

The Anatomy, Life Cycle and Effects of the Phenomenologically Distributed Human Parasite M0

The Reciprocity Group

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Abstract

This paper presents a self-replicating, homeostatic phenomenon called M0. M0 runs parasitically on populations of humans. It is remarkable in that although its anatomy is distributed across all phenomenological layers from neurological to paradigmatic, its causal sequences are robust and (once exposed) readily traceable and hence vulnerable to counterattack.

The anatomy and lifecycle of the parasite are described, together with several secondary effects which are often of primary importance to the host population. An alternative interpretation of the role of dopamine in controlling mood and awareness is proposed, and how the "security breach" thus exposed is exploited by M0 is shown. A disturbing model of the variability of human consciousness is proposed.

Appropriate responses to this construction of the data are discussed.

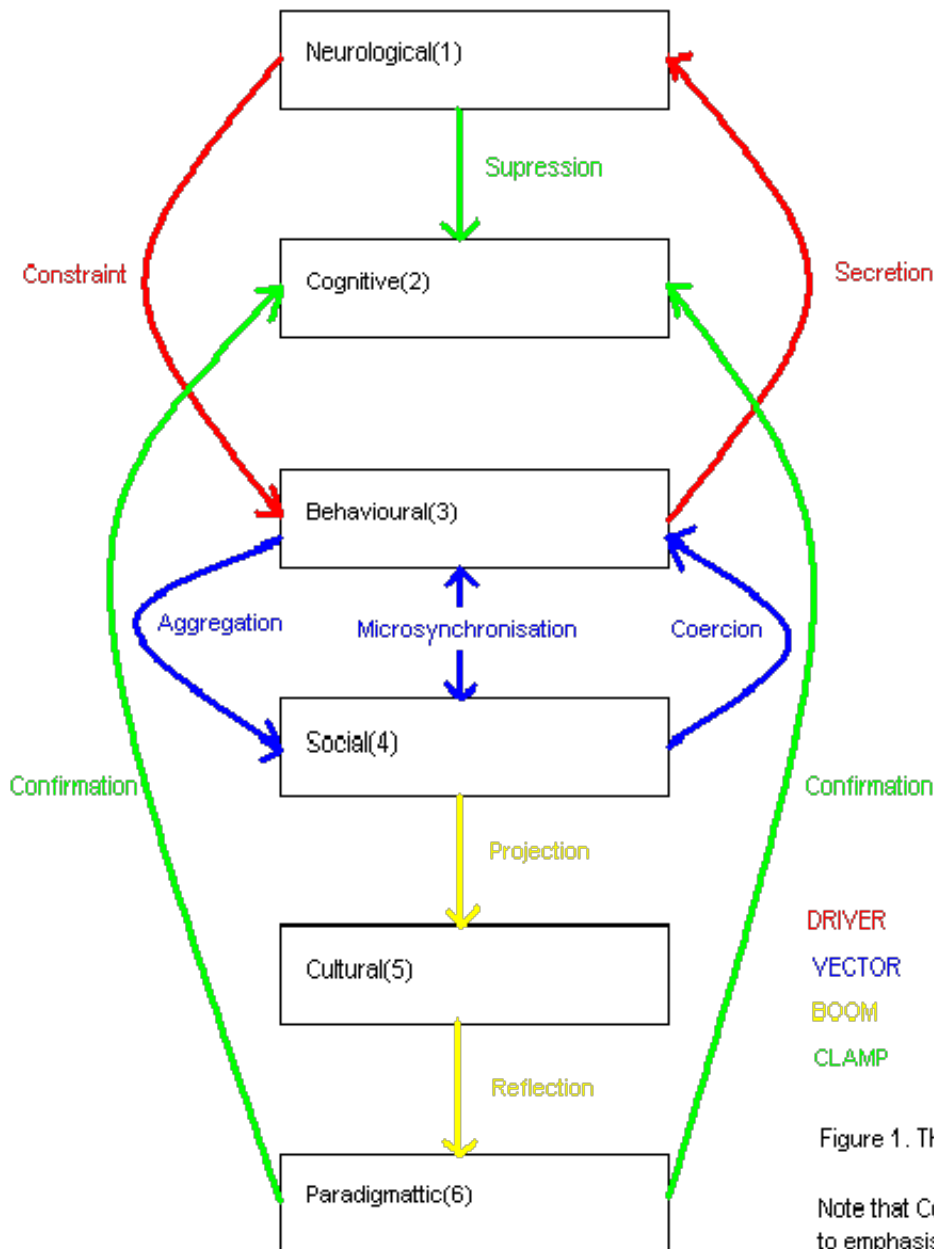
Anatomy and Life Cycle

NOTE 1: Because the stages in the life cycle of M0 collaborate to function, it is necessary to consider the whole cycle before reaching a conclusion as to its viability. This is particularly true because this construction of the data challenges some existing understandings. The challenges are explicitly stated below, in the section "Disagreements with Existing Understanding". Forward references in the description of the life cycle have been limited to the section "Exploitation of Feedback in Cognition", below. This section contains a functional description of the faculties M0 denies to its hosts.

NOTE 2: In some sections below the behaviour of M0 is described anthropomorphically. This is because it is easier to phrase things this way in an action oriented language such as English. M0 is an exceedingly primitive self-replicator, without awareness, intelligence or motivation. In every case, the long form of the anthropomorphic description is simply to say that if M0 did not have the property described, it would not have survived and this paper would not be necessary.

Habitat

The life cycle of M0 consists of very different stages that live in different habitats, as caterpillars crawl along leaves and butterflies inhabit the air. Unlike insects, M0's habitats are in completely different spaces and crucially, the different stages collaborate towards ensuring the parasite's survival. Indeed, all four readily identifiable subsystems (or "organs" if you prefer) within M0 are each distributed across more than one space, making it reasonable to recognise it as a single entity that inhabits multiple spaces simultaneously. Such is the nature of M0, this actually makes it easier to understand! The spaces used by M0 are:



1. **Neurological.** Includes neurochemical, structural and other physically identifiable phenomena.
2. **Cognitive.** The subjective experience of the person - limitations on what they can perceive and how they must perceive.
3. **Behavioural.** Observable, manifest behavioural traits of the individual in isolation.
4. **Social.** Effects of groups of people behaving together.
5. **Cultural.** Evolved by a society and passed on through generations. The culture is explicitly preserved.
6. **Paradigmatic.** The nature of the universe perceived by members of a culture. Beliefs about the nature of reality. The paradigm is implicitly preserved.

Driver

The driver organ is a positive feedback loop operating between the Neurological(1) and Behavioural(3) layers of individual humans. It is the motor that keeps a flow of energy directed into maintaining the existence of M0. It does this by exploiting what in systems engineering would be termed a "security breach" inadvertently provided by an existing safety mechanism. Since understanding the breach requires a reappraisal of the existing understanding of the function of dopamine, we should first consider an analogous security breach exploited by the opium poppy.

Pain is a natural safety mechanism that prevents an injured animal sustaining further damage to the injured area. It is a safety mechanism which generally enhances the animal's survivability, but which would be counter-survival if the animal were unable to escape the cause of the injury because of the pain. Therefore a second safety mechanism has evolved that protects against problems caused by the first. For a while after injury, endorphins block the pain signals so that the animal can escape. But there are no further safety mechanisms, so if an animal performs a behaviour such as smoking opium (which simulates endorphins) for too long, it can get trapped in a situation not probed by evolution. Its brain chemistry strikes a new balance in the presence of the opium and the animal cannot stop smoking opium without experiencing distress due to withdrawal. It is therefore obliged to fund the cultivation of opium poppies.

We propose that the subjective experience of boredom is a first level safety mechanism analogous to pain, that has evolved to keep humans moving about so that they can discover and exploit their environment. This safety mechanism could itself prove fatal in siege situations, such as having to hide quietly up a tree until a predator leaves. So a second safety mechanism has evolved to place a human into a partially conscious standby mode after the human has been bored long enough that it would have moved on if it possibly could. The level of the neuroinhibitor dopamine in the human's brain rises. This induces a subjective experience of self-absorbed well being, while rendering the human quiescent but sufficiently conscious to notice when it is safe to move, by deactivating an entire layer of cognition, functionally described below as the "Exploitation of Feedback in Cognition".

There is an important difference with respect to the endorphin case. Excess dopamine is secreted *after* a period of boredom, not for an initial period. While an human cannot manufacture more endorphins without subjecting itself to stress of some sort, excess dopamine can be produced by simply continuing to do nothing interesting! Therefore a human that is kept in a bored state for long enough to rebalance its brain chemistry will become hooked on its own dopamine and be able to feed its own habit by simply boring itself! While tolerance may ease some of the debilitating consequences of being in standby mode, it does not even begin to compensate for the lost faculties.

The driver organ is therefore a positive feedback loop whereby a human hooked on its own dopamine (Secretion) will perform boring behaviours to stimulate dopamine production (Constraint). As with other addictive situations, the higher the usage, the greater the craving, such that the positive feedback loop will always tend to increase boring behaviour and levels within the bounds of the possible.

Vector

The vector organ primarily acts to spread M0 to new hosts, and maintain infection of existing hosts. It is a pair of positive feedback loops between the Behavioural(3) and Social(4) layers, one overt and the other covert, both again only constrained by practicalities. Its most obvious channel is the custom of almost all human societies, for a variety of rationales, to corral their children at around age four and bore them rigid for two years (Coercion), by which time dopamine self-addiction has established itself and the driver organ is running. Other examples of M0 Coercion are the explicit maintenance of ridiculous and time consuming ritualism for no useful purpose in courts, legislatures etc, as well as peer pressure to perform rituals such as attending football matches. Nations who have elected to dispense with silly wigs etc. in courtrooms have all kept the incessant, mandatory, obsessive-compulsive displays by the protagonists. If such bobbing, twitching, skipping antics were observed at the bus stop, the victim would be called mentally ill, and neurochemical "explanations" for his or her behaviour would be invented. At the bus stop, one is required to perform *different* rituals.

Less obvious is the overt return channel (Aggregation). This is the result of vast numbers of ritual addicted hosts needing to maximise repetitiveness and minimise novelty to avoid dopamine withdrawal. The result of this is that every transaction in M0 infected societies, from flirting with the opposite sex to buying a newspaper

and even buttering one's toast has a defined "proper" series of actions by which it is effected. This endless barrage of repetitive input means that hosts in M0 societies rarely find opportunities to even encounter dopamine withdrawal.

The single, full duplex covert channel (Microsynchronisation) is a bizarre phenomenon that we cannot prove the existence of, but are forced to conclude must exist. As the driver and vector loops send the average dopamine levels of the population up, conscious awareness of influences and motivations reduces, and sensitivity to dopamine reducing novelty increases. Individuals become increasingly blown by the winds of the dopamine economy set up by mutual exchange of rituals. In this context, the minutiae of body language become synchronised to a level of detail, and in such a way, that we don't think one even knows what to look for without the high dopamine state needed to achieve sensitivity. In chronic cases of M0 hosting, each little crease in the host's clothing will be exactly where it was in the morning at the end of a long, hot day. Such "neatness" is a frightening measure of the constriction of the person's movements through the day, however it is rationalised as a desirable attribute in M0 afflicted society. Normal humans don't behave like that until they are dead.

Natural immunity to M0 exists. The immunes have a singular set of personality traits, but many names. Children diagnosed with Attention Deficit Disorder. Hackers (creative computer programmers, not the criminals). Mystics. In industry, people who "know Quality". In medicine, star diagnosticians. Creative artists of all kinds. Several of the present authors. Despite forceful (and often highly offensive) insistence to the contrary by M0 hosts, these people are not defective, or disordered, or stupid, or anything else. They have a range of normal human faculties not possessed by M0 hosts, because their cognition can exploit feedback. While M0 hosts simply deny that this is the case, natural immunes are quite happy that they can do what they do, and recognise and communicate with each other. An explicit argument showing that it is indeed the natural immunes and not the M0 hosts that have the right of this dispute is provided under the discussion of the "Exploitation of Feedback in Cognition", below.

Natural immunes have some genetically defective dopamine receptors or over-active dopamine cleanup mechanisms. Other dopamine paths work normally, for example the damping of motor nerve excitations that is lost in dopamine depleted Parkinson's sufferers causing tremors, works in natural immunes. The defective dopamine receptors mean that however the M0 vector may assail them with boredom, they cannot enter standby mode. Therefore they cannot become self-addicted, the M0 driver cannot become established, and cognition remains intact. That is why natural immunes have low dopamine *and* defective receptors - we are looking at a positive feedback out-of-control loop, not a negative feedback control loop.

Boom

By so constraining the host to ritualised behaviour, and causing the host to constrain new victims until they succumb, M0 can maintain and spread itself. But it would be a cheap trick on its own, since humans would quickly spot what was going on and take steps to eradicate M0. As it operates by subtle manipulation of the host population's behaviour it cannot defend itself (in general) by open warfare. Instead it conceals itself by operating on the hosts' awarenesses from its base in Neurological(1), as discussed below. But even this would not be enough, since the hosts' perceptions would not tally with physical reality and they would see the nonsenses. The true power of M0 over its hosts comes not from the uniquely intimate way that it subverts its hosts' behaviour or cognition, but from its ability to reconcile the hosts with the nonsenses under their very noses. This is accomplished through the boom organ, which extends from the base in Social(4) to condition the entire epistemological and ontological context of the hosts. It's a neat trick for such a small self-replicator, and demonstrates the power that phenomenological distribution can give a system.

There is no connection on the M0 anatomy diagram between the Cognitive(2) and Behavioural(3) layers. This is not because hosts have no control over their own behaviour - they do. But that control can be over-ruled at any time by the requirements of M0, which does not require the host's cognition in the loop. This happens because although the hosts are effectively ritual junkies, they do not know that they are junkies. They therefore have no opportunity to resist their addictive behaviour, and believe that the urges that come upon them are their own "feelings". In fact, very little of what M0 hosts actually do is inspired by their own aspirations. They would indeed love to say, take a year off and walk along the Rocky Mountains, but in fact they'll never do it, because M0 has other plans for them.

In this way, what actually happens in M0 infected societies is only a very tiny fraction of what could happen. As the M0 society describes its extremely narrow trajectory through its state space, the region swept becomes by default, the "culture" of that society. Yet the individual hosts have no reason to think that the network of institutions, laws, literary treasures, rights and so on is anything other than the accumulation of years of their ancestors' summed wisdom and creativity. Thus M0 transfers its own limited agenda from the dynamics of Social(4) to the repository Cultural(5) (Projection).

Language provides an example of this transference of limitations. As discussed below, the faculty of striving for/reaching an understanding of something requires the exploitation of feedback in cognition. Since M0 hosts cannot exploit feedback in cognition, this is something they do not do. Therefore there is no word in English for doing it. However, there are plenty of ways of saying that one has mechanically operated on inputs to obtain outputs. "Figure it out." "Work it out." "Grind through it."

Management practice provides another. Why do organisations that purport to be managing time wisely never include a column for the time spent filling in the ever more convoluted timesheets? Should one not at least count the time spent managing time, if only to discount it to a central cost code? As time accounting systems get more complex, the time spent operating them grows vastly, since it is necessary to have extended meetings to determine and regularly renegotiate which time accounting codes one uses for different jobs, yet the cost of this to the organisation is always by custom ignored. Why? The answer is that to M0 hosts, another little administrative task is like "one for the road", which is always a moderate and reasonable thing for an addict to take. They do not recognise the extent of their usage. Therefore they genuinely perceive no need to account for the increasing time spent accounting for time, and the custom (or repetitive behaviour) of not counting another hidden cost of administration is acquired. This behaviour will then be defended by the practitioners, although they will not know why, which makes attempting to discuss the matter with them a very bizarre experience. They seem to be convinced that it is the questioner that is the imbecile, but cannot explain why. Eventually they will make an exaggerated display of contemptuous laughter and walk away, presumably to fraudulently book the time spent arguing about the time spent time accounting to some other (productive) activity, as usual.

From Cultural(5), M0 is able to condition the implicit assumptions infants pick up about the universe (Reflection) as they form their own Paradigmatic(6) layer, and so control what they learn about what is possible and impossible in this universe. By constraining the kind of questions that are meaningful, it can control just about all aspects of human affairs, and yet remain invisible even to natural immunes who although they are not in the feedback loops, learn the same paradigm as everyone else. Immunes are therefore often left with a profound sense that there is something very wrong, but cannot express what it is.

One might think that the paradigmatic component of M0 would be a rich and complex thing, inherently hard to grasp. But it turns out that this is not so. The full details of exactly how it works are covered in the second paper in this series, called "The Ghost Not".

It might seem difficult to give an example of how M0 has compromised our paradigm, since by definition a paradigm is a coherent set of implicit assumptions you don't realise you hold. But armed with some understanding of what M0 does, one can to some extent allow for the "blind spot", and notice a discrepancy. Such a discrepancy is described in the third paper in this series, entitled "Reciprocal Cosmology". It is a slight variation of the usual geometry of the universe that has been accepted since the work of Hubble, that appears to resolve most of the deep philosophical problems of modern physics. Here we can note that it does not matter if the variation is correct – that it is obvious and yet novel, and detected by applying the ideas contained in "The Ghost Not", is all that is needed to support the credibility of the M0 concept.

Clamp

Although it is primitive, M0 is a loathsome parasite. The purpose of the clamp organ is to hold the host's mind in check while it uses his or her entire life to the maximum possible extent. By exploiting the standby mode security breach from Neurological(1), M0 maintains the host in a state that omits the higher value Cognitive(2) functions altogether (Suppression). This alone makes the host unable to perform the self-criticism necessary to notice that his or her actions do not correlate with their stated objectives. Worse, the self-absorbed state evolved to keep the host happy but still in sieges increases self-confidence as it progressively erodes the

remaining awareness. Eventually, the host's confidence in his or her total mastery of the situation is justified (in their own eyes) by the brilliance of the strategies they create. Such as resetting the clocks and telling themselves they are more productive. Chronic cases appear criminally cynical because the mix of fatuous comments and patronising attitude seems to tally with the characteristic motor impairment symptoms of very high dopamine - rearward lolling head and a peculiar smirking expression. Sadly, the more authority a person acquires, the less practicalities intervene to moderate their self-addiction. The boom transfers the motor impairment to Cultural(5) - "airs and graces" (Projection).

Hosts do not realise they are compelled to ritual fix, and supported by an action oriented culture cannot conceive of anything more reasonable than repeating the same behaviours over and over again. It becomes an end in itself, an inherent good. In extreme cases highly ritualised workers such as nurses will replay previous life threatening behaviour caused by unawareness, including the "arguments".

This state of mind is supported (Confirmation) from Paradigmatic(6). The universe thus perceived is a shallow, chaotic one. When things work it is because they have been constrained to rigid behavioural tramlines. Otherwise, the clamped mind believes everything will slide into chaos. There is no deep structure (algorithmic redundancy) to base one's understanding on, so understanding does not take place. All learning is therefore by rote, and without structure usually forgotten very quickly. The ability to imagine themselves ever understanding anything is stripped from most people. Therefore they do not even try, and if ever circumstances do cause them to try to use their full awareness, the experience of trying to use faculties that are unavailable is unconsciously distressing and the host is effectively conditioned by aversion techniques to avoid thought!

Meanwhile the high dopamine levels numb the host, removing awareness of the state of their own metabolism, and the simplest forms of metabolic control. Most people cannot exert any influence at all over their own heart rate!

In this state of mind, the host controls nothing, understands nothing, and he or she may do terrible things while always returning to the junkie's first priority - the next fix. The only over-riding priority, as in other forms of addiction, is fear. The host becomes completely reactive, and in the absence of an immediate cause of fear his or her biggest concern after ritual fixing is to *avoid blame*, a second order fear of the rituals being interrupted by fear. Such is the dimming of the host's faculties that the simultaneous subjective experience of self-important superiority and craven terror does not seem contradictory. Yet to all of this incredible contradiction and confusion in their own minds, the hosts and their co-hosting friends and relations, will be oblivious.

Disagreements with Existing Understanding

This model disagrees with the following interpretations, which we believe are the conventional constructions put upon the data:

Dopamine levels rise with interesting activities.

They do not. They rise with boring activities. However, there is a bizarre side effect of Microsynchronisation that may illuminate the origins of this belief. Most people's ritual fixing is constrained by physical practicalities. Most hosts would fix more if he or she could. Hosts learn to recognise people more deeply into ritual addiction by their characteristic motor impairment symptoms, in which they see the promise of powerful dopamine rushes caused by the totally predictable behaviour they will be able to regard. Thus boring people will persistently describe even more boring people (and situations, such as football matches) as "interesting", and less boring people as "boring". Natural immunes do it exactly the other way around, since they are stimulated by, and do not suffer withdrawal stress from, novelty. This effect can often be seen in social settings. So what dopamine rises with depends on who is doing the testing.

The possible states of consciousness are asleep and awake.

The most common state is M0 extended standby mode, in which the person is almost as unconscious as in normal sleep, but does not know it. The state contains its own dream reality. People who do awaken can recognise that they have been asleep. Most people enter this state by age six, become "childish" and stay that

way at least until retirement. Unlike the meeting rooms of large corporations, most children under the age of six are not childish - they are simultaneously more serious and more fun than most adults. Providing they do not replace work rituals with Derby and Joan rituals on retirement and are physically robust enough to survive dopamine withdrawal stress, people's dopamine levels can drop so low that they are able to exploit feedback in cognition and normal psychological development continues where it was suspended at age four. This is sometimes referred to as the "second childhood". In M0 extended standby mode a person cannot hope to comprehend the other states, but most usually retain some emotional memories of a far happier and more alive state that they experienced as small children. This is normal wakefulness, and is their birthright through every day of their lives.

High dopamine leads to alertness.

High dopamine leads to a delusional feeling of self-confidence, and in contrived situations in M0 society the consistent repetition of actions such as simple assembly tasks. But this is not alertness. To demonstrate this, consider a situation in the countryside, away from the M0 society where everything visible is constructed for the benefit of ritual junkies. The high dopamine people trudging along, plod, plod, plod, heads down, are supposed to be the "alert" ones. The low dopamine ones looking about and seeing all the little birds and animals are supposed to be "distractible", and if they see something they point out, they must have been "hyperfocusing". The reasons for this kind of childish name calling are discussed in the section "ADHD Diagnosis and Dopamine Denial Resentment", below.

Notice that in all other circumstances, dopamine is recognised as an *inhibitor*. Only "alertness" is enhanced by this substance.

Normal dopamine levels are healthy.

Most people's dopamine levels are horrifyingly high. They were only ever evolved to be anything like as high for short periods, with long periods of separation between them. The high levels devastate people's consciousness and are unhealthy.

People with ADHD, hackers, mystics etc. are deficient and disordered.

In most human societies, people naturally immune to M0 are in a vastly superior mode of consciousness, compared with those around them. See the section "Exploitation of Feedback in Cognition", below.

Radiograms show people with ADHD have weak brains.

Radiograms show higher oxygen uptake by parts of M0 hosts' brains. Probably because of having to work against excessive background levels of neuroinhibitor just to be able to walk - standby mode is intended for sitting quietly! We may very well be looking at the tolerance itself.

People with ADHD live in a dream world.

There is a disagreement about who lives in a dream world. Members of both groups agree that they see the same things as other members of their group. This alone should make the situation interesting to rational people. Immunes are consciously aligned with respect to objective reality, people hosting M0 are unconsciously aligned with respect to the dopamine economy. But because the M0 hosts are unconsciously aligned to something they do not realise exists, they are incapable of defending their position. While in truth they cannot perceive the structural isomorphisms all around them that are core of what the immunes can see, they are obliged to restrict their position to an unsupported assertion that the immunes are all individually deranged and then perform exaggerated displays of contemptuous laughter when the immunes point out that they all see the same thing.

People with ADHD cannot keep calm.

In this construction it is still true that immunes are often not calm, but the disagreement is with the proposition that they should be calm given that they live on the Planet of the Dopes. In particular, they do not realise that the M0 hosts' exaggerated displays of contemptuous laughter are an attempt by the hosts to rationalise their behaviour *to themselves*. Because they do not understand why they behave as they do, and are in a state of mind where eventually they will reset the clocks and claim they are more productive, they display contempt because this then "proves" to them that the person they are talking to does not deserve a sensible answer. It does not even occur to them that an implication of their exaggerated displays of contemptuous laughter is that they are in the habit of mocking the afflicted! This position alone would earn them a punch on the nose in most situations, and it is only because human nature (unlike M0 nature) is gentle and forbearing that this does not usually happen when M0 hosts behave abusively towards immunes. So we have an immune who at the moment he manages to set up a logical ring of steel around the evasive behaviour of the M0 hosts, is treated to an outpouring of abuse instead of a rational response! Since this is more than a little frustrating, it is a sign of good health that immunes become frustrated at this point. In distinction, dopamine self-addicts experience their moments of greatest "calm" when their dopamine levels peak and the situation becomes maximally dangerous because of their reduced awareness.

Exploitation of Feedback in Cognition

Although this paper has presented anomalies at Behavioural(3), Social(4), Cultural(5) and Paradigmatic(6) that are due to the metabolism of M0, it has not yet demonstrated what M0's clamp does to Cognition(2) through Suppression from Neurological(1). Such a demonstration is desirable to verify the assertion that the security breach at Neurological(1) is real.

Suppression does two things. As an individual's dopamine rises, self-confidence and self-absorption rise as awareness falls. This effect only amplifies the difficulties of discussing the real problem however, which is thornier. The problem is, how does one show that the subjective experience of a natural immune or a person who has grown up in a society free of M0 is not only qualitatively different to a person hooked on their own dopamine, but is also *superior*? Unless we can settle this question, it is going to be difficult to alert the majority of the human race to the existence of the parasite so that we can destroy it.

The problem is not to convince everybody. Natural immunes, people from M0 free societies and people who have benefited from an upbringing that values self-criticism enough to free themselves from the worst effects of M0 do not usually need convincing. We know each other, and when we are shown M0, we *know*. Therefore this section must be addressed strictly to people who are currently addicted to their own dopamine, without even realising it. It must show you what M0 has taken away, so that you can reclaim what is yours.

The Missing Faculties

Our universe has a property called algorithmic redundancy. What this means is that every little thing does not go off doing its own sweet thing. Instead the whole universe is arranged in patterns. Study one hydrogen atom, and you've studied them all. Or a brick, or a '58 Buick. Or a tornado, which is a pattern of movement, like M0 but restricted to a single phenomenological layer. The work of both scientists and poets lies in discovering and describing the patterns that are found in nature.

There is plenty of work for scientists and poets to do. An atom at the end of one of a young girl's hairs moves in a great many patterns, discovered and described by particle physicists, fluid dynamists, meteorologists, Vidal Sassoon and poets, *all at the same time*. The universe does not contain just the patterns that people have discovered and described to date, it is absolutely stuffed full of them, and we have barely begun to understand. In any situation, there will be patterns. Peter Senge has recently documented a bunch of them that appear over and over again in different guises in the business world in "The Fifth Discipline". There are so many of them that being able to see the patterns allows us to chunk up the universe. To handle it with ease, the lazy person's way. It is this trick that nature has pulled off as her centrepiece of making us smart, and it is what M0 stops. What natural immunes can do are the following kinds of activities, which all require some sort of feedback - a way of taking the output of something and feeding it back into the input.

Self Remembering

At this moment you are perhaps sitting on a train, or at a workstation, reading this paper. You are "aware" of the paper. But are you also *aware of being aware* of the paper? Is there a part of you that watches the rest sitting on the train or in the armchair and reading the paper (through the eyes of course, we are not talking excursions to the ceiling here), that when it wants to can control the rest? As you read this, you probably became aware of yourself in just this way. People with healthy dopamine levels *always* have this "monitor" going in their heads. It's exceedingly handy because for one thing, it doesn't get drunk anything like as easily as the rest of our minds. This is why the "hyperactive" and "dreamworld inhabiting" hacker or artist is often in fact the most in control on drinking missions. Not the necessarily the quietest - just the most in control!

The monitor is very important. When you are aware of yourself you can notice when you are making a complete mess of something. You can recognise problems more easily, because you tend to step back and insult your own work while you are doing it! And it is the monitor that is the free and independent you that really does the wanting when *you* want something. When it wants something it wants it in a big way, and it is something that you find truly fulfilling when you get it. It never stops looking for opportunities. That is why natural immunes will sometimes let projects apparently lapse for years until they find whatever they need to proceed. The monitor is your real awareness, your ability to spot something that you weren't expecting to see, but which is happening nonetheless. It is by keeping all our monitors going for longer and longer periods that we will be able to "Consider all that we do, examine every rule, take it back to the rudiments" (as Kate Bush put it) and eradicate MO. If we know what we are fighting, we can do it.

In order to make the monitor happen, there must be some sort of feedback happening in the brain. Information about the world is gathered by the senses and fed to the brain, which interprets the information and can respond (even while doing "intellectual" work) on full automatic (this is what happens in standby mode). But what is then supposed to happen is that the whole scenario, the picture of the world you started with, but with you now in it as a part of the situation, is fed back into the brain to make sure that what is happening is what was supposed to happen.

Pattern Discovery

We are getting pretty good now at designing computer systems that given the clues, can solve the riddle. The clues may be a bunch of symptoms that a hospital patient has, or the dimensions of a set of boxes to be loaded onto a lorry. What we haven't really made any progress with at all is designing a computer that can first spot the clues amidst all the irrelevant facts they are hidden in *before* it has solved the riddle, and then use the clues to solve the riddle. Sometimes even spotting the clues before it even knows there *is* a riddle. It's a uniquely human talent at the moment, that lies behind all new theories of science, as well as the moment of sudden, complete understanding that inspires a poet to capture a thousand summer afternoons in six lines of text.

This ability is based in being able to imagine the relationships of cause and effect between the parts of what one is seeing being arranged in many different possible ways, and then test each arrangement to see if holds up. As we do this we can start to get a feel for how the pieces can fit together very quickly - sometimes only a few hours skillful playing can make the subtle world hidden in whatever one is studying become apparent. A creative software engineer can take a software problem, chunk it into four or five subsystems, then chunk it *again* into 4 or 5 *different* subsystems (which must obviously be connected differently). Then he or she can compare the different approaches and spot the underlying similarities between the approaches, however these are disguised by details of each approach. These are then the real problem - the hard issues that the designer must address to do a good job. And with the problem understood, getting a sensible answer usually isn't too difficult. A musical composer or someone doing logistics for a major trade fair can do exactly the same thing. In mathematics, the technique is called inductive reasoning. In the textbooks it is usually shown as a complement or equal to deductive reasoning - step by step stuff. But all mathematicians know better. In fact they do exactly the same thing as a DJ finding the perfect mix for the moment.

The only way to do anything like this with conventional computers is called *exhaustive search*. We just program the computer to try every possibility, including the vastly overwhelming number of ridiculous ones, and test them. All the experience of chess program designers is that human players do not do this. They find themselves pitting exhaustive searches against something *else*. The recent ability of computers to function at Grandmaster level in chess doesn't mean that exhaustive search is now as good as Grandmasters - merely

that it is as good as chess.

This trick of holding all the elements of a problem in mind at once and considering each possibility while bearing in mind that as the elements change, the relationships between them also change is very suggestive of a mathematical idea called *modal logics*. In modal logics, the value of an expression (or even parts of the expression) can change the relationships indicated by the operators within the expression. Instead of saying,

$$A + B = C$$

we can say

$$A ? B = C$$

and make the rule that if C is odd the ? becomes a +, but if C is even it must become a -. The odd thing is, we can actually build computers that can cope with this sort of thing. They are analogue machines rather than digital ones. Analogue machines were commonly used for graphics rendering until about 20 years ago, and are not theoretical notions at all. Analogue machines don't even have to be electronic. Minimum area problems that would make a Connection Machine cough can be solved by soap films in an instant. The analogue machines that can do modal logics must have a feedback connection in them. The electronics that hold the value of ? must be connected to the electronics that hold the representation of C forwards to fix the value of C and backwards to be fixed by C. The purpose of the circuit is to find a balance or true possibility, not a halt or answer.

The machines have to be analogue because the effect of ? and C on each other must be felt instantly. If the computer was conscious, there would be no period of time in which a process of applying the change could take place. So there would be no sequence of actions that an analogue machine could specify to a digital one to tell it how to do the trick. Of course, the digital computer could be programmed to simulate the physics of what the analogue machine was made of, and do it that way, but it would take a long time. All those atoms to model...

We are here faced with a trick that humans can do, that seems miraculous without feedback being involved in how we do it, but makes much more sense if we assume it is used.

Self Extension

When we discover a pattern, it has a profound way on how we see situations where it is found. When we first encounter a complex situation such as the deck of a yacht or a theatre stage, all seems chaos. Later, when we have come to understand the situation, the purpose of each piece of equipment and its relationship to other equipment, all seems simple. The situation has not changed, so we must have. This is one of the reasons why understanding based learning is so much more effective than the usual sort. Instead of memorising facts in a disinterested state of mind, one gets the subject literally under one's skin. One in part *becomes* the area of study, and lessons learned in one situation will always be available in any other.

This is by definition a form of feedback. The mind observes and considers, and what it sees causes it to change. The mind acts upon itself.

Pattern Recognition

When we have learned a pattern by coming to understand it, it becomes very easy to spot it hiding in any other situation. For example, a small and innovative company might be bought by a larger one on the death of the founder. After a period of neglect in unimaginative hands, it emerges triumphant and ends up top of its class. In such a situation, it should be easy for the "Cinderella" pattern to be visible. Indeed, languages used in non M0 societies involve exactly this kind of telling of legends as the definitions of words!

Again, there is a physical example of this kind of behaviour available, called a tuned oscillator. A tuning fork is an example. Stick a bunch of them in a piece of wood, play a G, and the G fork will ring. When we add a pattern to our repertoire, we seem to do something like set up a tuned oscillator holding it in our minds.

Another example simply pumps the oscillator into prominence. This is another example of feedback, since the activity in the oscillator is dependent on the activity in previous cycles plus inputs.

Meaning Based Thinking

Our culture places great value on symbol based thinking. This is presumably because the idea of letting symbols stand for things and then manipulating the symbols seems like a great advance over trying to manipulate brute matter. It would have taken Hannibal a long time to pile up supplies in front of each of his legionaries and elephants to find out if he had enough to feed everyone before setting off. This is all well and good, but it removes the awareness of the haybales and pizzas concerned. This difference becomes extremely important when one is trying to for example, understand a physical law, rather than the notation used to describe what is so far known of it. But how can it be possible to understand the meaning of something not yet understood? The answer is that we let the parts of our new understanding of the meaning behind the behaviour described by the symbols be defined by their relationships to the other parts. We construct self-defining whole pictures that allow us to fill in the details. This requires the use of the same modal logic faculties described above, and hence a hardware level feedback in the brain.

Feedback and Gain Control

All of the faculties listed above, that are prominent in people naturally immune to M0 and not used in people with normal vulnerability are based in feedback at a hardware level in the brain. All engineers know that in any circumstance where they employ feedback, they must take care to control the *gain* of the circuit. This is the measure of how much the signal is amplified before it is reintroduced to the circuit's input. Too little and it might as well not be there, but too much and it will quickly become a howl. The control must be just right.

This point is very important indeed. Existing understanding says that high dopamine gives rise to a state known as "alertness", which can be identified by various behavioural traits that are deemed desirable in M0 society. The best "alertness" is found in high dopamine people, and there is then a range of people of inferior "alertness" as the level of dopamine in their brains reduces.

Now the low dopamine people certainly have the faculties described above, and the evidence for feedback being involved is strong although circumstantial. So the low dopamine people must have their amplification precisely controlled! They are not at one of an infinite number of possible points on a line, they are at the one point where the feedback works! Therefore there is no range of anything healthy visible at all! There is a single point that gives rise to the faculties concerned, and a range of points where they are not present, and happen to be more or less far away.

Therefore despite being in a massive minority in modern societies, low dopamine people have healthy brains and are normal, and everyone else has been made unwell by the M0 parasitisation of their society.

Secondary Effects

This section discusses some examples of the secondary effects of M0 on human populations. Terming the effects "secondary" is not intended to belittle their importance to humans - only to M0.

ADHD Diagnosis and Dopamine Denial Resentment

As the average dopamine of a population rises, reducing awareness and dopamine craving increase the microsynchronisation of the population's body language. In these circumstances, individuals who are not members of the dopamine economy because they are naturally immune to M0 cause unconscious resentment by the majority simply by existing. For example, consider the situation of a primary school teacher. As the principle source of M0 infection in most human societies, schools are highly ritualised. Because the teachers are adjusted to very high dopamine levels, they suffer withdrawal stress very easily. When they are approached by a child, they anticipate a dopamine rush caused by its predictable and ritualised behaviour. If instead the child then moves in a non-standard way they face novelty, and their dopamine drops. This causes

stress and they are quickly conditioned to resent the child.

Later, they must deal with the fact that this child does not sit and ritually perform untold dozens of simple arithmetic examples one after the other, and looks out of the window instead. Worse, the child claims to have understood the operations he or she has been doing (which is more than the teacher's symbol based thinking can actually do), and does not *need* to do any more! With the dopamine denial resentment already in play, the teacher will announce that the child is stupid or bad, and simply not notice that the best way to keep him or her quiet would be to replace the simple arithmetic with some number theory.

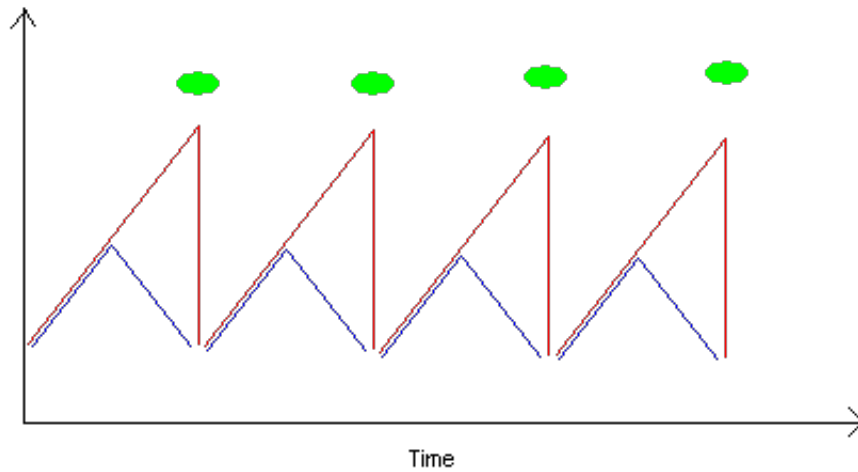
Therefore the act of diagnosing "attention deficit disorder" is a social disease of the M0 hosts surrounding a healthy child. It is this wider context that explains why it is not possible to have a rational discussion of the fact that so-called ADHD children can consistently outperform their peers, often by one or two orders of magnitude, in anything they turn their hands to.

The simultaneous problems of spontaneous "lesson teaching" behaviour by highly ritualised workers such as minor administrative officials, the consequences of attempting to form emotional relationships with people who do not even know they are junkies, and living in a society that both denies the existence of and acts contrary to the findings of the higher cognitive faculties, cause many natural immunes to develop psychological problems. Natural immunes tend to end up sufficiently powerful to control "lesson teaching" by instilling *fear*, or members of the underclass.

The Socioeconomic/Warfare Cycle

Like many parasites, M0 is a much less sophisticated organism than its hosts. The feedback loops leading to the higher cognitive faculties in the human brain are precisely controlled, but the two feedback loops in M0's anatomy do not have controls. To be feedback loops at all, they must therefore be over-amplified. The activity in the circuits increases in a positive feedback until the supporting environment collapses.

This results in the human socioeconomic and warfare cycle. The cycle starts with the population at relatively low dopamine levels, although too high to permit the exploitation of feedback in cognition. They are confused and in their era's version of poverty. Because of the low dopamine and the presence of a few natural immunes seeing what is in front of their noses and behaving opportunistically, they soon get organised and start to get real and paying, if "humble" jobs. As useful work builds, ritualism builds with it. Each roof tile is put on the same way, each palette of bricks is loaded the same way, the bus is caught at the same time every day, the same conversation happens a hundred times a day in the grocery shop. So dopamine levels rise as well as activity and material productivity.



Material Productivity

Activity & Average Dopamine Level

Marching Point

Figure 2. The Socioeconomic/Warfare Cycle

The Earth is bountiful, and soon an economic surplus develops. By now, the population is suffering high dopamine levels, are seriously unaware of the overall picture of their own actions, and need more and more frequent ritual fixes. So they start to accrete pointless ritualised behaviours that can be performed more frequently than productive rituals such as carrying bricks up ladders. They "regularise" and "administrate" themselves. Throughout the whole human history that M0 culture has been able to retain, people have always moaned about administration, but it is no sick joke. The population soon absorb the entire economic surplus they have generated, swanning around in ever deepening dopamine induced standby mode with ever more pompous "job titles". When the surplus is exhausted, the dopamine self-addiction has become chronic, and the ritual fixers begin to abandon productive work to concentrate on ritual fixing. Everybody is "in a meeting", "arguing" around in circles.

Eventually, the physical wealth in play drops to the point where economic collapse occurs. The apparatus used in ritual fixing disappears, and at the height of their self-absorption and dopamine induced stupidity, the population are plunged into massive dopamine withdrawal and poverty.

Since it provides both ritual and an outlet for aggression, the population now start marching, and destroy the remaining ritual supporting apparatus. The cycle then begins again.

This alternative to existing socioeconomic and political theory may appear simplistic, and to be sure there are regional variations. But the core idea is sound. The problem is so big we simply cannot see it, although it is celebrated in the classic "Mattress Shop Sketch" by "Monty Python's Flying Circus". A couple dressed in wedding attire enter a mattress shop, urgently wishing to buy a mattress. But there is a problem. They have uttered the word "mattress", and now one of the assistants simply must stand in a tea chest and sing "Jerusalem". This causes the couple to inadvertently utter another keyword, and more lunacy ensues. This continues until all are leaping and cavorting about singing hymns and the bride bursts into tears.

It helps to consider concrete examples. It takes a staff of hundreds of thousands of NASA employees and NASA subcontractors all over the world months to prepare each Space Shuttle launch. And yet a team of just six workers could turn around the DC-X experimental Single Stage To Orbit spacecraft in 24 hours. It is true that DC-X was atmospheric and uncrewed, but the Shuttle has never performed an atmospheric skew-flip either! The Delta Clipper programme has of course been cancelled in favour of something more complex.

Or consider the UK Government. One dynamic person should be able to handle logistics efficiently for about ten productive workers, and yet when a group of just eight scientific workers recently left a government research centre, a staggering 116 administrators were left without a reason for employment. Since the loss of

eight people from the headcount did not significantly reduce the administrative workload, the administrators simply continued to self-administrate, and to date, no-one seems to have noticed.

Path. Lab. Scandals

Every few months in the U.K. there is a major scandal as yet another Path. Lab. is discovered to have been producing erroneous test results, and fears of undiagnosed cancers and other ailments are raised in the minds of thousands. The Lab. personnel are ritually condemned, and more "procedures" are instituted. The same thing must happen elsewhere too.

Given the security breach at Neurological(1), the situation is tragically clear. The only people who can cope with the staggeringly boring work of examining one slide after another, day after day, looking for the often subtle signs of a positive test, are those who (in M0 terms) can "concentrate". That is, those who enter standby mode and continue to perform the same ritual with no real awareness for hours on end. The problem is not just the loss of pattern recognition capability. An explicit structure is still identifiable without exploiting feedback in cognition, so a job description such as "Look for a daisy pattern" is reasonable. But a *real* pattern, a pattern in the deep structure, such as "Look for irregular spatial distribution", is not an instruction one can give to a person in standby mode and expect them to succeed. No, the problem is deeper than that. It is that the person's awareness shrinks into unconsciousness and they add the action of marking the test result as negative (which it usually is) to the ritual!

There seems to be one, and only one, way out of this situation. The job must be done, it must be done right, it cannot be livened up, and we cannot yet automate it. Our pattern recognition technology isn't good enough. So no matter how much they find the boredom excruciatingly unbearable, natural immunes are the only people who can be trusted to do this job and stay alert enough for their work to be believable. This would still be true in M0 free societies. To date, Path. Lab. technician is the *only* job we have identified that *requires* a naturally immune person. This point should be emphasised for two reasons. Firstly, it has been suggested that understanding of M0 should be suppressed since it implies that natural immunes are a "Master Race". It does no such thing - even if it did, the truth does not bend its knee (or perform any other self-abasing rituals) to the rituals of so called "Political Correctness". But it so happens it doesn't. Unless one counts a Master Lab Tech Race, and Lab Techs already *think* they are the Master Race anyway.

The second point is that natural immunes, who will be able to command high salaries doing interesting jobs where their normal human talents are *desirable* will not want to do poorly paid, excruciatingly boring but vitally *necessary* work. Since natural immunes can exploit feedback in cognition and understand feedback effects such as "the good of society" without being "very clever" and expecting some other fool will do the job while they get on with the very important inconceivable grandeur of ritual fixing, we are likely looking at a voluntary organisation. How such an organisation will be able to function in the highly ritualised environment of a hospital, where the M0 hosts will be unconsciously compelled to demonstrate their contempt for, and "teach lessons" to the immunes at every turn, we cannot yet see. Issuing sidearms would seem to be self defeating in the circumstances.

Conclusions

The picture presented in this paper addresses many of the deepest puzzles confronting the human race, many of which have been in existence for all of the history recorded since the problem it describes began. It does this in a simple, necessary and sufficient, unambiguous and falsifiable way. If the hypothesis is false, it can be proved so. This is because it naturally decomposes into three distinct parts. The processes and examples given from Behavioural(3) to Cultural(5) involve reinterpretation of existing understanding. This reinterpretation hangs on the specific assertions as to the function of dopamine and the security breach at Neurological(1), and the exploitation of feedback in cognition at Cognitive(2). These assertions are testable. The picture is strengthened by the example of M0's action at Paradigmatic(6). This is theoretically disproveable.

If the picture is correct, there is much to do. We are faced with the biggest public health problem in history, but we get a huge "peace dividend" for solving it because so many other problems are caused by it.

Experimentation

The following experimental investigations would seem interesting.

Early Onset Parkinsonism

Onset of non-insulin dependent diabetes in later life is often associated with obesity. After a lifetime of overproduction of insulin, the pancreas loses its function. By analogy, statistics may well reveal that workers in highly ritualised jobs (marketing staff, clerical workers, production line workers, judges, doctors etc.) are more vulnerable to early onset Parkinsonism as their total dopamine producing ability wears out. Comparisons between machine operators and the fitters who share the same environment but have a more surprising life repairing different kinds of faults might be revealing. Further reason for predicting this effect is found in the relationship between cocaine useage and early onset Parkinsonism. Cocaine produces an incompetent, delusional and self-confident state of mind by increasing dopamine secretion. Cocaine users suffer a higher incidence of Parkinsonism than the population as a whole.

Dopamine Levels in Children

This picture predicts that dopamine levels rise significantly in children between ages 4 and 6.

Deep Structure Cognition

In "The Fifth Discipline", Peter Senge has collected a number of archetypal deep structure patterns that occur frequently in human life. This picture predicts that the ability to discern these patterns in everyday situations will correlate with low dopamine.

Native Americans and Australasian Aboriginals

This picture predicts that peoples who do not ritualise children will remain with low dopamine levels throughout life.

Withdrawal Management

This picture predicts that it is possible to induce dopamine withdrawal in highly ritualised test subjects by requiring them to solve a series of novel problems. The withdrawal stress should be physically identifiable, and resolvable by administration of dopamine.

Public Health Responses

Since various indicators suggest that Western societies are currently well into surplus consuming self administration, public health responses to counter the effects of M0 should be recognised as urgent if we are to avoid the misery of economic collapse, but requiring care. This section explores public health responses that would not be ambitious, and would in fact self-fund. While each of the parties would need to have an appreciation of why they need to take the action described (or do something better), there would seem to be no rational impediment to improvements starting very soon indeed.

Caveats

It is obviously desirable to destroy M0, since it is a stupid parasite that ravages the human race just to get a heartbeat. It is less desirable that we attempt to destroy it overnight, since going into recovery after years of dopamine self-addiction can be traumatic. First the individual must deal with the shocking reality of M0, then withdrawal stress, and then a tremendous opening of awareness that English cannot describe.

For certain kinds of people, even attempting to reduce their dopamine dependency to the point that they can exploit feedback in cognition may be contraindicated. Examples of such groups are:

- **Chronics.** Very ritualised people who have been deeply conditioned by circumstance to fear the loss of their rituals must not be compelled in any way, even though this may mean compensating them financially and ritualistically for loss of employment now regarded as inappropriate for a person trapped in high dopamine. There is so much ongoing damage to sort out that we not only need, but also can easily afford, the principle that defeating M0 is a healing activity and no further harm will be done to anyone under the misguided belief that the ends justify the means. There have been enough profoundly damaging attacks on people's very identities via the hardware layer of their neurology by non-culpable but unswervable and terrifying M0 hosts compelled to enforce ritual fixing at all costs. There must be no more.
- **Infirms.** There are a proportion of people who die shortly after retirement. It is likely that dopamine withdrawal stress at least contributes to their demise. In such a situation it would actually be better to *maintain* the individual's ritual fixing, and then take any opportunity to exploit good health and manage dopamine withdrawal.
- **Distressed.** Many old people experience a return to a childlike state of mind after retirement, and find that childhood memories are clear, yet the intervening years are fuzzy. In this picture, the childhood and elderly memories are those of a conscious person, the fuzzy ones are those of a person in M0 extended standby mode. The elderly people's memories do not exhibit a peculiar failure mode - their standards just go up again! While this implies that normal psychological development can continue exactly where it left off after 60 years like a switch turning on (the L-dopa thaws were exactly like this), the experience may not be pleasant for all. Some people may feel that being four years old, and the next moment 66 and old is very distressing. They may prefer to return to standby mode. Alternatively, some people will regain full consciousness and become aware that without understanding what they were doing or why, they have done things that now cause them great remorse during the period that they were in M0 extended standby mode. Full self awareness leads to a self criticism that is usually far harsher than the criticism of those around one, and public recognition that these people are not culpable may not satisfy their own natural standards. Again, they may prefer to go back to sleep.

The following suggestions may illustrate the intensity of emotional energy that most of the population will need to manage during the transition.

- **ME/CFIDS.** During the 1980s the Western world climbed a dopamine slope that reached a marching point in 1990 with economic collapse followed by a serious war. Unusually, the political regimes did not preach "moral values" during this time (no matter how hypocritical such preaching usually is), but instead egged on the short term thinking and divorce from solid roots that became popular. During this time, the mysterious new disease ME appeared. Informal polls of natural immunes suggest that sufferers of "yuppie flu" were *not* yuppies, who were clearly M0 hosts. They were energetic people of the natural immune/ADHD character type, of the variety that react more with sadness than anger when confronted by inexplicable behaviour. We propose that ME is a physiological consequence of stupidity induced heartbreak suffered by gentle people (mainly) with defective dopamine receptors.
- **Road Rage.** Related to the rise of 1980s dopamine behaviour was the phenomenon of road rage. This may be modelled as follows: The 1980s consumer boom enabled vast numbers of people to regularise their domestic environments as never before, and this was coupled with a fashion for workplace regularisation sponsored by standards organisations. The only novelty many people see in the resulting situation is the unpredictable and dynamic state of the road on their drive to work. This is sufficiently stressful anyway, without the kind of agitation that a sudden drop in a tolerated neuroinhibitor would bring. Traffic related murders have occurred for longer in the USA than in Europe, but there are reasons to believe that the USA may have a higher proportion of natural immunes than almost anywhere else, producing a greater economic surplus, allowing higher average dopamine levels than anywhere else.
- **Laingian Schizophrenia.** In the 1960s R. D. Laing proposed a model of schizophrenia wherein the "patient" was seen as attempting to free themselves from the centre of a web of mystification and coercion set up by the people around them. The poetical utterances of the "patient" could be seen as

attempts to characterise the "form" of their confusion. Laing lacked however, any sense of *why* the networks of apparent cowardice, complicity and cynicism he saw around his patients could have built up. In this picture, the "patient" is indeed attempting deep structure analysis, and is very much hampered by the English language. But a reason for the web is available. Since the rest of the family are not naturally immune, they haven't got the slightest idea why they do what they do, are scared stiff, and are frantically trying to retro-fit plausible rationales to their own behaviour. Unfortunately, the ensuing fan-dance with reality has holes a fully conscious person can see, but not enough to make sense of the chaos.

We should not all plan to address these issues on the same Monday morning, lest all ends in tears. Instead, a four headed attack on different initial states is preferable:

1. **Orient Natural Immunes.** These people can benefit enormously from simply knowing what is going on. Their active presence will be of great value to societies in recovery. In many cases a lifetime of alienation from those around them will need to be addressed, but initial evidence is that a natural immune's self confidence and hence usefulness in society increases immediately upon understanding M0.
2. **Reduce Effects on Children.** In theory, those not yet dopamine self addicted need never be. In practice, deritualising our societies will take more than one generation. But we can at least block off M0's principal route of infection without causing the unaddicted children any trauma at all.
3. **Gradually Reduce Ritualisation.** Society as a whole can gradually reduce its ritualism without any danger of possible destabilisation for a very long time. Standardisation mania throughout the 1980s means that we will take years in reintroduce the levels of background novelty we enjoyed in 1979. And by then, we'll be better able to handle change.
4. **Address Urgent Situations.** We can focus our efforts to achieve and manage change into critical areas, such as young hospital doctors who spend up to 70 hours per week with nurses who are rigorously trained to interact with them ritually. In the M0 model, these people more than any others need to be able to apprehend a complete picture when a mystery presents itself to them, yet are in the worst possible conditions to be neurologically capable of doing so. Their working conditions must be changed so that they are physically capable of doing a good job.

These objectives can be fulfilled through the following suggested initiatives:

Public Information

By providing a factual account of the key feedback loops in sober, background news coverage, and scientific journals, sufficient information to enable natural immunes to understand the situation can be conveyed, without blowing the matter up into an unwarranted hysteria. It can also lead to more detailed coverage that will make the position clearer for the (possibly as many as) 20% of the population who have a bias towards low dopamine because of over-active transport mechanisms, many of whom spend a proportion of their lives beyond 4 years old in full consciousness and have an awareness that something is missing the rest of the time. Routes accessible to many of the "wistful ones" but not mass histrionic might include popular haunts like the hacker community and science fiction fandom.

Public Policy

If the existence of M0 is proven at Neurological(1), legislatures and administrations will be faced with an unpalatable fact. There's something very nasty around, and they themselves are the worst areas of infection. One of the great difficulties is that government, which by definition has no central authority over it, tends to descend into far deeper ritualism than the surrounding society, and the ritualised environment captures even energetic elected politicians. Dopamine clouded judgement and deeply conditioned fear of ritual loss will create a powerful overall drag on any initiative. Running counter to this inevitable tendency however, will be the strong awareness of health and safety that public servant's unions have by virtue of their memberships' jobs. With the health issues in terms of possible early onset Parkinsonism and loss of quality of life understood, co-operation

at all levels of the government machine may be more forthcoming than might otherwise be expected. All the smokers managed to beat their nicotine addiction when their offices became non-smoking. Once they know what has happened to them, they will be able to exercise their willpower and avoid performing unnecessary repetitive behaviours.

Beyond this, there is a key principal that can make wise administration in the period after this shock is understood a much clearer problem. It is that if existence of M0 is a reality, policy must reflect this fact. Administrations must simply assert that they recognise the existence of M0, and are determined to ensure that the situation improves consistently if gently. Beyond then supporting a gradual movement away from the intense ritualism of recent years, administrations need not go looking for trouble. They must simply ensure that when forced to make policy or take administrative decisions, they do so in the light of their M0 understanding. This stated underlying intent will alone move many individuals and organisations in a positive direction. Examples of where this principal may be important are:

- **Supporting Recovery.** When elected officials are required to adjudicate on the funding for naturally immune children, whether previously classified as "gifted" or "disordered", they must proceed on the basis that these are the rare *healthy* children, whose education is a highly cost effective investment, and not "special needs" children who are a fiscal drag. Similarly, placing very high value on *simplicity* in public policy (such that baroque administration cannot easily develop out of it) must become a natural and unsurprising attitude.
- **Debating Jurisprudence.** For some time in Western societies it has been fashionable to create "machine" legislation, with little room for the judiciary to apply a more ambitious intent. This has distorted the relationship between legislature and judiciary as well as creating an enhanced atmosphere of deranged ritual blame avoidance rather than common sense in normal life. To correct this situation, a debate that does not cross boundaries of independence about a mutually understood definition of *common sense* is required. Only then can common sense become a responsible citizen's refuge, and non-procedural living commence.
- **Replacing Courage.** With M0 proven to exist, we will know that there is an unconscious urge in all debates to trivialise and then argue around in circles, which is what most debates end up doing. To replace courage with facts means to identify the genuine and addictive parts of the debate based on M0 understanding, and use procedural force on the addictive parts only, so allowing the genuine issues to be scrutinised adequately. This is retaining human intelligence in the face of M0 rather than abandoning ourselves to it.
- **Negotiating Practice.** If one side of a negotiation were to field diplomats who had been on a quantitatively verified dopamine reduction programme, they would enjoy an advantage in strategic thinking over their counterparts. In a remarkable inversion of the arms race, this would oblige the other side to do the same for the most venal of motives! At that point, the two sides would both recognise that the other could also see possibilities involving several simultaneous changes, and arguing around in circles would no longer hold a hidden attraction. Convergence to objective reality would be possible, and because human nature is not M0 nature it would therefore be likely. All parties must understand that no-one can be called truly responsible for their own actions for the last 6,000 years. Our tribe has suffered the equivalent of ergot poisoning, and we return to sanity holding bloody weapons. We must put them down, repair, then mourn.

Re-evaluate ADHD & Other Non Existent Diseases

As the true nature of Attention Deficit Disorder is separated into fully conscious natural immunes that have been subject to dopamine denial resentment and alienation, and children who have specific real physiological or psychological problems, better treatment for all can be achieved. ME/CFIDS can be re-evaluated in the light of this picture. But there are many other (primarily psychiatric) "diseases" that we will have to accept are not real at all, given that in fact 97% of the population is neurochemically unwell. The point is remembering that the correct understanding is essential for making authentic progress.

Consider Educational Objectives

The need to deritualise education is clear, but the possibilities may seem less so. Firstly, Western cultures have no experience or techniques for dealing with large numbers of children who are not in M0 extended standby mode. How does one teach discipline without hampering creativity? Children must indeed be taught to think clearly and critically, and exert sufficient efforts to achieve their objectives. The first generation of healthy children will likely not form "crocodiles" to walk behind the teacher. As one software engineering project manager said of his staff, "Convening a meeting of software engineers is like herding cats!" Society cannot dump teachers in this situation with anarchy breaking out all around. Here we may be able to learn from those societies who broke away from the rest of the species sufficiently early in the Great Migrations to avoid the current instance of M0, and try some experiments. Doing educational experiments with children is far more ethical than knowingly forcing them into dopamine self-addiction would be. How do Amerinds and Australasian Aboriginals raise their kids? What about traditional Maoris, and what happens in Tibet?

Against the unconscious urge to ritualise for the sake of it, it is also worth pointing out that kids no longer need to be ritualised to prepare them for a ritualised workplace. The amount of automation in use today means that soon the only jobs remaining for humans will be creative ones, designing and programming the systems. The "Software Factory" is a logically ridiculous wishdream of chronic ritual fixers unconsciously compelled to erect ever bigger "dopamine shooting galleries" within the commercial IT industry. It will not occur, and will not be automated where it counts. Artificial Intelligences capable of correctly evaluating "requirements documents" written in pseudocomputerbabble by paranoid users and spitting out completed systems sufficient for the intended purposes may exist one day, but they won't run on a computer made from little pieces of paper being pushed round by Earnest Young Men Wearing Ties. Those who do not enjoy such work and prefer to enter the high value handcrafts market or growing leisure class must be able to conceive of and execute their own projects, or they will end up on street corners, kicking Coke cans and smoking.

Even in the short term, an entire technology generation of the now ubiquitous personal computer turns over every three years or less. Children must learn to expect permanent change to be an enjoyable reality, which in fact it is. At the same time that they are introduced to the dominant technology of their generation, they can exploit it to explore individual and self-directed paths of learning, allowing even an existing classroom situation to become deritualised very quickly.

We may be able to introduce dramatically increased novelty in the workplace while greatly accelerating children's appreciation of the interesting richness of the world by introducing a legion of non-childish children asking "Why?", either accompanying their relatives to help get the work done, or just wandering around on their own investigations. Returning children to the Information Age workplace would not overturn Lord Shaftesbury's achievements if "common sense" returned to being a legally meaningful concept.

Modify ISO9001 and Workplace Environment

ISO9001 is an international standard that has mistakenly attempted to improve the workplace by regularising it. It grew out of the Total Quality Management initiative in industry, which in turn was based in the "Theory of Profound Knowledge" produced by J. Edwards Deming during his studies of quality improvement. Dr. Deming's philosophy (he recognised it was more than an industrial practice) is indeed profound, since it is all about enhancing awareness, and exploiting feedback in cognition. He knew that once raised to full consciousness, many find the world they then perceive to be sufficiently interesting that they can avoid falling back into standby mode - particularly if their colleagues are also in this brighter, more positive and objective oriented frame of mind.

In this picture, Dr. Deming's contribution is in remarkable company - it has suffered the same problem that has trailed in the wake of the great spiritual teachers throughout history. Although the topic may be of interest to many people because it may be the first case of secular understanding unambiguously *catching up* with the great teachers, discussing the indications that they *all* knew of M0 and allowed for it is largely outside the scope of this paper. There is no doubt that they all caused a stir, deeply challenging the people that heard them. M0 societies react to such challenges (which for some reason they do not dismiss with the usual simple denial) by wrapping the source of novel challenges in nice comforting rituals.

Dr. Deming's awareness and feedback has become an orgiastic ritual fixing celebration of the thinking of Frederic Taylor, who gave us mass production before industrial robots with his slogan "Leave your brain

outside and bring your body indoors!". The existence of the ISO9001 audit, with its pointless adversarialism, where managers brief their staff like a barrister schooling his or her client - "Don't say anything unnecessary. Just say everything is in the Registry..." shows how far the implementation of Dr. Deming's ideas has strayed from his intentions. The mandatory requirement for ISO9001 "compliance" demanded for most public sector work, coupled with the "made up rule" that an organisation's subcontractors must be "compliant" for one to be oneself, has made ISO9001 inescapable. And as it has spread, it has not only reduced novelty within each workplace, but has reduced the novelty passing *between* workplaces, as the outputs of one standardised set of paperwork ritual manuals become the inputs of the next, and if it isn't in the book, well you're just "not allowed" to do it, so there's no point asking.

In this picture, ISO9001 is doing more than anything else to damage the state of industry, by creating an environment that makes the workforce unaware, defensive and extremely inefficient. The workforce is becoming test happy, as organisations no longer monitor the real quality of the actual delivered work and take remedial action when it slips, but instead simply randomly sample the employees' urine to see if they have been smoking cannabis - apparently the only perceived source of problems (this witch hunt around). In fact, microsynchronisation has become so strong the workforce are aware of it and are taking ridiculous measures to *enhance* it, perceiving it as an inherent good! "Lesson teaching" is driving large numbers of key creative, problem solving natural immunes out of large organisations, and the few people sustained in low dopamine and with some contact with reality left because of being brought up with values such as "always ask yourself if you have done your best", are becoming afraid to speak up against the exaggerated displays of contemptuous laughter produced when they try to drag discussions away from self administration and back to cases. This sorry tale is an unconventional way to look at something we have spent so much money on, but why else did the British Standards Institute keep saying that this standard (that supposedly values metrics above all else) *increases productivity* when it was eventually proved in court that the figures show it doesn't? Again, M0 offers a rational reason for people to ritual fix for the sake of it and retro-fit rationalisations for actions they do not understand.

And yet the ISO9001 standard does not really have a problem! The people who make up the workforce have treated this largely reasonable document in this terrible way almost entirely of their own free will, each in their own individual interpretation of it, as if blatantly pointless yet mercilessly micropoliced mandatory actions, incessant whinging, "arguments" and mutual recriminations, and the provision of every communication as a fear inducing *threat* were just a natural way to set about *anything*! Which for dopamine self-addicts of course, it tragically is. It is The Way We Do Things - the mother of all procedures.

It is true that there is an opportunity cost associated with the entire approach adopted by the standard in that it is primarily *control* as opposed to *results* oriented and does nothing to encourage or even endorse initiative and spontaneous local problem solving. However in comparison to the scale of its current abuse as a mass excuse for "Monty Python" scale ritual fixing this problem will be slight for a long time yet, and significant improvements can be made by simply adding a preamble describing *intent* to the standard, and making successful registration dependent on fulfilling the *spirit* of the preamble.

Understanding what is meant by *spirit* and not getting into ridiculous infinite regressions of challenged "definitions" until even the meaning of the word "the" is claimed to be in dispute, is therefore a requirement. Auditors will have to be able to test for this. Therefore fully conscious auditors will be available to guide their colleagues when they are available, and a frenetic race to see how quickly rightsized managers can perform the auditor training rituals and tick the little boxes must *not* be involved simply because that is the "target meeting" ritual and hence "Quality".

We must *grow up* and *break* this kind of "childish" behaviour by grown adults who call themselves "professionals". "Playing The Game" is not big, clever or socially acceptable any more. It does not represent "the cut and thrust of business" no matter what the remaining self-addicts may believe. It must be as pathetically unacceptable and beneath comment as spitting, which also spreads unpleasant diseases.

ISO9001 must be seen as requiring effective solutions to problems. The process must be defined as "a protocol for communicating with our colleagues through time and space", not a prescriptive tramline for blame avoidance. The auditor must always compare the local process with the business need of its users, and it must always be the process that is found to be at fault when problems occur (because if it was of any help in doing

their jobs everybody would naturally want to use it correctly and be able to). So-called "noncompliances", *offences found out by the commissars*, are simply not the issue amongst sensible people who are working together in a state of mutual respect, where managers are expected to identify and call for actions that are physically *possible* and will actually *work*. Instead the auditor, with concrete responsibilities that render them popular because they turn up and *solve* problems rather than force their *concealment*, must become a librarian of logistical technique, assisting in the development of local understanding of the nature of the work being done.

If a little effort is made to publish this concept from the centre of the ISO9001 definition committee, and checks are made to ensure that ISO9001 auditors understand and are acting on the publication, even the legislative requirement would be valuable since it would render unavoidable something that acts to *increase* awareness, not massively *reduce* it..

More generally, a culture that has always by default acted to maximise the ritualisation of the workplace will be able to make enormous improvements by turning the other way. This model predicts that organisations employing six people each doing six different jobs will find that efficiency and diligence are better than if each specialises in one job. Alternatively, as organisations get larger, jobs tend to get more specialised, but opportunities to practice mandatory job reallocation on health and safety grounds increase.

It will be necessary to consider which jobs produce a very high dopamine level, and see if they can be restructured. The first priority must be levels so high they reduce general awareness of physically dangerous situations. Investigation of how objective impairment of general responsiveness quantitatively varies with dopamine levels will be needed. Then jobs that require alertness but reduce it because of their structure should be examined. Can the jobs be restructured with less routine, or do we have to use natural immunes or very short shifts?

The Ethics of M0

Eradicating M0 will oblige us to deal with an embarrassing ethical question. What do we do about existing activities that actively use M0 as a control technology, until now without the knowledge that it works by removing volitional control and replacing it with ritual fixing at a neurochemical and hence irresistible level, depriving the subjects of volition they believe they retain?

A great deal of marketing practice is based in offering dopamine self-addicts rituals to follow, rather than useful products (although useful products are sometimes also involved). One armed bandits are a canonical example. Armies clearly utilise M0 to create cadres of people who believe themselves invincible and seem surprised when they are shot. What of prisons, which must be seen as sentencing a normal non-immune to inescapable ritual addiction and mind reduction?

After 6,000 years of species-wide degradation by this horrible trap, the simple answer would seem to be that all these practices must become utterly unacceptable if we are to regain our self respect, let alone to prevent any danger of the mindset spreading from a deliberately created instance of M0.

However, this area need not become contentious while progress in reducing the use of M0 is clearly being made by all. The formulaic content of television can be varied within the public interest requirements of broadcasting licences under a gentle statement of intent from governments that might just become less gentle if we are *forced* to raise this unpleasant matter again.

A global move to fully conscious armies under existing arms reduction protocols would create much more effective defensive forces. This may have been demonstrated when a non-professional (albeit skilled) volunteer force containing a significantly enriched minority of natural immunes managed to redefine the entire Israeli national defence strategy in hours with their enemy in country and moving fast, during the Yom Kippur war. They just got the idea and filled in the blanks themselves. On the other hand, fully conscious armies that like being cozy and safe would make offensive actions harder to plan reliably. Random dopamine samples from a potential assailant's army might do much to reassure nervous nations that the feared troops have their wits about them and have not been neurologically conditioned to believe themselves superior to all other troops.

In the marketing context, despite missing the "pleasing" they used to receive from "nice" sales assistants, most people of their own free choice would probably welcome exemplary fines for the same tired old lies about the light being different in the shop and the furniture really being pink when it was ordered, and so on. If the legislators are too ritualised to be able to invoke common sense in the face of an infinite regress of arguing about definitions that was tired when Lewis Carroll made "Achilles and the Tortoise" rehearse it, perhaps we will need some fresh ones who the senior (and hence very highly ritualised) civil servants aren't able to bully into spending all day and night ritual fixing because they never get allowed near them. With the action of M0 understood, the day can soon come when everybody will be able to appreciate that this kind of tired, prevaricating behaviour accomplishes nothing and literally makes one unwell and hence vulnerable, and should be regarded as a form of *assault*. As for the marketroids themselves, now we know how sick they are we must hide them away from small children lest they see the horrible way they repeat that facial rictus over... and over... again... look... exactly... the same way... every... time...

The point made flippantly above is intended seriously. There will certainly be people who are so ritualised that parents aspiring to raise healthy, low dopamine kids will not want their children to even regard their microsynchronisation, and the demand that these people "Go Away!" must be recognised as reasonable. In societies recovering from such a terrible situation, putting the overwhelming priority on raising as healthy a next generation as possible rather than supporting the convenience of the already profoundly unwell must be correct. So long as the unwell people retain an absolute determination over their own identity, they must accept that others have chosen differently, and are changing everything. There will be inevitable pain as the overwhelming majority recognise that they have been, and are, very unwell indeed. But this must not be allowed to impede recovery.

Architecture and Consumer Goods

Again within a general intention to reduce the ritualisation of society, people's environments can be made less predictable. Products that are based around logical structures rather than features (packaged as actions that may be performed with the features) will both fill and generate their own market. For example, as the population gets smarter, operating system producers can expect a greater call for elegant, flexible and powerful systems such as Linux which present components to a problem solving brain, and less for ones whose use model is of type "Tip for the Day: To make the thing not autocorrect before you've finished typing, choose File/Patronise, click on Dollshouse, simper at the Paperclip, run once around the canteen widdershins..." In this picture, the commercial success of Microsoft can be summarised by saying that it has exploited the fact that most people actually get major dopamine hits off exchanging meaningless rituals with another very simple program, over and over again.

An important point to emphasise is that novelty means *unexpected* stimulus - we have simply evolved to live healthily in a more interesting environment than that preferred by M0 society. If an apparent increase in business or social risk due to reduction of controls on the *possible* is a cost, the improved *usefulness* of the population will compensate for it, and by becoming less childish, reduce the likelihood of incurring the worst end of the "But what if moon monsters land and take all the parking spaces on a Tuesday afternoon?", approach to planning.

Denounce Administrative Convenience

Most importantly for long term success, the battle against M0 *must* start to be fought in the small. As drunk driving was only conquered when it became socially unacceptable rather than when it became unlawful, we must eventually overturn the unstated privileges enjoyed by ritual fixers in M0 society. The core position might be as follows:

When a person deals with an organisation through one of its employees, it is no more acceptable for that employee to abuse their position of trust by coercing the person to *ritual fix* with them through threat of willful maladministration, than it is for them to *sexually harass* the person by the same threat. Although previously acceptable, ritual fixing is now identified as damaging to *both* party's physiological health, and one is not obliged by law or custom to play. An organisation's administrative problems are its own to solve, in a manner that does not damage its own employees' health, and strictly without the involvement of others. A single test

case with this paper's model of dopamine self-addiction and the action of the vector organ proven would change the whole climate of dysfunctional business relationships based in flat denial of problem ownership and intelligence insulting retro-fitted rationalisations.

No More Mr. Nice Guy?

There will be an increasing need for natural immunes and people who recover full consciousness to be willing to speak out, often against a lifetime's fear of derisory responses. They must become more the initiative takers in social situations, which is their underlying tendency anyway. Healthy humans solve problems when they see them. Adults must be more willing to speak out about their shared, richer world, so that a clear groundswell of opinion is raised to support children who are without rights of self-determination, yet whose parents who do not enjoy their own level of awareness, and so cannot understand what is in these children's best interests.

They must also learn to be more judgmental of the situations about them. This will be hard for many, who are familiar with a life in which they are simply glad when others are not nagging them to perform frenetic, pointless rituals. They must do so however, because a fully conscious person who wastes his or her precious time is no good to anyone, least of all themselves. If their employer is keen to become more aware and values them, that is fine and they can do a valuable job. But if the employer really doesn't want to know, because in fact delivering product and getting paid has become secondary to ritual fixing, they must leave. There will be plenty of employers keen to seize a market lead while their competitors are ritual fixing, and there aren't very many natural immunes in play. No matter how hard they try while working in ritual fixing hotbeds, all surpluses natural immunes create will be absorbed at the top of the cycle. The more they create the worse the fall their colleagues will eventually suffer.

This attitude would seem to apply to political regimes as well as companies, with the possible exception of the USA.. We dare not lose the USA in this battle. It is a synthetic country set up by natural immunes hyperfocusing on getting the deep structure right because they were working in a hurry. (Believe us. Natural immunes recognise the attitude of the US Constitution's authors - it's human nature.) It was then populated by people drawn preferentially from unusually creative gene pools who were all getting into a lot of trouble at home, had *always* seemed to have had someone having a go at them, could perceive long term gain tangibly enough to make short term risk acceptable, felt able to cope opportunistically at the other end, and weren't inherently afraid of change - all of which should ring bells. For a long while not even the microsynchronisation from so many different origins would have worked. There were no centuries old mazes of atrocious quality law and precedent, with ritual fixers enjoying veto privileges over all useful actions until they were satiated, supping at every contradiction. This freedom to get on produced an immense economic surplus, allowing the majority to sink further into dopamine self addiction than anywhere else. Ever. This paradoxical country where ritual craving administrators sincerely believing themselves patriots, defaced an explicitly secular state apparatus - that said what it was in writing - by spraying "In God We Trust", "One Nation Under God" and suchlike all over it, would seem to have a better chance of breaking free than any other. It also offers the most horrible consequences if it ever really marches in a state of dementia, so that either way we cannot afford to lose it.

Right now the USA is in deep trouble, and doesn't know it. What was previously described as a character type is now described as a medical condition. The majority within the population are convinced that their country more than any other is being ravaged by a terrible disease that stops children Following The Procedure Properly. This generation of the enriched naturally immune minority of children have had their full consciousnesses administratively reclassified as symptoms, and they are being "treated" with stimulant drugs. Stimulants really aren't very good for healthy young humans who haven't even been taught how to use their powerful healthy faculties well, because they make the mind race for solutions but remove the ability to gradually accumulate a big picture to work with. The monitor races around and around the surface thoughts. The child's mind spins with no load on, and psychological burn-out can easily result. This produces a withdrawn and reactive state perhaps superficially similar to dopamine self-addiction, but it has not made a diseased child well. It has made a well child diseased. Or to put it another way, with gentle daydreaming Craig spiked with Ritalin and stocking supermarket shelves *s l o w l y* instead of winning the surplus race and staving off the big marching point for another generation, who shall feed Beavis and Butthead?

There is currently a war on between two groups within humanity. Neither of them have really known it until now, although both have been prosecuting it from the (unaware) point of view of the other. Around the top of the

Socioeconomic/Warfare sawtooth wave M0 hosts are deeply distressed by non-microsynchronised and non-ritual conformant natural immunes, who in turn are subject to "lesson teaching" by the M0 hosts. There are good reasons to expect that with the insidious operation of the M0 clamp organ exposed, the war can end and we can all return to health. Perhaps it will help that we *all* have a common enemy that can be beaten now. But if not, the natural immunes and people with a certain kind of "old fashioned" upbringing are going to have to fight to retain at least a major voice in society. If unhealthy people can become vocal and get special rights, why can't healthy people get human ones? We can dream up some very imaginative publicity stunts! Those gentler souls amongst us who feel that they would rather retreat than become involved in conflict would not appear to have that option (ethically speaking) since they are part of a tiny minority of healthy and functioning members of their *species* and should recognise a fundamental duty to try to eliminate the affliction M0. Nobody volunteered for this one - we all got lumbered.

Pharmacology

In the current world situation, the development of a molecule that can bind to the specific dopamine receptors that induce standby mode without triggering them would be very useful. As a managed way of breaking the M0 driver feedback loop and allowing an individual enough time for natural psychological development to fixate him or her on objective reality, or keeping people who for the time being must do unhealthy jobs safe from self addiction, they would perhaps be the first psychoactive that we really understand the underlying neurology of, since we can recognise the state they induce as being normal for a human being.

Some Comments

These miscellaneous observations seem worth appending to this paper, which in general has omitted all but essential aspects of the picture to make it easier to see. We hope they clarify rather than obfuscate.

A Note on Terminology

The existence of the phenomenon eventually described in this paper as M0 was originally recognised by two independent workers. Carter referred to it as the "Stupidity Virus", some sort of socially induced cognition damaging state of mind that he had successfully broken while studying how to teach software engineering. Allsopp called it "The Monster", a bizarre emergent social phenomenon that he had recognised through several inexplicable common characteristics that prevented him getting people to look at his remarkable results working on the education of so-called ADHD children, which his evidence showed was a genetically related "condition".

Since Allsopp's term was better it was adopted by Carter as the investigation continued, they merged their data to reveal a genetic immunity to a socially conditioned disorder, and "The Monster" became a concrete thing rather than a conceptual bucket for an inexplicable phenomenon. As he was preparing to write this paper, Carter's feedback exploiting cognition popped the naturally immune science fiction author Robert Anson Heinlein up to point out that what the species has been ravaged by is a Monster - it probably has a big family. Since we have spent the last 6,000 years cavorting about in a mind-numbing feedback loop and nearly trashed our planet in the process thanks to this one, we will be very keen to go hunting other Monsters before they see us. We must give the fully conscious workers that will spot them every bit of help we can, and full consciousness uses *aesthetics* in all sorts of ways. We will need to distinguish between Monsters that we find, and will probably want to use lots of lovely group theory to describe their ways, so Carter selected M0 (em-zero) to look good on paper, since group theory was all great runes and a few squiggles last time he looked, and his word processor doesn't do squiggles.

Intellectual Consequences

To fail to recognise that doing this work has been an extraordinary experience would be lying by omission, and pretty transparently too. We couldn't be that stupid! Started as individual investigations into ADHD children (Allsopp), teaching software engineering (Carter & Sanger), the application of Rudolf Steiner's thinking to management technique (Tolman) and an attempted mathematical description of social constriction of freedom

(Arickx), we have developed a simple, testable model that if proved, will *immediately* have profound consequences for at *least* Neurology, Psychology, Education, Medicine, Jurisprudence, Economics, History, Politics, Linguistics, Software Engineering, Management Theory, Theology and Physics.

A phrase that occurred during the work was, "What is the difference between faith and determination?" We still can't answer that question, but boy does whatever-it-is pay off! Our small group of lively characters, a mix of natural immunes and people who are simply awake by their own efforts, connected by Internet, each for some reason compelled to try to *understand*, may well have had the privilege of making one of the greatest discoveries to date. Gosh. While the honour is somewhat tarnished by the seriousness of the news, the opportunities for improving human experience in this are like nothing in history. What else can one say?

M0 Metabolic Studies

What other activities traditionally seen as "human nature" might in fact be revealed as examples of M0's metabolism? Can we see the phenomenon of "fashion" as the accommodation of M0 required uniformity of appearance with the thermodynamic reality that clothes wear out? Should the very cut of the bizarre garments visible in pictures of bygone ages be thought of as phemonenologically distributed worm casts? Might the idea of M0 casting off echelons of fashion be complemented by the strange way the meaning of words tend to invert over time such that St. Paul's Cathedral in London was first *complimented* as "awful, pompous and artificial" by the King? Might these echelons of debased words be in some way a structurally inevitable consequence of the inversion of "alertness" and "insensibility" suffered by dopamine self addicts?

David Bohm

The physicist David Bohm was convinced by his observation that often people do not behave rationally, that there must be some sort of flaw in modern thought, but that it was subtly hidden. He felt that in order to pin down the flaw it would be necessary to study everything that "Thought" - the conceptual grounding of a culture as well as the mentation proceeding within it - was influenced by, including (for example) foodstuffs, advertising and philosophy. His colloquium transcripts called "Thought as a System" are a good description of his intuition on this matter. Although we came nowhere near completing Bohm's investigative programme, we believe that our sampling became sufficiently informed by getting to know our quarry's character that we were able to identify the flaw that Bohm wanted to find.

He was right. It is huge, concrete and nothing to do with life just generally being a downer at all.

George Gurdjieff

There are remarkable correlations between the M0 parasite described in this paper and the writings of the mystical teacher G. I. Gurdjieff ("Beelzebub's Tales To His Grandson") and his pupil P. D. Ouspensky ("In Search Of The Miraculous"). M0 extended standby mode corresponds to his second state of consciousness, normal (i.e. naturally immune or non-M0) consciousness to his third, and the state of mind necessary to operate at Paradigmatic(6) seems to correlate with the fourth.

He identifies many of the anatomical components of M0, although there are some differences. He does not seem to be aware of the driver organ, attributing the underlying cause of the problem to the Suppression action between Neurological(1) and Cognitive(2), which he describes as the "maleficent now-law-conformable effects of the organ Kundabuffer" - a sort of ghost organ that used to be there, made you gaga and still has an effect although it has physically disappeared. That said, he often insists that the terrible state humans are in was brought about solely by they themselves due to their "unnatural conditions of being", but without saying what the unnatural conditions are!. In this picture they are a society which conducts every transaction by performing rituals.

Gurdjieff was dissatisfied with the conventional scientific paradigm, attributing it to "scientists of new formation" and offered an alternative, that is very difficult to understand. He seemed aware of microsynchronisation, and used an exercise where he shouted "Stop!" to make students conscious of their bodily positions. He was witnessed affecting an "air of regal grandeur" that enabled him to fascinate and extract deferential behaviour

from others, which seems very close to skilful mimicry of the characteristic motor impairment of very high dopamine levels. He discussed the existence of a large number of "general laws" that one must accumulate great skill to avoid being trapped in within any organised society and suffer one's lifetime being whittled away. In all of the records of his teachings however, he does not make much sense until one already knows what he is saying, whereupon the interpretation is evident.

Nevertheless, it does cause one to wonder if this partial, self-consistent yet conceptually closed off picture was his own development, or if he learned about all these key elements during his travels. The idea that certain people have been keeping their heads down and preserving full consciousness quality history and culture throughout the Long Watch of M0's instantiation is interesting because of contributions they could make to sorting out the paradigm as well as suggestions regarding restructuring society more safely.

Ibiza

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