dioxide pigment and alumina manufacturers, sometimes even using inferior raw materials, are successfully selling into a highly competitive world market. There are many opportunities (see also Western Australia). Australia is the world's largest importer of caustic soda (used for alumina production). Yet though simply manufactured from common salt and energy, Australia still imports nine-tenths of its needs. In Western Australia salt and energy are produced along side each other for export as raw materials and energy (at the Burrup Peninsula in the north west). An inadequate market for co-produced chlorine is claimed as an obstacle for a world scale chloralkali plant with Australia becoming increasingly competitive, this may change. Presently seven-eighths of Australia's production of titanium minerals are processed overseas. The evidence with expanding production suggest vast export potential."

It's probably all here, but buggered if I'm paying them to find out the details:

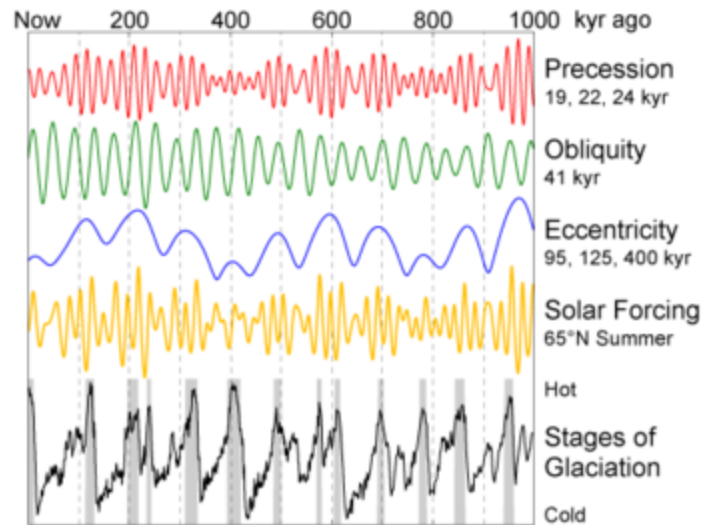
<http://www.ibisworld.com.au/industry/retail.aspx?indid=1854&chid=1>

So, the people importing the salt don't want to lose their market, and the people building the de-sal

plant are French, so they have no stake in helping Australia become self-sufficient, and, although I haven't done the research, I would bet a link could be dug up between the des-sal company and the salt-market interests.

2. climate-change

Anyway, back to climate change. I know you don't like graphs, but you gotta study this one:



See how the global temperature is going up and down like a yo-yo, with about ten different ice-ages in the past million years - about 100,000 years apart, in concert with the wobble in the Earth's axis (called precession, like spinning top whose axis of rotation also slowly goes round and around) and the deviation from circularity of its orbit (eccentricity) and the rotating angle of the plane of orbit (called obliquity, like a slow-motion version of the wobble of rotating dinner plate). As the skeptics say, this happens whether we're here or not. But also notice, we are currently at a warming maximum, and due to go into a cooling phase. It's precisely the fact that we are at this "turning point" that makes things so delicate on a scale few "lay-people" understand. Like someone tapping you on the shoulder just as you're about to start a drum roll, this is a moment in the rhythmic structure when a relatively slight perturbation (i.e. humanity's combined greenhouse gas output) could have a relatively major impact (you miss the roll, lose the beat, and stuff up the song altogether). What if we actually manage to knock the top right off the current turning point we're at? The situation is big enough and complicated enough to go seriously haywire and fly right off the scale.

Of course the question is not one of absolute proof. We base our legal system on proof beyond reasonable doubt, not absolute proof, because in the real world we never prove *anything* absolutely, and are always free to disbelieve. Reason is not a tyrant, just a guide who you have to choose to follow. So it's no coincidence that people used to turning their back on reason and bowing instead to authority (i.e. religious types like Tony Abbott) find it very easy to turn their back on science too - they have had a lot of practice at ignoring facts and engineering water-tight consciences for themselves. But as Brain told us, you can't turn your back on a bushfire. Or a tsunami. Or a hurricane. It is now irrational to deny climate instability. Of course people are free to be irrational. But rational people are also free not to listen to them, and with good reason.

All I'll add w.r.t. Peter Puppet Garrett this one question - what's *really* going on? Here's what I'm afraid is *really* going on:

http://www.dailyreckoning.com.au/reports/dr-uranium-2009.php?gclid=CNWU1_SA_5sCFRlcagodk0QS_w

Uranium vs. Geothermal - this is THE most important question of this coming century - and its a decision concerning the next 30,000 years.

3. "Can someone work that one out for me?"

So say you've grown up in Broadmeadows. You've had a shitty education in a State system that's seriously underfunded, and so run by teachers who are constantly in crisis. I know a few teachers, and I was recently around at a friend's place who was marking year 10 English essays for a high school in Melbourne's north. I read a few essays out of interest, and I was shocked. I would have guessed they were about grade five or six level. Not all; some were smart - but the majority were really bad, and the worst, only semi-literate. Kids are coming out of school with massive video-game skills, but no real education to speak of.

Now say, due to the availability of housing and the multicultural atmosphere of Broadmeadows, there's an influx of Asian overseas uni students. They're driving convertible beamers, going on international flights, and spending plenty of money. Why? Because by and large they have parents willing and able to pay for it. These are some highly motivated people: they've been working hard at good schools all their lives, and now have a crack at a western University, which charges their parents up to \$40,000 a semester, by the way. And they're coming out of a culture far less egalitarian than Australia. In India for example, compassion and sympathy for the poor is not the norm, and the higher classes do not feel lower classes are their equal. I'm not judging or blaming; I'm just describing the situation, and suggesting common sense might tell you that upper class Indians and lower-class Australians might be a volatile mix.

Add to this the odd phenomenon that its the last wave of migrants who are most racist about the next wave - growing up in Coburg, I've seen this my whole life. Most people are mirrors: they reflect back what they've gotten their whole lives. If you've grown up taking shit all your life for being a wog, you have to be seriously educated to avoid turning around and dishing up a serving of that shit you've been eating all your life. And here are these "new Australians" smarter, richer, luckier, happier than me, whose been here since birth, but has never had much hope of making something of myself.

So there's my explanation. Its all about cultural morale and social respect I reckon, or the lack thereof. How to build a culture of respect for one another (and hence self-respect)? Well now, you only have to look at RRR to see the answer to that question. The answer is art. Art turns anger into an aesthetic experience, and we cry at the movies or scream at the gig or bliss out at the gallery or spray graph on the walls instead of clobbering those who disrespect us: art sublimates violence into creative energy by giving anger a voice, along with the other feelings. More art and music in more and better schools throughout the state, but especially in urban hot-spots, and you won't need to waste ten times what that costs in cops, hospitals, courtrooms and jails. It's the difference between conductors and ticket inspectors, which by the way is a difference which is highly symbolic of all the others. Bring conductors back on trams and get rid of the cultural nazi's who call themselves inspectors, but are really the consciousness-engineering branch of the cultural vandals running the corporate world.

Now the University, who in a sense have brought about the friction between the overseas students and the local louts, would, you hope, be on to it. On the one hand, unemployed graduates in the humanities; on the other, a crying need for tutoring and cultural liaison work in the under-privileged suburbs. Hell, the overseas students themselves would probably be glad of tutoring jobs in local high-schools part-time. But instead the University just disappears ever further up its own festival of ideas, and the bogans slog it out with the rich kids in the badlands, never having had a hope in hell of getting to go to that very University themselves.

p.s. "What's essentialism?"

As I tutored in uni over the past 20 years, I've run up against the same problem year after year as you've been complaining of on *The Blower*: with some notable exceptions, the guys *tend* to speak first and think later, whereas the gals *tend* to think so much that the words never make it past the elaborate array of censors we call "femininity." Getting the guys to shut up and the gals to speak up is a big part of the work of being a good tutor. It's not you, mate; it's the culture, and so a problem for all of us in one way or the other.

I was actually driving my 85 year old mother to visit a friend in Ocean Grove last Friday morning, and she kept talking over the talk-back with her own opinions, so I missed most of it! I didn't hear the mother-daughter criticism thing you referred to, but I did hear the guy who talked about essentialism: the doctrine that we each have an essence defining what we are. Religious versions call it a soul or spirit; scientific versions call it biology; political versions call it race or class; economic versions call it "market forces" or just plain greed. Either way, the idea is that you are this thing, like it or not.

As he said, being "modern" is all about denying this. Things like class, race, self-identity (and its insecurity called "greed"), and even our gender, are socially constructed, and we can choose to change them. This philosophy is called existentialism: that we are born a blank slate, and our choices make us what we are, not some pre-existing essence. For an existentialist, no one is born with an essence, but everyone dies with one. At our death, the sum-total of all our decisions have determined what we are, and that is then set forever, and can never change.

There's another philosophy called perspectivism, which goes even further: it says that what something is, is always in part a function of its context. A bomb, for example, might be held by a peace-activist to be an essentially bad thing, and by a militarist, to be an essentially good thing. But a perspectivist will say it all depends: in the wrong hands in the wrong context, a bomb is a bad thing; but if I'm trapped down a collapsed mine and have some dynamite with which to blast my way out and thereby save my life, a bomb is damn good thing.

So for a perspectivist, not even at your death do you have an essence: at the time you die, you might be a hero, and then later in history, say, you might get re-interpreted as a villain, say, or vice-versa. Of course this happens while you're still alive, too. What's the essential truth? Are (were) you a villain or a hero? The perspectivist says that there just isn't any such thing as *the* essential truth apart from all contexts.

A lot of people are still essentialist - they think men are essentially different to women, say; or

Indians essentially different to Greeks, and both essentially different to Australians; good people essentially different to bad ones, and so on. A lot of others are existentialists: they say a pauper can become a prince, or a prince a pauper; a Greek can learn Hindi, move to Mumbai and if he works hard at it, become Indian; and even a man become a woman, or a woman, a man.

Then some people balance the two, and are existentialist up to a point, then fall back on essentialism, and say we can change, but only within limits, and those limits are essential.

Once applied not just to things, but to also people, perspectivism says that we are the internalized awareness of other people's interpretations of us, and our own interpretations of those interpretations, which as we know can become either a vicious or a virtuous circle. Life is a kind of hall of mirrors, and the challenge is to find the right position from which to bring as many appearances as possible into focus. And "appearances" means something cultural. Thus as a bloke I *tend* to speak up and explain in an authoritative tone, even if I'm not so sure of what I'm saying, not because my essence makes me, nor even because I freely choose it as a good-faith existentialist, but because it appears to me that that is my clearest cultural option for being interpreted favorably. Paired to this assertive loud-mouth interpretation of masculinity is the submissive interpretation of femininity in which being a good listener is valued more highly than being a dominant talker. So the big challenge, where politics and art meet and both gain real meaning which neither can have in isolation, is in changing culture.

And that of course is where RRR in general and you in particular shine. For the weird thing about culture is that it is largely fashion-driven, and fashion is actually led by a small number of people. What's cool and what's not? No-one can dictate it, but we all participate in it in some way or other, and copy what we think is right. This is why its so good to hear RRR wondering about how the forces of domination and control work themselves out, in the way we interact in conversation, and how we can think about and shape our culture, instead of just passively consuming it.

Great stuff, Bigsy.
cheers D.