## UNSTABLE ORBITS IN THE SPACE OF LIES

## By Greg Egan

I always feel safest sleeping on the freeway — or at least, those stretches of it that happen to lie in regions of approximate equilibrium between the surrounding attractors. With our sleeping bags laid out carefully along the fading white lines between the northbound lanes (perhaps because of a faint hint of geomancy reaching up from Chinatown — not quite drowned out by the influence of scientific humanism from the east, liberal Judaism from the west, and some vehement anti-spiritual, anti-intellectual hedonism from the north), I can close my eyes safe in the knowledge that Maria and I are not going to wake up believing, wholeheartedly and irrevocably, in Papal infallibility, the sentience of Gaia, the delusions of insight induced by meditation, or the miraculous healing powers of tax reform.

So when I wake to find the sun already clear of the horizon — and Maria gone — I don't panic. No faith, no world view, no belief system, no culture, could have reached out in the night and claimed her. The borders of the basins of attraction do fluctuate, advancing and retreating by tens of metres daily — but it's highly unlikely that any of them could have penetrated this far into our precious wasteland of anomie and doubt. I can't think why she would have walked off and left me, without a word — but Maria does things, now and then, that I find wholly inexplicable. And vice versa. Even after a year together, we still have that.

I don't panic — but I don't linger, either. I don't want to get too far behind. I rise to my feet, stretching, and try to decide which way she would have headed; unless the local conditions have changed since she departed, that should be much the same as asking where I want to go, myself.

The attractors can't be fought, they can't be resisted — but it's possible to steer a course between them, to navigate the contradictions. The easiest way to start out is to make use of a strong, but moderately distant attractor to build up momentum — while taking care to arrange to be deflected at the last minute by a countervailing influence.

Choosing the first attractor — the belief to which surrender must be feigned — is always a strange business. Sometimes it feels, almost literally, like sniffing the wind, like following an external trail; sometimes it seems like pure introspection, like trying to determine 'my own' true beliefs . . . and sometimes the whole idea of making a distinction between these apparent opposites seems misguided. Yeah, very fucking Zen — and that's how it strikes me now . . . which in itself just about answers the question. The balance here is delicate, but one influence is marginally stronger: Eastern philosophies are definitely more compelling than the alternatives, from where I stand — and knowing the purely geographical reasons for this doesn't really make it any less true. I piss on the chain-link fence between the freeway and the railway line, to hasten its decay, then I roll up my sleeping bag, take a swig of water from my canteen, hoist my pack, and start walking.

A bakery's robot delivery van speeds past me, and I curse my solitude:

without elaborate preparations, it takes at least two agile people to make use of them: one to block the vehicle's path, the other to steal the food. Losses through theft are small enough that the people of the attractors seem to tolerate them; presumably, greater security measures just aren't worth the cost — although no doubt the inhabitants of each ethical monoculture have their own unique 'reasons' for not starving us amoral tramps into submission. I take out a sickly carrot which I dug from one of my vegetable gardens when I passed by last night; it makes a pathetic breakfast, but as I chew on it, I think about the bread rolls that I'll steal when I'm back with Maria again, and my anticipation almost overshadows the bland, woody taste of the present.

The freeway curves gently south-east. I reach a section flanked by deserted factories and abandoned houses, and against this background of relative silence, the tug of Chinatown, straight ahead now, grows stronger and clearer. That glib label — 'Chinatown' — was always an oversimplification, of course; before Meltdown, the area contained at least a dozen distinct cultures besides Hong Kong and Malaysian Chinese, from Korean to Cambodian, from Thai to Timorese — and several varieties of every religion from Buddhism to Islam. All of that diversity has vanished now, and the homogeneous amalgam that finally stabilised would probably seem utterly bizarre to any individual pre-Meltdown inhabitant of the district. To the present-day citizens, of course, the strange hybrid feels exactly right; that's the definition of stability, the whole reason the attractors exist. If I marched right into Chinatown, not only would I find myself sharing the local values and beliefs, I'd be perfectly happy to stay that way for the rest of my life.

I don't expect that I'll march right in, though — any more than I expect the Earth to dive straight into the Sun. It's been almost four years since Meltdown, and no attractor has captured me yet.

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I've heard dozens of 'explanations' for the events of that day, but I find most of them equally dubious — rooted as they are in the world-views of particular attractors. One way in which I sometimes think of it, on 12 January, 2018, the human race must have crossed some kind of unforeseen threshold — of global population, perhaps — and suffered a sudden, irreversible change of psychic state.

Telepathy is not the right word for it; after all, nobody found themself drowning in an ocean of babbling voices; nobody suffered the torment of empathic overload. The mundane chatter of consciousness stayed locked inside our heads; our quotidian mental privacy remained unbreached. (Or perhaps, as some have suggested, everyone's mental privacy was so thoroughly breached that the sum of our transient thoughts forms a blanket of featureless white noise covering the planet, which the brain filters out effortlessly.)

In any case, for whatever reason, the second-by-second soap operas of other people's inner lives remained, mercifully, as inaccessible as ever . . . but our skulls became completely permeable to each other's values and beliefs, each other's deepest convictions.

At first, this meant pure chaos. My memories of the time are confused and nightmarish; I wandered the city for a day and a night (I think), finding God (or some equivalent) anew every six seconds - seeing no visions, hearing no voices, but wrenched from faith to faith by invisible forces of dream logic. People moved in a daze, cowed and staggering — while ideas moved between us like lightning. Revelation followed contradictory revelation. I wanted it to stop, badly - I would have prayed for it to stop, if God had stayed the same long enough to be prayed to. I've heard other tramps compare these early mystical convulsions to drug rushes, to orgasms, to being picked up and dumped by ten-metre waves, ceaselessly, hour after hour — but looking back, I find myself reminded most of a bout of gastroenteritis I once suffered: a long, feverish night of interminable vomiting and diarrhoea. Every muscle, every joint in my body ached, my skin burned: I felt like I was dying. And every time I thought I lacked the strength to expel anything more from my body, another spasm took hold of me. By four in the morning, my helplessness seemed positively transcendental: the peristaltic reflex possessed me like some harsh — but ultimately benevolent — deity. At the time, it was the most religious experience I'd ever been through.

All across the city, competing belief systems fought for allegiance, mutating and hybridising along the way . . . like those random populations of computer viruses they used to unleash against each other in experiments to demonstrate subtle points of evolutionary theory. Or perhaps like the historical clashes of the very same beliefs — with the length and timescales drastically shortened by the new mode of interaction, and a lot less bloodshed, now that the ideas themselves could do battle in a purely mental arena, rather than employing sword-wielding Crusaders or extermination camps. Or, like a swarm of demons set loose upon the Earth to possess all but the righteous . . .

The chaos didn't last long. In some places seeded by pre-Meltdown clustering of cultures and religions — and in other places, by pure chance — certain belief systems gained enough of an edge, enough of a foothold, to start spreading out from a core of believers into the surrounding random detritus, capturing adjacent, disordered populations where no dominant belief had yet emerged. The more territory these snowballing attractors conquered, the faster they grew. Fortunately — in this city, at least — no single attractor was able to expand unchecked: they all ended up hemmed in, sooner or later, by equally powerful neighbours — or confined by sheer lack of population at the city's outskirts, and near voids of non-residential land.

Within a week of Meltdown, the anarchy had crystallised into more or less the present configuration, with ninety-nine per cent of the population having moved — or changed — until they were content to be exactly where — and who — they were.

I happened to end up between attractors — affected by many, but captured by none — and I've managed to stay in orbit ever since. Whatever the knack is, I seem to have it; over the years, the ranks of the tramps have thinned, but a core of us remains free.

In the early years, the people of the attractors used to send up robot

helicopters to scatter pamphlets over the city, putting the case for their respective metaphors for what had happened — as if a well-chosen analogy for the disaster might be enough to win them converts; it took a while for some of them to understand that the written word had been rendered obsolete as a vector for indoctrination. Ditto for audiovisual techniques and that still hasn't sunk in everywhere. Not long ago, on a battery-powered TV set in an abandoned house, Maria and I picked up a broadcast from a network of rationalist enclaves, showing an alleged 'simulation' of Meltdown as a colour-coded dance of mutually carnivorous pixels, obeying a few simple mathematical rules. The commentator spouted jargon about self-organising systems — and lo, with the magic of hindsight, the flickers of colour rapidly evolved into the familiar pattern of hexagonal cells, isolated by moats of darkness (unpopulated except for the barely visible presence of a few unimportant specks; we wondered which ones were meant to be us).

I don't know how things would have turned out if there hadn't been the pre-existing infrastructure of robots and telecommunications to allow people to live and work without travelling outside their own basins — the regions guaranteed to lead back to the central attractor — most of which are only a kilometre or two wide. (In fact, there must be many places where that infrastructure wasn't present, but I haven't been exactly plugged into the global village these last few years, so I don't know how they've fared.) Living on the margins of this society makes me even more dependent on its wealth than those who inhabit its multiple centres, so I suppose I should be glad that most people are content with the status quo — and I'm certainly delighted that they can co-exist in peace, that they can trade and prosper.

I'd rather die than join them, that's all.

(Or at least, that's true right here, right now.)

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The trick is to keep moving, to maintain momentum. There are no regions of perfect neutrality — or if there are, they're too small to find, probably too small to inhabit, and they'd almost certainly drift as the conditions within the basins varied. Near enough is fine for a night, but if I tried to live in one place, day after day, week after week, then whichever attractor held even the slightest advantage would, eventually, begin to sway me.

Momentum, and confusion. Whether or not it's true that we're spared each other's inner voices because so much uncorrelated babbling simply cancels itself out, my aim is to do just that with the more enduring, more coherent, more pernicious parts of the signal. At the very centre of the Earth, no doubt, the sum of all human beliefs adds up to pure, harmless noise: here on the surface, though, where it's physically impossible to be equidistant from everyone, I'm forced to keep moving to average out the effects as best I can.

Sometimes I daydream about heading out into the countryside, and living in glorious clear-headed solitude beside a robot-tended farm, stealing the equipment and supplies I need to grow all my own food. With Maria? If

she'll come; sometimes she says yes, sometimes she says no. Haifa dozen times, we've told ourselves that we're setting out on such a journey . . . but we've yet to discover a trajectory out of the city, a route that would take us safely past all the intervening attractors, without being gradually deflected back towards the urban centre. There must be a way out, it's simply a matter of finding it — and if all the rumours from other tramps have turned out to be dead ends, that's hardly surprising: the only people who could know for certain how to leave the city are those who've stumbled on the right path and actually departed, leaving no hints or rumours behind.

Sometimes, though, I stop dead in the middle of the road and ask myself what I 'really want':

To escape to the country, and lose myself in the silence of my own mute soul?

To give up this pointless wandering and rejoin civilisation? For the sake of prosperity, stability, certainty: to swallow, and be swallowed by, one elaborate set of self-affirming lies?

Or, to keep orbiting this way until I die?

The answer, of course, depends on where I'm standing.

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More robot trucks pass me, but I no longer give them a second glance. I picture my hunger as an object — another weight to carry, not much heavier than my pack — and it gradually recedes from my attention. I let my mind grow blank, and I think of nothing but the early-morning sunshine on my face, and the pleasure of walking.

After a while, a startling clarity begins to wash over me; a deep tranquillity, together with a powerful sense of understanding. The odd part is, I have no idea what it is that I think I understand; I'm experiencing the pleasure of insight without any apparent cause, without the faintest hope of replying to the question: insight into what? The feeling persists, regardless.

I think: I've travelled in circles, all these years, and where has it brought me?

To this moment. To this chance to take my first real steps along the path to enlightenment.

And all I have to do is keep walking, straight ahead.

For four years, I've been following a false tao — pursuing an illusion of freedom, striving for no reason but the sake of striving — but now I see the way to transform that journey into—

Into what? A short cut to damnation?

'Damnation'? There's no such thing. Only samsara, the treadmill of desires. Only the futility of striving. My understanding is clouded, now — but I know that if I travelled a few steps further, the truth would soon become clear to me.

For several seconds, I'm paralysed by indecision — shot through with pure dread — but then, drawn by the possibility of redemption, I leave the freeway, clamber over the fence, and head due south.

These side streets are familiar. I pass a car yard full of sun-bleached wrecks melting in slow motion, their plastic chassis triggered by disuse into autodegradation; a video porn and sex-aids shop, façade intact, dark within, stinking of rotting carpet and mouse shit; an outboard motor showroom, the latest — four-year-old — fuel cell models proudly on display already looking like bizarre relics from another century.

Then the sight of the cathedral spire rising above all this squalor hits me with a giddy mixture of nostalgia and déjà vu. In spite of everything, part of me still feels like a true Prodigal Son, coming home for the first time not passing through for the fiftieth. I mumble prayers and phrases of dogma, strangely comforting formulae reawakened from memories of my last perihelion.

Soon, only one thing puzzles me: how could I have known God's perfect love — and then walked away? It's unthinkable. How could I have turned my back on Him?

I come to a row of pristine houses: I know they're uninhabited, but here in the border zone the diocesan robots keep the lawns trimmed, the leaves swept, the walls painted. A few blocks further, south-west, and I'll never turn my back on the truth again. I head that way, gladly.

Almost gladly.

The only trouble is . . . with each step south it grows harder to ignore the fact that the scriptures — let alone Catholic dogma — are full of the most grotesque errors of fact and logic. Why should a revelation from a perfect, loving God be such a dog's breakfast of threats and contradictions? Why should it offer such a flawed and confused view of humanity's place in the universe?

Errors of fact? The metaphors had to be chosen to suit the world-view of the day; should God have mystified the author of Genesis with details of the Big Bang, and primordial nucleosynthesis? Contradictions? Tests of faith — and humility. How can I be so arrogant as to set my wretched powers of reasoning against the Word of the Almighty? God transcends everything, logic included.

Logic especially.

It's no good. Virgin births? Miracles with loaves and fishes? Resurrection? Poetic fables only, not to be taken literally? If that's the case, though, what's left but a few well-intentioned homilies, and a lot of pompous theatrics? If God did in fact become man, suffer, die, and rise again to save me, then I owe Him everything . . . but if it's just a beautiful story, then I can love my neighbour with or without regular doses of bread and wine.

I veer south-east.

The truth about the universe (here) is infinitely stranger, and infinitely

more grand: it lies in the Laws of Physics that have come to know Themselves through humanity. Our destiny and purpose are encoded in the fine structure constant, and the value of the density omega. The human race — in whatever form, robot or organic — will keep on advancing for the next ten billion years, until we can give rise to the hyperintelligence which will cause the finely tuned Big Bang required to bring us into existence.

If we don't die out in the next few millennia.

In which case, other intelligent creatures will perform the task. It doesn't matter who carries the torch.

Exactly. None of it matters. Why should I care what a civilisation of posthumans, robots, or aliens, might or might not do ten billion years from now? What does any of this grandiose shit have to do with me?

I finally catch sight of Maria, a few blocks ahead of me — and right on cue, the existentialist attractor to the west firmly steers me away from the suburbs of cosmic baroque. I increase my pace, but only slightly — it's too hot to run, but more to the point, sudden acceleration can have some peculiar side effects, bringing on unexpected philosophical swerves.

As I narrow the gap, she turns at the sound of my footsteps.

I say, 'Hi.'

'Hi.' She doesn't seem exactly thrilled to see me — but then, this isn't exactly the place for it.

I fall into step beside her. 'You left without me.'

She shrugs. 'I wanted to be on my own for a while. I wanted to think things over.'

I laugh. 'If you wanted to think, you should have stayed on the freeway.'

'There's another spot ahead. In the park. It's just as good.'

She's right — although now I'm here to spoil it for her. I ask myself for the thousandth time: Why do I want us to stay together? Because of what we have in common? But we owe most of that to the very fact that we are together — travelling the same paths, corrupting each other with our proximity. Because of our differences, then? For the sake of occasional moments of mutual incomprehensibility? But the longer we're together, the more that vestige of mystery will be eroded; orbiting each other can only lead to a spiralling together, an end to all distinctions.

## Why, then?

The honest answer (here and now) is: food and sex — although tomorrow, elsewhere, no doubt I'll look back and brand that conclusion a cynical lie.

I fall silent as we drift towards the equilibrium zone. The last few minutes' confusion still rings in my head, satisfyingly jumbled, the giddy succession of truncated epiphanies effectively cancelling each other out, leaving nothing behind but an amorphous sense of distrust. I remember a school of

thought from pre-Meltdown days which proclaimed, with bovine good intentions — confusing laudable tolerance with sheer credulity — that there was something of value in every human philosophy . . . and what's more, when you got right down to it, they all really spoke the same `universal truths', and were all, ultimately, reconcilable. Apparently, none of these supine ecumenicists have survived to witness the palpable disproof of their hypothesis; I expect they all converted, three seconds after Meltdown, to the faith of whoever was standing closest to them at the time.

Maria mutters angrily, 'Wonderful!' I look up at her, then follow her gaze. The park has come into view, and if it's time to herself she wanted, she has more than me to contend with. At least two dozen other tramps are gathered in the shade. That's rare, but it does happen; equilibrium zones are the slowest parts of everybody's orbits, so I suppose it's not surprising that occasionally a group of us ends up becalmed together.

As we come closer, I notice something stranger: everybody reclining on the grass is facing the same way. Watching something — or someone — hidden from view by the trees.

Someone. A woman's voice reaches us, the words indistinct at this distance, but the tone mellifluous. Confident. Gentle but persuasive.

Maria says nervously, 'Maybe we should stay back. Maybe the equilibrium's shifted.'

'Maybe.' I'm as worried as she is — but intrigued as well. I don't feel much of a tug from any of the familiar local attractors — but then, I can't be sure that my curiosity itself isn't a new hook for an old idea.

I say, 'Let's just . . . skirt around the rim of the park. We can't ignore this; we have to find out what's going on.' If a nearby basin has expanded and captured the park, then keeping our distance from the speaker is no guarantee of freedom; it's not her words, or her lone presence, that could harm us — but Maria (knowing all this, I'm sure) accepts my 'strategy' for warding off the danger, and nods assent.

We position ourselves in the middle of the road at the eastern edge of the park, without noticeable effect. The speaker, middle-aged I'd guess, looks every inch a tramp, from the dirt-stiff clothes to the crudely cut hair to the weathered skin and lean build of a half-starved perennial walker. Only the voice is wrong. She's set up a frame, like an easel, on which she's stretched a large map of the city; the roughly hexagonal cells of the basins are neatly marked in a variety of colours. People used to swap maps like this all the time, in the early years; maybe she's just showing off her prize possession, hoping to trade it for something worthwhile. I don't think much of her chances; by now, I'm sure, every tramp relies on his or her own mental picture of the ideological terrain.

Then she lifts a pointer and traces part of a feature I'd missed: a delicate web of blue lines, weaving through the gaps between the hexagons.

The woman says, 'But of course it's no accident. We haven't stayed out of the basins all these years by sheer good luck — or even skill.' She looks out across the crowd, notices us, pauses a moment, then says calmly, 'We've

been captured by our own attractor. It's nothing like the others — it's not a fixed set of beliefs, in a fixed location — but it's still an attractor, it's still drawn us to it from whatever unstable orbits we might have been on. I've mapped it — or part of it — and I've sketched it as well as I can. The true detail may be infinitely fine — but even from this crude representation, you should recognise paths that you've walked yourselves.'

I stare at the map. From this distance, the blue strands are impossible to follow individually; I can see that they cover the route that Maria and I have taken, over the last few days, but—

An old man calls out, 'You've scrawled a lot of lines between the basins. What does that prove?'

'Not between all the basins.' She touches a point on the map. 'Has anyone ever been here? Or here? Or here? No? Here? Or here? Why not? They're all wide corridors between attractors — they look as safe as any of the others. So why have we never been to these places? For the same reason nobody living in the fixed attractors has: they're not part of our territory; they're not part of our own attractor.'

I know she's talking nonsense, but the phrase alone is enough to make me feel panicky, claustrophobic. Our own attractor. We've been captured by our own attractor. I scan the rim of the city on the map; the blue line never comes close to it. In fact, the line gets about as far from the centre as I've ever travelled, myself . . .

Proving what? Only that this woman has had no better luck than I have. If she'd escaped the city, she wouldn't be here to claim that escape was impossible.

A woman in the crowd — visibly pregnant — says, 'You've drawn your own paths, that's all. You've stayed out of danger — I've stayed out of danger — we all know what places to avoid. That's all you're telling us. That's all we have in common.'

'No!' The speaker traces a stretch of the blue line again. 'This is who we are. We're not aimless wanderers; we're the people of this strange attractor. We have an identity — a unity — after all.'

There's laughter, and a few desultory insults from the crowd. I whisper to Maria, 'Do you know her? Have you see her before?'

'I'm not sure. I don't think so.'

'You wouldn't have. Isn't it obvious? She's some kind of robot evangelist—'

'She doesn't talk much like one.'

'Rationalist — not Christian or Mormon.'

'Rationalists don't send evangelists.'

'No? Mapping strange attractors; if that's not rationalist jargon, what is it?'

Maria shrugs. 'Basins, attractors — they're all rationalist words, but

everybody uses them. You know what they say: the Devil has the best tunes, but the rationalists have the best jargon. Words have to come from somewhere.'

The woman says, `I'll build my church on sand. And I'll ask no one to follow me — and yet, you will. You all will.'

I say, 'Let's go.' I take Maria's arm, but she pulls free angrily.

'Why are you so against her? Maybe she's right.'

'Are you crazy?'

'Everyone else has an attractor — why can't we have one of our own? Stranger than all the rest. Look at it: it's the most beautiful thing on the map.'

I shake my head, horrified. 'How can you say that? We've stayed free. We've struggled so hard to stay free.'

She shrugs. 'Maybe. Or maybe we've been captured by what you call freedom. Maybe we don't need to struggle any more. Is that so bad? If we're doing what we want, either way, why should we care?'

Without any fuss, the woman starts packing up her easel, and the crowd of tramps begins to disperse. Nobody seems to have been much affected by the brief sermon; everyone heads off calmly on their own chosen orbits.

I, say, `The people in the basins are doing what they want. I don't want to be like them.'

Maria laughs. 'Believe me, you're not.'

'No, you're right, I'm not: they're rich, fat and complacent; I'm starving, tired, and confused. And for what? Why am I living this way? That robot's trying to take away the one thing that makes it all worthwhile.'

'Yeah? Well, I'm tired and hungry, too. And maybe an attractor of my own will make it all worthwhile.'

'How?' I laugh derisively. 'Will you worship it? Will you pray to it?'

'No. But I won't have to be afraid any more. If we really have been captured — if the way we live is stable, after all — then putting one foot wrong won't matter: we'll be drawn back to our own attractor. We won't have to worry that the smallest mistake will send us sliding into one of the basins. If that's true, aren't you glad?'

I shake my head angrily. 'That's bullshit — dangerous bullshit. Staying out of the basins is a skill, it's a gift. You know that. We navigate the channels, carefully, balancing the opposing forces—'

'Do we? I'm sick of feeling like a tightrope walker.'

'Being sick of it doesn't mean it isn't true! Don't you see? She wants us to be complacent! The more of us who start to think orbiting is easy, the more

of us will end up captured by the basins—'

I'm distracted by the sight of the prophet hefting her possessions and setting off. I say, 'Look at her: she may be a perfect imitation — but she's a robot, she's a fake. They've finally understood that their pamphlets and their preaching machines won't work, so they've sent a machine to lie to us about our freedom.'

Maria says, 'Prove it.'

'What?'

'You've got a knife. If she's a robot, go after her, stop her, cut her open. Prove it.'

The woman, the robot, crosses the park, heading north-west, away from us. I say, 'You know me; I could never do that.'

'If she's a robot, she won't feel a thing.'

'But she looks human. I couldn't do it. I couldn't stick a knife into a perfect imitation of human flesh.'

'Because you know she's not a robot. You know she's telling the truth.'

Part of me is simply glad to be arguing with Maria, for the sake of proving our separateness — but part of me finds everything she's saying too painful to leave unchallenged.

I hesitate a moment, then put down my pack and sprint across the park towards the prophet.

She turns when she hears me, and stops walking. There's no one else nearby. I halt a few metres away from her, and catch my breath. She regards me with patient curiosity. I stare at her, feeling increasingly foolish. I can't pull a knife on her: she might not be a robot, after all — she might just be a tramp with strange ideas.

She says, 'Did you want to ask me something?'

Almost without thinking, I blurt out, 'How do you know nobody's ever left the city? How can you be so sure it's never happened?'

She shakes her head. 'I didn't say that. The attractor looks like a closed loop to me. Anyone who's been captured by it could never leave. But other people may have escaped.'

'What other people?'

'People who weren't in the attractor's basin.'

I scowl, confused. 'What basin? I'm not talking about the people of the basins, I'm talking about us.'

She laughs. 'I'm sorry. I don't mean the basins that lead to the fixed attractors. Our strange attractor has a basin, too: all the points that lead to it. I don't know what this basin's shape is: like the attractor itself, the

detail could be infinitely fine. Not every point in the gaps between the hexagons would be part of it: some points must lead to the fixed attractors — that's why some tramps have been captured by them. Other points would belong to the strange attractor's basin. But others—'

'What?'

'Other points might lead to infinity. To escape.'

'Which points?'

She shrugs. 'Who knows? There could be two points, side by side, one leading into the strange attractor, one leading — eventually — out of the city. The only way to find out which is which would be to start at each point, and see what happens.'

'But you said we'd all been captured, already—'

She nods. 'After so many orbits, the basins must have emptied into their respective attractors. The attractors are the stable part: the basins lead into the attractors, but the attractors lead into themselves. Anyone who was destined for a fixed attractor must be in it by now — and anyone who was destined to leave the city has already gone. Those of us who are still in orbit will stay that way. We have to understand that, accept that, learn to live with it . . . and if that means inventing our own faith, our own religion—'

I grab her arm, draw my knife, and quickly scrape the point across her forearm. She yelps and pulls free, then clasps her hand to the wound. A moment later, she takes it away to inspect the damage, and I see the thin red line on her arm, and a rough wet copy on her palm.

'You lunatic!' she yells, backing away.

Maria approaches us. The probably-flesh-and-blood prophet addresses her: 'He's mad! Get him off me!' Maria takes hold of my arm, then, inexplicably, leans towards me and puts her tongue in my ear. I burst out laughing. The woman steps back uncertainly, then turns and hurries away.

Maria says, 'Not much of a dissection — but as far as it went, it was in my favour. I win.'

I hesitate, then feign surrender.

'You win.'

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By nightfall, we end up on the freeway again; this time, to the east of the city centre. We gaze at the sky above the black silhouette of abandoned office towers, our brains mildly scrambled by the residual effects of a nearby cluster of astrologers, as we eat the day's prize catch: a giant vegetarian pizza.

Finally, Maria says, 'Venus has set. I think I ought to sleep now.'

I nod. 'I'll wait up for Mars.'

Traces of the day's barrage drift through my mind, more or less at random - but I can still recall most of what the woman in the park told me.

After so many orbits, the basins must have emptied . . .

So by now, we've all ended up captured. But — how could she know that? How could she be sure?

And what if she's wrong? What if we haven't all, yet, arrived in our final resting place?

The astrologers say: None of her filthy, materialist, reductionist lies can be true. Except the ones about destiny. We like destiny. Destiny is fine.

I get up and walk a dozen metres south, neutralising their contribution. Then I turn and watch Maria sleeping.

There could be two points, side by side, one leading into the strange attractor, one leading — eventually — out of the city. The only way to find out which is which would be to start at each point, and see what happens.

Right now, everything she said sounds to me like some heavily distorted and badly misunderstood rationalist model. And here I am, grasping at hope by seizing on half of her version, and throwing out the rest. Metaphors mutating and hybridising, all over again . . .

I walk over to Maria, crouch down and bend to kiss her, gently, upside down on the forehead. She doesn't even stir.

Then I lift my pack and set off down the freeway, believing for a moment that I can feel the emptiness beyond the city reach through, reach over, all the obstacles ahead, and claim me.