# Repairing the soul: mental health in Eclipse Phase



## Psychiatry in 10 AF: living under the allostatic load

*Diseases of the soul are more dangerous and more numerous than those of the body.* -Cicero

Psychiatry 10 AF is in many ways unbelievably advanced. Where once psychiatrists had to poke at the black box of the mind using crude pharmaceuticals, intuitive guessing and some half-baked theories, modern psychiatrists can monitor the activity of an ego in real-time, perform psychological editing, have software support the therapy using extensive epidemiological, personal and neural data, and enjoy a century of evidence-based psychology. Many conditions that were once incurable can be fixed straight away, and previously impairing conditions have been turned into merely chronic problems that need a simple prescription or regular therapy touch-up to be controlled. Unfortunately the mind can also break in an infinite number of ways and the stresses of the world have risen to such an extent that traditional transhuman minds need psychiatric support far beyond in the past. Radical personal and social transformations, the trauma of the Fall, new cognitive and neural threats, as well as new cultures have produce a rich flora of emerging problems. Many are so unique and individual that the amazing tools of modern psychiatry/psychosurgery still fail. Just consider the multitude of ways traditional mental disorders can synergize with the possibilities of enhancement, existential confusion and neural hacking in the modern world. Then add some major future shock.

One of the classic approaches that is still used to a surprising (to outsiders) degree is mental hospitals. Just like psychiatry itself they have advanced light-years since the bad old days, but the core idea remains the same: a controlled (or at least controllable) environment that helps the patients function and heal.

## Types of mental health units

"Bill, it is time for your session." "Not now, I am right in the middle of designing." "I know. Remember what Frank said – you must stop getting so obsessed by your projects." "But they are \*important\*!" "Not as important as keeping you functioning. If you end up in a fugue again, who will then run the cell? Come now, the therapy link is waiting."

Some units specialize in short-term or even out-patient therapy. Many such units are indistinguishable from enhancement spas and psychosurgery clinics. Patients check in for mental tune-ups, interact with psychiatric professionals and memeticists, and might engage in various recreation-like therapies. Cheaper ones perform much of the work over the mesh using remote interviews and simspace training.

At the opposite end are the long-term care facilities where patients requiring years of rehabilitation to reintegrate into society (if ever) are treated. These are the hard cases, and often ignored by society, relatives and former friends.

In between is a plethora or more or less open units, often customized to fit the needs of the patients, their problems or their culture. Open units might allow residents to live in a structured way partially integrated in society yet under ongoing treatment. Some units deal with addiction disorders, others with uplifts or AGIs with problems, still others with people having a hard time to fit into autonomist society.

A special form of semi-open unit is the rehabilitation units for retrieved stacks and egos from the Fall. Often run by subcontractors to infomorph brokerage companies, they wake up, debrief, inventory and try to patch together infugee survivors. A decade after the Fall they are still making money. The choicest ego's might be taken, but there is a profit in most egos that can be put on the job market.

Two kinds of units that have disappeared almost completely from the physical world (except in the Jovian Republic) are crisis stabilization units and secure units. The reason is the spread of cortical stacks. If a patient arrives at a hospital in a bad state the standard procedure is to load the ego into a simspace where the mental stabilization work is done. Short-term intensive virtual treatment is a common approach to when people break down or show dangerous derangements. In the case of incurably insane egos the situation is usually simpler: they are stored for future treatment.

## Egos, emulation and simspaces in mental health

"What's this?" The intern gestured at a strangely formatted database. "Ah, Backup NL56... a sad story." "Let me guess, pre-Fall hopeless cases?" "Yes. This is the backup of the Maastricht GGZ server. It was beamed out perfectly well and we got it intact. Only problem was that others also did. We know Nine Lives cracked the not-too-hot encryption, since a few of the patients have appeared since then."

"But these are no-hopers!"

"To us, yes. But if you were a soul-trading syndicate, wouldn't you find a few uses for florid organic psychoses or violent sociopaths? The worst thing is, since some of these alphas are around, the forking rules say we can't try to revive our versions."

#### Storage

The cheapest solution to treatment is to keep damaged egos filed away until there is a cure, or someone cares.

Pre-Fall there were various rules for periodic reviews of hard case storage in most places, but these rules bent and broke in the Fall. Some polities still maintain them, but the backlog of broken egos is currently so big that tough cases are likely to remain inactive for a long time. Paradoxically this also saved a large number of egos during the fall: many low-priority ego stacks were in slow off-world backup storage, and when the situation on Earth began to clearly turn bad several healthcare systems began to transmit all egos they had their hands on – and since the long-term storage was already online it often got sent early.

Dead storage may be cost-effective but most polities and health care organisations find it unseemly. Sometimes it is used as a threat: patients uninterested in making the effort to help their own rehabilitation might be found too expensive to run and will be placed in storage. However, this only works when they are lucid enough to understand the threat, so in practice this is usually an empty threat.

### Embodiment

At the other extreme, having embodied patients is usually only worthwhile when the treatments are mild and open. They cannot be run faster in simspace (although simspace speedups also tend to make therapy more expensive – more professional-hours of service per unit of time) and there is a need for a physical building, possibly one with expensive security. Out-patient units, especially ones linked to infomorph brokerage services, exist: infugees lucky to find indentured embodied jobs might get continued therapy as part of their contract. Whether this is helpful support in adjusting to a changed world or ongoing indoctrination depends very much on the company and the viewer.

Asyncs pose a special problem for simspace treatment, and are usually handled at one of the embodied clinics once their problem is understood – unfortunately this can take a while.

Embodiment therapy is occasionally used, where patients are deliberately sleeved in particular morphs as part of the treatment. This is especially important for infomorph-based disorders: some people simply do not take well to the thought of being software, and needs to be eased into the modern world. Other therapeutic sleeves might have drug glands, particular appearance or provide needed experiences. Stories about hospitals sleeving patients into animals for therapy are entirely untrue (although theiromorphic simspace avatars are sometimes used for particular kinds of group therapy).

## Simspace hospitals

Most psychiatric units are however simspaces, where infomorph patients can be treated. These units are usually mesh-disabled servers that can only be accessed using local secure connections, making them both virtually escape-proof and hard to attack from the outside. Monitoring can be pervasive, including direct measurement and interpretation of mental state. Isolated patients can be frozen and restarted without them noticing, allowing their health teams to work on them carefully and when fully informed. In some polities it

is also allowed to run beta-forks of patients to test out therapies or their reactions to certain stimuli, which can then be used to treat the alpha.

The simspace designs range over the entire scale from recreations of a classic sanatorium to lush natural environments to realistic behive habitats. The general rule is that they tend towards realism and concreteness: most mentally ill persons get worse in too abstract or fluid environments.

In most cases virtual psychiatric units are not keeping patients in solitary confinement. Even with AI companions to avoid direct social deprivation most people go somewhat mad if left outside a proper social context. Hence there are virtual "day rooms" (which can of course look like anything) and other forms of social spaces where patients can interact fairly freely.

Some servers act as quarantines for particularly risky egos, such as egos infected with the exsurgent virus or with extreme hacking skills. Most mental health institutions are unable to handle them and tend to deliver them to specialized organisations – in the PC often directly controlled by the Consortium. In smaller polities with fewer resources such "hot egos" are usually just stored for the future.

#### Treatment

We were making headway through the forest, slowly following the river downstream. It was hard work and soon all discussion ended as we slogged through the ferns and bushes. Veronica even stopped talking about her poor children, which was a relief. Sa led the group, pushing apart branches for the rest of us, but it was still a constant struggle to avoid getting whipped in the face or scratched. I did not have the time to think about... my thing.

We passed through a patch of what looked like redwood trees (I wished I had my muse to ask; Peggy was not up to the task). Suddenly something fell down a few meters ahead of us. Looking up we saw a treehouse built into the canopy, wooden bridges linking platforms and what looked like Chinese pagodas. We began to explore the trunks. "Found it!" Veronica shouted gleefully, pointing out a bundle of ropes hanging on a trunk. "Luigi, you should go first", Sa told me, "I don't know how this kind of thing works. I'll help you up." Me neither, I thought, but I tried anyway. Slowly I began to drag myself upwards, finding footholds here and there on the trunk. The smell of resin, sweat dripping from my brow, late aftenoon sunlight through a forest, the solid force of my muscles...

Raphael watched the group and their inexpert climber from outside reality. "He is making excellent progress, don't you think? Anxiety levels are actually down, even while climbing."

Dr Riggs rotated the therapy sim infographics bundle in his hands. "He takes to adventure therapy like a fish to water, yes. Nice social trust-building. But we cannot run him through our entire adventure library, we need to fix his ideographic problems."

"We are going to need a safe and trusting mental state for that. I have snapshotted his limbic states in peak experiences and during relaxation during the past week, and we could ask JimSpara to construct a mood frame." The AI did not sound too eager, and Dr Riggs understood its reticence. Mood frames were a bit too crude for both of their tastes, especially in complex cases like this. Still, if they were ever to get Mr Battachi out of the big server across the room, they had to get their hands dirty. That was their duty.

"Talking therapy" has persisted, despite numerous claims it is unscientific. Partially the reason is that social animals like transhumans do respond well to just having a dialogue with another transhuman: even talking to a mere AI tends to help things, and with the extra effect of having a real expert most people feel much better. The direct, complex interaction also allows the therapist to probe more directly into what is wrong and to suggest strategies for handling it. In simspace the therapist can also discreetly monitor the state of mind and use this information (and a hefty dose of intuition) to guide the talk.

Many therapies strive to give a distressed person coping methods. They range from old classics like mindfulness training (focusing on the present situation, feelings and thoughts in a non-judgemental way) and stress control through breathing over neurofeedback training to the deliberate creation of reserve subpersonalities. Many therapies are more like learning elaborate mindgames or mental techniques than traditional treatments: some patients are surprised to find that the "games" they thought were mere entertainment and distractions were actually the point.

Most mental health institutions have plenty of online games and entertainments available, carefully selected to build up the psyche in various ways – everything from working memory training mind games to social simspaces where proper behaviour is subtly rewarded. In particular simspace adventure therapy is popular: groups of patients (and sometimes staff) are put into virtual adventures. This is to promote cooperative gaming, building trust, problem solving, and initiative. Plus that a dose of high adventure and outdoor pursuits often help people in general. Behind the scenes the games are monitored and evaluated. People often open up when they are suitably distracted.

There is in principle no end to the games the treatment specialists might play on patients if they think they can benefit from it: imaginary escapes, putting them in a simspace while dreaming, wish fulfilment fantasies or unexpected scares. But radical tricks tend to be rare, since they break the trust that is so important for the treatment and might even give patients reality testing syndrome: a constant doubt about their own reality.

Over the years the mental toolbox has expanded, with therapies like visualising one's personal future, meme inventory (figuring out what one believes), augmented self-hypnosis (a form of minor DIY temporary psychosurgery), self-visualisation (AR or simspaces allowing the patient to explore their own mental state), therapeutic scenario design (where they design their own simspace adventures), isomorphic connection enhancement (neurochemical tweaking so that experiences in one therapy domain generalises to other situations) and countless others. Something that has been tried occasionally is to have family member forks available. The success varies: some people are enormously helped by being able to talk to their parents, to others the parents are the problem.

Institutional syndrome is an issue. When people live too long inside a controlled environment they adapt, and might become unable to live well on their own. It is not just a matter of having people tell you what you do or being constrained to certain environments, but also the awareness of the pervasive surveillance. As soon as patients start do well enough they are usually freed from the server and made outpatients, or in some situations given private servers they can trust are unmonitored. Still, the totality of modern simspace treatment is so great and so many people were committed after the fall that health authorities are despairing what to do with the myriad patients who are now completely dependent on their institutions.

#### Monitoring

A common element in modern mental treatment is mental status monitoring. On admission a mental state examination is performed, a set of tests used to describe the state of mind of the patient (e.g. neurological state, mood, attitudes, behaviour, speech, thought processes, perception, insight, judgement, body image etc.) This examination is used to set up regular monitoring for how the mental state changes. Some aspects are automatic, like ego scan data, some are given as subtle environmental tests (e.g. how quickly does the patient notice when a particular AR hallucination is introduced) and some are given as explicit tests or interactions with a professional. This is a useful guide for checking how the treatment is going, as well as an early warning system if things begin to deviate unexpectedly.

Mental mapping is an even more detailed \*as well as time consuming and expensive) method where status monitoring, psychosurgical techniques, creation of special purpose gamma-forks and advanced information processing build elaborate models of the mind. These models allow experts to really investigate the layout of the mental landscape, figuring out the emotional or cognitive connections between different concepts. It is by

no means foolproof and occasionally leads investigators on the wrong track, but some therapists praise its ability to detect hidden or forgotten feedback loops that are upsetting the psyche.

## **Assigned muses**

Often patients are not given access to their old muses. Besides the risk of smuggling in contraband information and software (unintentionally or not), their strong link with the patient can hinder therapy. Cases of folie à deux between people and their muses are distressingly common, and often the cause of mental problems. At the same time people need muses, so a hospital muse ("your personal nurse") is assigned to them. As patients progress they are often put into "joint therapy" with their own muses present in order to both return to normal life and imprint their new, hopefully improved mental state onto the muse.

## Confidentiality and privacy

Most mental health institutions take confidentiality very seriously. In a world where a person largely is their mind, mental problems are potentially devastating to reputations and future prospects. Mental health also requires trust, and that in turn requires the treatment professionals to keep patient confidences to themselves and to protect the privacy of patients.

There is a significant difference between the inner system (plus the Jovians) and the Autonomist Alliance in this regard. The inner system approach generally tends to focus very strongly on maintaining patient privacy, often enforced by clear rules on what can be disclosed to whom. The autonomists tend to focus on creating a trusting, protective environment for patients but see privacy as a matter of politeness rather than rules. In a sousveilance society with small communities it is hard to hide who is having mental difficulties anyway.

The Extropians, as always, are a bit in-between. Privacy contracts can be arbitrarily extreme (there are stories about a wealthy client who is being treated for something by staff who have agreed to have their on-job memories encrypted when off-duty), but there are also autonomist-style transparent care.

#### Jovian treatment

Compared to the rest of the solar system Jovian mental health care is a throwback to an ancient era, treating fully embodied patients largely without the use of psychosurgery, nanodrugs, AGI support and therapeutic biomods. While by outside standards it may look primitive it is by no means a primitive place: there are *some* psychosurgeons, licensed nanotreatments and AI support systems, and the staff still makes use of modern findings. The members of the Jovian Psychological Association regularly download the journals and blogs of the rest of the solar system, and sometimes contribute (as long as they keep to their professional topics the Republic Online Protection Service does not interfere). The overall view is that just because JPA members do not conduct unethical high-tech research doesn't mean they and their patients cannot benefit from these results. As always, there is a small group of purists arguing that this is poisoned fruit, but they have never been able to argue convincingly how to define the limits.

In addition the Jovian mental health specialists excel at therapies that do not require problematic technologies. Careful monitoring and mapping of emotional states during therapy, social role interpretation, biofeedback, insight priming, shaped meditation, and attribution perception-control training are just a few of the local specialities. The need to making do without direct ego monitoring of the ego has made many Jovian psychiatrists very good at detecting subtle cues (or maybe it is everybody else who have forgotten how to see when a patient are avoiding something without looking at a brain scan).

## **Anarchist treatment**

The I in illness is isolation, and the crucial letters in wellness are we.

In many ways autonomist habitats accept a wider "mental range" as acceptable, but when the condition becomes problematic they can be paradoxically firm in treating people. To autonomists, there is no fundamental difference between a prison and a mental hospital. Crime is a disruption of the relationship between an individual and society, and mental illness is another kind of disruption – often overlapping. After all, trying to harm another citizen is at least partially a mental aberration that needs some treatment. Mental disturbances that prevent people from participating in the community are clearly something the community needs to help with. In order to successfully participate in a reputation economy you need proper social skills and to avoid rep-destroying behaviour.

For milder conditions there are often care in the community: people are not institutionalized but treated at home by wandering psychiatrists. However, the kind of conditions that autonomists find require involuntary treatment (such as personality disorders, repeated antisocial behaviour, psychosis etc) are usually treated by bringing the sufferers to a treatment centre where they are held until they get better. The treatment decisions are often made using direct democracy where the locals vote to commit someone. There have been accusations of this being used to settle scores, especially against low-rep members.

### Example mental health clinics

#### **The Spilsbury Clinic**

Marty, here is the MLE estimate of the mindstream from subject 45-80 in the winning run:

"Was cold the office. Old lady on table, my mother appeared. Question is difficult to understand question. Do not know. Fact, not know where. Asked him he wanted, but a goobedygook. For and can move and try find the location, then found lack organization. Fact, the true spirit of the fixed cells. Recent times, like when monsters metal whirring teeth down. Oh, mother. Know how die. Or worse."

Looks pretty good. It shows C-grammar, it recognizes at least the initial simspace environment and that the situation is abnormal. The last part (and cortical activations) seems to indicate a deanimation episodic memory with appropriate emotional responses. I have a good feeling about this one. -Tadzio, DNB Estimator

This clinic is a wholly owned subsidary of Cognite, specializing in repair and treatment of badly damaged ego states. It deals with reconstructing a person out of fragments, an equal mix of neuroscience, software forensics, art restoration and rehabilitation. This is a slow and expensive process usually only worth doing for particularly valuable egos or egos who happen to have very rich and devoted sponsors.

The clinic does not have any physical world office, but is legally located in Valles-New Shanghai. In practice much of the work is done at Cognite habitats such as Thought or Phobos. Much of it is far below the level of psychiatry and more like data decoding. Quantum computers and AI algorithms sift through the possibilities of what the whole mind might be like. The clinic makes use of all available information about the subject – personal information, past grocery bills, XP, surveillance footage, interviews with friends and acquaintances, their memories, anything – to constrain and validate the emerging mind. Some critics think they also use ethically problematic methods like running multiple instances and culling the least accurate ones, but even if they do most subjects are so damaged that they do not count as persons (or disabled potential persons).

The end result varies a great deal. Sometimes the only result is a slightly more functional vapour, sometimes it looks like a full recovery. The problem for non-expert outsiders is that it can be hard to tell whether a reconstructed mind is a real continuation of a person or merely a simulacrum cleverly interpolating responses. The clinic has identity counsellors on retainer who can help family, employers and ex-patients deal with these issues. They also have a deal with Armstrong-Verbatim, a law firm specializing in personal identity law, who can help with getting a ego declared a person, or a continuation of a particular person.

A "patient" is unlikely to remember anything of their treatment until their final version is brought online in a meticulously chosen simspace environment and successfully investigated by psychologists and family members.

# Ozturk Rehab Gmbh.

Infugee rehabilitation and infomorph brokerage company on Mars. OR buys up retrieved stacks, scans them (they have some fine experience in screening out virally infected minds) and then tries to bring their egos back to function so they can put them on the job market.

OR maintains offices around various Martian settlements where prospectors and others can deposit found stacks for a 300 credit payment (with a 50 credit bonus for extra information about location, nearby data files, DNA samples etc that will help recovery). OR maintains a distributed online "campus" where different departments handle the rehabilitation in an assembly line fashion. Employees are distributed around Mars, specialising in different aspects. The official head office is located in Elysium, a mid-sized garden office mainly used for corporate functions.

Initial scanning is used to determine what is in the stack, how recoverable it is and whether it appears to pose any danger. This is more a matter of software security than psychology. If it looks like the ego is intact enough it is delivered to the disinfection unit, which tries to identify any cognitive viruses or other nasties precluding activation. If there are no problems, then it is given to the preparation unit (psychosurgical scanning) and the awakening unit, where the ego is briefly awakened and interviewed. The material gained is used to estimate what treatments are needed, and whether it will be profitable to continue. Broken, incurable or expensive-to-treat egos are donated to the Elysium immigration department, where they will likely languish indefinitely in dead storage. Healthy egos are sent straight to the placement unit, where they will be interviewed and tested further for skills.

Egos in need of rehab usually get it mainly through psychosurgery. While OR recognizes that some trauman can be talked away, it is usually cheaper to patch them. They offer a range of treatments, usually including memory editing and antidepressant patching. Typically they experience the rehab as a series of interviews, test simspaces and a few conscious psychosurgery sessions.

The overall culture of OR is focused on the bottom line: egos are more of a product than clients. However, the distributed employees of OR vary in their attitudes. There are friendly consultants like Dr Nick Sidonio who does their best to not just fix the worst problems but actually inform the patient and give them helpful hints. Others, like Mikal Salemme at awakening, are only interested in rapidly sniffing out whether an ego will be profitable (and hence give him a bonus), not caring much if egos accidentally gets assigned to dead storage.

#### Wang Mental Health Centre

The meeting room was a plain of carpets. Persian carpets, synthetic needlefelts, handmade rugs, squares of grass, even a polar bear pelt. The azure blue sky had no sun to mar its perfection, but the simspace was still lit like on a bright day. We sat around a small oriental table as Dr Hakobyan poured us some mint tea.

"Susan, I have some good news. The others have recovered. Kim said that if you hadn't done what you did to save their stacks they would still be left out there."

*Susan shivered. She was dressed in some kind of toga of her own devising, all soft fleece and colourful squares. Despite the warm environment she still seemed cold.* 

"Also, Jaan wanted you to have this." I gave her the picture: a crayon portrait of herself against a background of projected 3-manifolds, done with the meticulous naïveté of a young AGI. For the first time since coming into the meeting room Susan smiled for real.

"Are... the clocks still alright?"

I briefly glanced over at Dr Hakobyan, who gave a PM nod. "Yes, they are all still running. No shear. With relativistic corrections we just see quantum noise."

"I dreamed that time was broken."

"Thanks to you, it isn't." I really hoped Susan was not able to see through my avatar's kinesics as I lied to her.

An intermediate- to long-term treatment facility in Nova York. The centre itself is fairly normal for outer system mental hospitals, except that it happens to be an independent group rather part of the main Nova York Medical Soviet. This is mainly for historical reasons – it existed long before the Fall, when it was still the St. Dympna Neurological Care Unit, a remote site for the Equihealth Inc. hospital network. When Equihealth crashed and burned in the Fall the unit was taken over by professor Dao Wang, its respected medical director who turned it into a co-op. The medical soviet has long tried to get the clinic to join it, but professor Wang prefers to keep it separate and his staff generally agrees. Both organisations work well together anyway, with the big cluster giving patients and services to the centre and the centre often stepping in with expertise when a troublesome case occurs.

There is another reason for professor Wang's refusal to join: he is a Firewall agent, and the clinic is used to treat Firewall members with problems, as well as saved bystanders that cannot be directly returned to the population at large. 90% of the centre is doing everyday long-term care for the mental cases of the belt, but the remaining 10% are "sensitive" patients. Some are merely visiting for a evaluation after a mission, others are slowly recovering after encountering horrors that have shattered their minds.

Professor Wang has set up strict ethical rules for how Firewall gets to use his clinic. Rehabilitation is the goal, and while some residents are unlikely to ever make any recovery the clinic will not stop trying. It is not a prison or a way of disposing of unreliable agents. Psychosurgery to help them function better is OK, but not to protect Firewall secrets (he makes a clear exception for people with mental xrisks – such people are a danger to others and themselves). Debriefing is fine as long as it gets professional psychiatric support, but no interrogations or pressuring. Once a patient is in the clinic he will not allow copies or forks unless the patient agrees (and has decision-making capacity, in his estimate). Studying exotic cases is fine, but again subject to proper research ethics and confidentiality.

Asyncs pose a special problem since they need to be embodied, and the facilities do not have much space for them. In addition they often tend to draw unwanted attention. If possible Wang sends them off for treatment elsewhere, something that has given him a bit of reputation of discriminating against asyncs. There might be

some truth to this, since he is very wary about anybody having exsurgent infections and damage, even dormant. He often responds by pointing out that he has far too much experience with apparent mindstates suddenly crashing into malign infections. Something which incidentally has enabled him and his co-workers to refine their server quarantine setup significantly: their "Idyll Architecture" for keeping nasty entities locked up is a mainstay of Firewall operations.

The physical clinic is a neo-gothic spar jutting out from the surface of Metis at a crazy angle. The view of the outside city is both breathtaking and unsettling to non-locals used to strong gravity, so most of the interior makes use of AR illusions and simspaces to make people feel at home. A series of patient servers are located in a spiral inside the building, carefully designed so that they cannot be accessed from the outside without the proper authorization and precautions.

An energetic new presence is Dr Gray Guermantes, a raven uplift interested in extending the centre to deal with uplift psychology. While this would likely fit in with its existing expertise, professor Wang is somewhat cautious about it. This has merely given Dr Guermantes another thing to focus his considerable plotting and networking abilities on.

## "Litmus", Liberty-Truesdale Centre for Mental Health Sciences

LTCMHS ("Litmus") is the largest mental health hospital on Ganymede and in the Jovian Republic.

Litmus is located in the Truesdale dome outside downtown Liberty. The dome has a concentration of hospitals and medical clinics. Litmus is a groundscraper extending around a cylindrical shaft (filled with hanging wines, epiphytes and low gravity trees; very discreet webs prevent jumping). The shaft opens in the dome parklands, surrounded by small buildings containing offices and elevators to down below. Different levels contain different functions, ranging from reception (where ground vehicles and subways arrive), administration, outpatient services (treatment for patients who are not hospitalized), intensive case management (stabilizing and monitoring patients in crisis), psychoterapies of various kinds (from grief and transition treatment to teaching life management skills), inpatient units (several, specialised for different conditions such as substance abuse, psychotic disorders, personality disorders, mood disorders, mental traumas, developmental disorders and dementia) and maintenance levels.

Litmus is particularly renowned for its addiction disorder program, which treats substance abuse, other forms of addictions such as XP, sex or food, DIY psychosurgery and anything else related to short-circuited motivation. Although the Republic does not like to admit it, a sizeable number of people are abusing of addictive stimuli and are in need of treatment. The treatment at Litmus is regarded as the best in the Jovian system (and even competitive against other major units in the inner system).

The traumatic stress disorder program is also important. After the events of the Fall and the formation of the Republic there were a massive need for dealing with anxiety disorders, PTSD and other forms of stress. The TSDP is coordinating the efforts across the republic to handle the anxiety problems, working closely together with the Jovian Public Health Authority and several agencies. The TSDP complex extends outwards from the main groundscraper into its own underground domain locally called the "stress levels", where the coordination offices are located.

Despite rumours in the rest of the solar system, Litmus is not used for dissidents – that is a security matter, and the Republic generally holds that people disagreeing with its rule are not insane, but simply wrong (and culpable of disturbing the peace). Still, not agreeing with the junta tends to increase stress levels, and there is a noticeable overrepresentation of people not fitting in with the republican society at the hospital. Security is also tight, but for entirely natural reasons: there are many people in the closed inpatient units that are a danger to others and themselves.

President Allison J. Hobbs is a prominent member of the JPA and JMA, and on good terms with many of the leading people in Liberty. She has been able to expand the funding quite successfully over the last few years, and is overall regarded as a great president by most of the staff. Partially this is by contrast to her predecessor, Miranda Damez, who was a doctrinaire and ruthless bioconservative placed in charge directly after the takeover - mostly due to personal connections with the junta. After she managed to alienate everybody, she was quietly removed to a sinecure at a think tank in Solano. She is still regarded as a nemesis by most of the staff, and reputedly she claims that the hospital is also full of crypto-transhumanists.

## **Nepenthe Sanitarium**

Health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity. -World Health Organization, 1948

Nepenthe is an upscale clinic/spa on Mars for well-off patients recovering from various ailments (real or imagined), as well as a place to keep the less stable members of the elite.

Located on the edge of the north Amenthes Fossa just where it enters the northern lowlands it has a grand view of the canyon and the lowlands to the north, with the Cimmerian plateau to the south. It is relatively close by air to Elysium, but sufficiently far to discourage light visits or unadvised excursions.

A casual visitor will find the sanitarium indistinguishable from a spa. Rich and beautiful people enjoy specially crafted entertainments and relaxation – everything from artificial hot springs to bioengineered tropical gardens to a massive reconstructed physical book library. Human staff discreetly maintains maximum pleasantness. Various forms of enhancement and tasteful recreational biosculpting treatments are available.

A closer look will reveal that some of the residents are slightly peculiar. The former XP star with the wardrobe and skin obsession. The nervous young man with tics who looks a bit like Morgan Sterling. The old man sleeved in a young body who compulsively chases after anything in a shirt. Their personal trainers, servants and other hangers-on expertly and discreetly keep them from making any too overt faux pas (or from unsuitable people from getting close). These are the less successful branches of families of wealth and power, kept here for mild treatment and out of sight of the paparazzi. In many cases their ailments are subtle and more social than mental: an inconvenient tendency to political activism, morbid love affairs, an inability to take a stand, or just being awkward in a social stratum where everybody else are self-assured powerhouses.

Among the long-term residents a local culture has emerged. They know each other and their quirks, playing their own peculiar game of slightly odd interactions. It could perhaps be described as slow-moving reality soap, where each action is taken with the outmost planning and consideration. When the XP star flirts with the old man, it is a response to the comment from the earnest student last evening. When the student has an intellectual discussion with the old engineer, they both try to annoy the firebrand heiress – as a response to her interruption of a chess game last week. And so on.

The sanitarium staff discreetly watches, preventing bad things from happening. It is not unlike the Village of the old "The Prisoner" television series, but even more genteel. They are less concerned with escape as with intruders trying to spy on the residents. The surrounding mountains are filled with sensors and even a few defences, and several of the staff members have useful enhancements to deal with surprise situations.

Recently some of the patients have developed an unhealthy obsession with the canyon, wanting to climb down into it. While some limited environmental excursion is just healthy, sanitarium staff definitely do not want any dangerous adventures. But the more climbing down is forbidden, the more exciting it becomes.

#### Adventure ideas

*Everybody's a mad scientist, and life is their lab. We're all trying to experiment to find a way to live, to solve problems, to fend off madness and chaos. -David Cronenberg* 

The best way of introducing PCs to mental health treatments is of course to run them through it – it is not too unlikely that after an adventure they might need recuperating. Characters with neurological damage and mental disorders might also be under ongoing treatment. While in therapy they might discover strange leads to the next adventure. Or be in the right place when Firewall or their other patrons need something done quickly from the inside.

A Firewall agent who knows too much has ended up in a mental hospital. Now the PCs need to get her out from their escape-proof, highly controlled servers before she spills the beans. For a surprise twist for suspicious PCs, they might find that the agent has indeed spilled the beans but the staff has been entirely professional and not passed on any information about Firewall.

Another version of freeing somebody from the asylum would be to try to get an important person out of the permanent stacks – something that will require plenty of social engineering and hacking. And who else might be found hidden away where nobody looks? Maybe a few important people from before the Fall have been "accidentally misfiled" for political reasons. If they return there will be hell to pay for some important groups.

The inmates are running the asylum: Contact was lost during the Fall with Bella Villa, a hospital station in a remote orbit, and everybody assumed it had died. But now there is signs of activity and the PCs are sent to investigate. They discover hat during the Fall the hospital authorities cut all communications, fearing software invasion. Isolated from the rest of the world the hospital became its own microcosm. The border between staff and inmates began to blur, and it has evolved into a unique and nasty society. It has become a rigid autocracy where the Orderlies control the Patients using intimidation, manipulation, physical violence, drugs and psychosurgery. People belong to different castes depending on their Diagnosis, performed by the Doctors – or modified to get the right Diagnosis for the job. After all, why not give people OCD and dirt phobia if you want them to be cleaners? Or recruit the sociopaths into the Orderlies, after giving them a paraphilia for being in the chain of command? But the biggest question is of course who the unseen Administrator who seems to be sending almost telepathic commands is? Does he even exist, or is it all a collective delusion?

A server full of crazy: during their mission the PCs come across an old server full of egos in dead storage... all insane. It might have been a backup from a hospital before the Fall, desperate infugees or even people locked into a torture sim by criminals and left behind. Now the PCs have to decide whether to bring the server with them to someone who can care for the poor egos, risking the secrecy of their mission (as usual, nobody is supposes to know they are where they are).

Folie a deux: Several cases of mental illness have popped up with strange similarities. It almost looks like there is a contagious meme spreading, turning people who come into contact with it insane. As the PCs investigate they find that each "patient zero" of each of the outbreaks had been a patient at the same mental health unit. Is this the real source of the contagion? An accidental infection, a deliberate psyops by an unfriendly power, or the clinic AGI deciding to become a memetic seed AGI? And how can they avoid succumbing themselves?

One of the doctors at the Wang Clinic has disappeared, apparently absconding. The big problem is that he held the authorization tokens to a particular patient server. It is now absolutely impossible to get into it. This would be bad if it was merely an ordinary server, but this one contained at least one Firewall patient. Professor Wang and Firewall \*really\* wants to get the doctor and token – and to figure out why he fled. Did he learn something from the patient? Or did he discover something so horrible he needed to lock it up

forever and disappear himself? Or could it be that it is just merely a case of a personal revenge against an old enemy who accidentally ended up in his hands, now locked into a nasty treatment program forever? Or is something growing inside the server, needing the time caused by the distraction to reach full maturity?

During an investigation the PCs discover that they need the help of an expert, who is unfortunately admitted to an online hospital. Dreading the worst, they manage to get in contact with the expert... who turns out to be apparently sane and living in a civilized, quiet simspace. "Oh, I am of course entirely mad. Otherwise I wouldn't be here, right?" In fact, the expert is using his isolation for protection and as a way of quietly working on his own project, perhaps even together with a few other experts in the neighbouring simspaces. There might be a discreet Firewall server (or Ozma think tank) running inside the hospital. Or maybe this is what the delusional expert thinks...

What is *really* happening at the Litmus TSDP? Coordinating republic-wide trauma treatment is a good and very visible thing, but the ties to the Jovian Psychological Defence Agency and the Republic Internal Security gives it a bit creepier image. Are they working on mind-control, enhanced propaganda or even cognitive weaponry? The controllable nature of the Stress Levels and the easy access to experts, resources and test subjects nobody cares much about would make it an ideal location to pursue sinister research.

## Inspirations

There are many movies and books about mental hospitals, of varying quality and medical correctness. Some inspirations for Eclipse Phase:

*Asylum seekers* – a comedic and surreal movie about patients participating in a form of reality soap in order to get a desired spot inside an asylum. The strangeness is not too far away from some of the more outré simspace treatments. Sometimes the solution to a patient's problem can be found by carefully constructing a quest for them.

*I'm a Cyborg, But That's OK* – Now consider this film in a world where people actually are cyborgs.

Dollhouse - Many interesting ideas for both psychosurgery and a EP-era mental hospital.

Escape from Spiderhead by George Saunders (The New Yorker, December 20 2010) – a story of drug testing and patient abuse.

Down on the Farm by Charles Stross – Are the inmates running the asylum?

*Queen of Angels* and *Slant* by Greg Bear – A future society where effective therapies are making people sane, but also leading to a division between the reliable therapied and the unreliable untherapied. And what happens if something undermines the effectiveness of therapy?