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Fokefloss for Neurofils (ed) Ken Al Sifr

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Tunnel Visions

In Nobodad's Noosphere (1990-2004) vision 'research' has declined into superfluous video games, profitable to toymakers & necessary for psychoneurocogs who like their amusing jobs. Tunnel Vision is the name of their game. They see only through their softwear glasses, dark enough to hide the past five decades of neuroscience.

MIT's *Brain & Cognitive Sciences* and Israel's Weizmann Institute [1] remind us this year that more than a quarter-century ago a single neuroscientist [2] explored sniffing behavior in wakeful & attentive cats and rabbits, to show how their neural electrophysiology and behavior depended on **the brain-spacetime context** of specific smells, and **not** by any means simply on the molecular specificity of the odorant. Given more time he might also have shown animal olfactory *illusions*. His elegant math offered *chaotic* infrastructure to his booklength model of biological sensoriperception, and **neurophysiology** as its substrate.

So why "Contextually Evoked Object-Specific Responses in Human Visual Cortex" or even "Imaging cortical correlates of illusion in early visual cortex" [1]? We are Other Animals too, with rather more neurons than cats & rabbits, and High School has taught us to expect analogous brains & behavior – a bit more sophisticated, to be sure, but noways essentially different (except in the fusty Sunday School & Friday Mosque cultures of USA and the Middle East).

The answer is clear: Our Space Shuttle [3] is horribly overcrowded and enjoying one of its historically familiar cultural **barbarisms** backed by technological novelties (cf: The European Dark Ages & early medieval rebound, when armor & weapons enjoyed breakthroughs unprecedented since the discovery of flintknapping).

But history never repeats itself, any more than the river of Heraclitus [4]; limit cycles are rare while turbulence is common. So why must our psychoneurocogs bore their "Lay Faithful" with monthly repeats of the Olde Hatte? Neuroscience already **knows** that Third Chimp brains are innervated for **complexity, flexibility, innovation & destruction**; otherwise we wouldn't still be here. It also has a good idea of how that came about and how its **biophysics** does it. One problem remains untouched, however: The biophysics of animal *conscious awarenesses* of a fictive cosmos of **quanta & qualia, of numbers & things, of 'subjects & objects'**. Neuroscience is scared to touch that, in our New Dim Age. The physicists evidently are not.

① *Science* 304 (2004) 115-7 & *Nature* 428 (2004) 423-6. 2. Freeman WJ. *Mass Action in the Nervous System*. Academic NY 1975. 3. Al Sifr K. *Too Many Neurons*. Vantage NY 1997 & *Parable of the Lonely Space Shuttle* (1998 updated annually since). 4. Who also said "This world order, the same for all, was not made by any gods or men..." (some 2500 ybp).

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No Qualia please !

Neuroscientists & their fashionable *Layfolk* will find no news in Christof Koch's 447 pp. if its *aaaScience* reviewer is a reliable reader [1], and they are already overfamiliar with his & Francis Crick's earlier *Framework* [2]. If they hold the majority view of Sunday School philosophers (according to the Prestigious Executive Editor of *NPG's Research Journals* & former Chief Editor of *NPG's Nature Neuroscience*) they are "**dualists**" & so immune to all operational explanations of biological conscious awarenesses [3].

As a neuroscientist dedicated since 1960 to operational definitions of our commonest & most trivial human experience I condemn Crick & Koch's rude rejection of **qualia** as an ideological illusion, and a very dangerous one in our present human condition [4], when global Druggers & Soft Wear sellers are trying to persuade the Third Chimp that All is Well if you buy their snake oils: Your kiddie just needs a course of *ADHD* off-label MEM1414-3454 when mugging for his quizzes, that's all! Try it on your old man who complains about forgetting things or that sister with her concentration deficit!

Our Postdecadence of the Brain (1990-2004) reminds us of the Behaviorist S-R illusion of the 1920s...(the popular version, not Skinner's, who was most attentive to conscious *qualia* in all animals). We are "*Learning to Forget*" [5] our "**raw feelings**" in a haze of commercially manufactured **neurobongo**, which delivers us as sacrificial ratpuplings to the altars of Sunday School Creationists. Is SfN-USA a hopeful Templeton* winner?

A difference now is that Sunday School Skinnerians had no global Hi-Impactors behind them. But both *NPG* & *AAAS* are carrying the trashcan for their dollar-sponsors, with only half-hearted, occasional editorial qualms. Do any of those Prestigious Editors truly believe that they are nothing but Crick's "*pack of neurons*" – an **unfeeling** zombieform? Of course they don't, so they too must be covert **dualists**, with implicit faith in *a something else* which sometimes drives their actions. Anachronistically in 2004, they bundle the *something* outside our physical door. That's absurd, as they seem to understand **no physics** since 1900. They would have been excusable in Darwin's day, though liable to ridicule by Tom Huxley [6]; in our 14th year of Nobodad's Noosphere they are dooming their beloved (and financially faithful) *Lay Folk* to a zombie-neurobotic future of fictive **materialism** devoid of **matter**. Their mythical **Qualia** are made of it.

1. *S.cience* **304** (2004) 52-3.
 2. *Nat Neuro* **6** (2003) 119-126.
 3. *Nat Neuro* **7** (2004) 317.
 4. Calne R. *Too Many People*. Calder & Riverrun 1994; Al Sifr K. *Too Many Neurons*. Vantage 1997 & *Parables of the Lonely Space Shuttle* (annually updated since 1998).
 5. *Science* **304** (2004) 34-38.
 6. Desmond A. Huxley. Michael Joseph 1994 & Browne J. *Charles Darwin: Voyaging*. Princeton 1995.
- * *Templeton Foundation* offers fat dollar rewards to scientists who say they sometimes go to church.

Why Consciousness?

Coolwhip microscopes do all the clever work for you [1], so why bother about a bored and superfluous **observer** for its monitor when trivial soft wear slaves can interpret the images and e-mail them confidentially to your editorial **Server** (neither She nor He but your favorite Global Hi Impactor (@ *Bioconsc Zombies, Inc.*) ?

All that was not foreseen by the nice Aldouses of *BNWs* 74 ybp, who was naive enough to feature Third Chimps in his popular satire [2]. But it was known & avidly predicted by a fast-talking featureless chimp who invaded our electronmicroscopy (TEM & SEM) lab in the biopsychology research program in Tallahassee FL 33 ybp; he was elegantly shown our door, because many people were very happy doing their jobs there.

Nowadays it's smarter to wonder if our biosphere needs conscious animals at all [3]. Rereading a 12-year-old massively printed *Argumentation Neurocognition* [4] I am amazed that anyone still fusses about animal conscious awarenesses. They aren't in our current Nobodad's Noosphere (1990-2004); they vanished in the *braindecadence*.

And who are **you** anyway? *Nothing but a pack of neurons!* to Crick's Queen [5], yet whatta *PACK!* I agree, but in 2004 you have only just begun to look inside a neuron, whereas physicists have been blowing their infrastructures apart since 1900; you and they are made of stardust, and that's a cosmic thought lightyears distant from cognitive conversations [4], though not in the least "*exotic*" [5] in 2004, when quantum teleporting gets *brainported* to *NPG* & *AAAS* almost every other week [6].

And if your brain indulges in such *exotica* then your conscious awarenesses are not going to disappear down the old lab drain the way our acquisitive TEM/SEM chimp hoped and the makers of *coolwhips* fondly desire. Some people will continue to do the things they **feel** like doing; often they start revolutions; that's Natural Selection.

It's the filossifiers & theossifiers who've made a "*hard problem*", for their own profit. **Biophysics** must have some sensible answers before year 2100, or the *coolwhips* could inherit the fruits of our work since flintknapping began.

1. *Nature NPG* **428** (2004) commercial "In Focus" 563.
2. Huxley A. *Brave New World*. Chatto & Windus 1930.
3. See any Sci Fi trashfoods.
4. *Behav Brain Sci* **15** (1992) 183-247, Open Peer Review (Dan the Phi Man *et al.*).
5. (un)Astonishing Hypothesis (1994) & with Koch *Framework for Consciousness*, *Nat Neuro* **6** (2003) 119-126.
6. by fiber optics on benchtops or by squeezed light in open air across the Danube on a quiet night (*so they said*).

Uncertainty or Indeterminacy ?

10 physicists in France, China & USA told us earlier this year [1] that they controlled the frequency of electromagnetic fields “over 100 terahertz of bandwidth with fractional uncertainties approaching 1 part in 10¹⁹”. Congratulations! and we question neither their data nor their skill.

But we are stupefied by their concluding remark that: “...it is notable that our data do not point to the existence of any fundamental limitations to the uncertainty. Our results appear to be limited mainly by noise of a technical nature (thermal and mechanical limitations) and total integration time.” Ghosts of Copenhagen save us! [1]

Maybe the Authors’ proper scientific caution has cloaked their conclusion in natural ambiguity. **What exactly do they mean by that?** Their sentence can be interpreted in two contradictory ways: ‘Max Planck & Heisenberg were both wrong & we have shown it’ **or** ‘the old indeterminacy rule’* still stands. In the current state of particle physics, quantum-relativistic cosmology & a neuroscience necessarily intelligible only with a **biophysics** of brains [2], this verbal uncertainty, superposed on neuronal wave-mechanics, is **nontrivial and humanly indeterminate**.

If our Authors intend us to believe that there is **no fundamental limit** to simultaneous measures of position and momentum on any scale, then we must conclude that animal brains (especially our ~100-billion neurons) are in principle (and must be in practice) fully **determinable**. That’s not an academic philosopher’s quibble for neuroscience & behavior. In fact it’s a fundamental issue for our fanciful so-called *Conscious Free Will* (which all our Authors must assume They have, whether or not they ever read popular books about the *Illusion of Free Will* [3]).

Moreover their nice optical-frequency method seems to remove previous uncertainties about the probability amplitudes of photon & electron trajectories in QED [4]. Theirs seem to have trajectories as certain (or uncertain) as Wolfgang Pauli’s old 1/137. [5] So I am flummoxed, while obeying the quantum dogma: **Never try to understand us!** As a neuroscientist who spent 22 years trying to understand primate *waveparticles* in behavioral terms [6] I fail to understand the quoted **words** of our brave standardizers.

1. *Science* **303** (2004) 1843-1845. 2. Freeman WJ. *Mass Action in the Nervous System*. Academic 1975; Nunez PL. *Electric Fields of the Brain: The Neurophysics of EEG*. OUP 1981; Rieke F *et al.* *Spikes: Exploring the Neural Code*. & Dayan P & Abbott LF. *Theoretical Neuroscience*. MIT 1997 & 2001. 3. A probable delusion of cognitive neuropsychologists (1990-2002). 4. Feynman RP. *QED*. Princeton 1985. 5. *J Conse Stud* **3** (1996) 112-126. 6. Stowell H. exploring Human Event Related Brain Potentials (LFP & GFP on scalp, 1968-90, as published).

* $\Delta x \Delta p \geq \hbar/2$?

There was once a little spinning space shuttle, which its noisiest and dirtiest passengers called *Erde, Orb, Earth, Wurld*, perhaps because they were the first animals to tongue sounds like *err & wurr*. Earth shuttled back & forth around a hydrogen-helium oven they worshiped as a god, since they had fooled themselves it was unique. Once every 365 shuttle spins they cried Happy New Year; and Good Night/Good Morning every 24 *uhrs* that completed their night & day. After an arbitrary 1000 shuttlings their holy priests declared a profitable Millenium, maybe because they could count further than other animals. As first to stride on their hind paws & TALK, these passengers boasted they had invented TOOLS, INFO & THINK (TIT), to claim the shuttle as theirs alone. They chanted pretty psalms & retailed fancy fairy tales about their origin, while reproducing with abandon, finding smart ways to break the rules of good behavior on space shuttles of finite size & energy – rules which say: **Eat & Be Eaten**. The noisiest and nosiest proclaimed themselves First Class, cornering the best seats & cramming others into the Baggage (often pushing them off the shuttle to extinction). These First Class passengers ate up the stores & trashed the shuttle faster than the Baggage People. [1]

After a few millenia the Baggage Folk, who birthed & died the fastest, grew restless, despite the old toys & trashfood tossed them by the Firsts; the Space Hostess couldn't always keep the starstriped curtains closed. But the shuttle Capt. Gaia had been on the intercom the past hour, trying to tell ALL passengers that the shuttle was at risk unless they quit their stupid over-eating-&-sexing; but nobody listened. The Crew had already donned their spacesuits & were looking for nearby empty shuttles (none of which were airconditioned). Sitting up & yawning in the loungers a few Firsts had heard something, not too clearly, and were amiably debating the relative merits of unlimited consumption & reproduction against a soft extermination of the "voracious human biomass". [1]

Some more educated Firsts & Baggageers had just realised Who They Were [2] & were daydreaming of a *genoproteophenomic* Fourth Bionic Chimp; but an unpopular minority suggested first consulting the myriads of microbes, who were viable passengers billenia before *Pan tertius* abandoned its trees; they know more about how life began [3]. But the now bored Crew were toying with qubits, nanowarring, verbobesity & ethispecificity. **Nobody cared about their numbers: 8.5 billion by 2050 ?**

Wilson EO. *Consilience*. (1998). 2. Diamond J. *The Third Chimpanzee*. (1992); Kingdon J. *Self-Made Man*. (1993); Tobias M. *World War III*. (1994); Palumbi SR. *Science* **293** (2001); Hughes JD. *Pan's Travail*. (Johns Hopkins 1994); Tudge C. *Neanderthals, Bandits & Farmers*. (Yale 1998); Malthus T. *On the Principle of Population* (1798); Darwin E. *Zoonomia, etc.* (1731-1802) 3. Knoll AH. *Life on a Young Planet* (2003).

Better news for your great-grandchildren next century, if Max Planck Demographic predictions of **GLOBAL FERTILITY RATES** are fulfilled: Between 2003 & 2004 ~half our >6 billion passengers will have fertility rates <2.1 -- the guessed threshold for numbers replacement [4]. Long Live the Trend!

4. Wilson C. *Science* **304** (2004) 207-9. Based on UN & US Census Bureau cumulative estimate & Author's arithmetic.

*U.S. For MEN AL SIN (Jan. 1998)
updated annually since.*