

The Network in the Desert

A condensed account of complexity can be given with a simple and stirring story that plays in the Arizona Desert. My story is about people who have built up an unusual network. Instead of writing an introduction, I want to recount the story in episodes alternating with my main theses regarding network logic, and in this way convey some idea of the way the nodes and strands of Web of Life are laid out.

Clear symptoms of camel mania have broken out in the caravan. Cecil Parsons, the oldest Sheikh of Quartzsite, roguishly winks at his harem. The women giggle -- that's Cecil, 103 years of age but still young at heart. His throne rolls on, followed by a band of banjo players whose repertoire fluctuates alarmingly between religious spirituals and ribald drinking songs. Evelyn, the band's groupie, has let her grey hair down and is communicating her motto, „Better to be sixty than pregnant!“ Marvin Rambel senior is on a tricycle that, in order to save his old legs, is being pulled by his dog Lassie. Faced flushed with self-importance, he is distributing free tickets that are „guaranteed to be valid nowhere“ but don't cost a cent..

Camelmania is also the name of the parade. Mayoress Patty Bergen, only 50 years of age and clearly still one of the kids, is sitting on the rocking camel saddle with a forced official smile on her face. A few old-timers file into the procession, homely relics of a distant rock-'n'-roll youth. Behind them thunder the four-wheel drives of a group from Oregon, followed by a formation of electric wheelchairs, a church on wheels, war veterans marching behind a truck with a machine gun on its top, and two hot-dog vans executing a parallel slalom. At the roadside is a cowgirl wearing a T-shirt announcing her determination to squander her grandchildren's inheritance; she calls out to the Sheriff of Quartzsite, „Hey man, can you shoot from the hip?“ She cackles -- she wasn't talking about his revolver.

Quartzsite. A godforsaken and dusty place in Arizona, not far from the Californian border, in the middle of the desert. In the searing hot summers, the population is 2,390. In the more clement temperatures of winter, anything up to a million senior citizens invade the town. They arrive in huge trailers from Canada and the northern USA in order to spend the winter in the desert. They found a temporary town on wheels. The season is annually opened by „Camelmania“, a carnival-like parade that the senior citizens celebrate as a manifesto of their unbridled mobility and lust for life -- Look, we're back, let the warm winter begin!

The word „network“ probably makes most readers think of cables, servers, power lines or railroads. However, infrastructures demonstrate merely the framework -- the bare bones -- of the network, and thus the more boring part. Much more interesting is the living part, the dynamic, well-nigh organic links, the inventions that come into being through the networking of many people. For me, networks are the most fascinating form of organization. They behave like living beings. They are born, grow up, reach maturity, suffer defeats, go through changes and metamorphoses, and are always good for a surprise. After spending a few weeks with the „Snowbirds“, I realized that these one million senior citizens have set up a wonderfully creative network that needs no statutes, command centre or organizing committee. Their network is self-organizing.

The ability of networks to order what is unordered without a „central controller“ pulling the strings is only one of their mysterious capabilities. They possess a number of attributes that makes them superior to other forms of organization. Compared with hierarchic systems, they learn faster, cope more easily with mistakes, react more flexibly, make a better job of combining diversity. And their inventiveness is incredible: solely through the pattern in which they arrange nodes and strands, they produce new things. The whole is more than the sum of the parts -- that is the creed of all network logic. I'll be talking about this extra quantity of innovation, about inventiveness and richness of variety in order to demonstrate that networks are better. The efficiency of networks is becoming truly conspicuous under the hard conditions of the fast-changing

world we are living in at the beginning of the 21st century. On a shrinking planet whose population of billions is growing exponentially, in the age of turbo-technology and exploding mega-cities, in the face of global market activities conducted in real time, in view of companies that are merging in some cases, splitting up into a thousand parts in others. Networks hold together this spinning world, are perhaps the only organizational form even capable of creating the orientation, community and identity we so urgently require amidst all the turbulence.

In the following I will use the term „living network“ to describe any system of social relationship that is complex, self-organizing, and adaptable. All these systems are in contact with each other and together constitute the „Web of Life“. The diversity of species possessed by the latter is overwhelming. When you read the word „network“ in this book, please think of ant colonies, predator-and-prey relationships, bacteria strains, swarms of cranes, nutritional networks, elephant herds, parasitism, reef communities -- and of human networks likewise. Football fan clubs, for instance. Groups of friends, unplanned path networks in villages; self-help groups, free markets. City quarters and neighbourhoods, freelancer networks, stock-exchanges. The Internet. Not to forget our senior citizens' colony in the desert, which every winter re-shuffles the notion that „retirement“ has anything to do with a withdrawal from active life.

The swarm of RVs -- Recreational Vehicles -- take up position on the right- and left-hand sides of the Interstate 10 throughout the expanses of Arizona. Some snowbirds prefer tranquillity at a distance from their neighbours, most settle for loosely grouped camps and fixed mobile-home settlements. They make dusty Quartzsite the second largest city in Arizona. Supplies, too, roll up on four wheels: drinking-water tanks, supermarkets, hairdressing salons, a mobile church. Flying buildings for people in transit. When the leaves change colour back home in Alaska and North Dakota, in British Columbia and Montana, when the golf courses close and hunting trails become impassable, then the snowbirds sense that the time has come to leave. They get into their simple camping vans or luxurious mobile homes, and escape from the autumn mists that seep into arthritic joints, from the biting cold that provokes rheumatism, from the metre-high mounds of snow they can leave to the young to sweep away. At the same time, their southward-bound migration is in line with a primeval instinct.

Yet „Follow the Sun!“ has nothing to do with lazing about. Carpe diem -- seize the day -- is the secret imperative governing the actions of these lively oldsters. Woe to the inactive! 68-year-old Bob Johnson's favourite pastime is fiddling about with his motorized paraglider. He attaches the strings of the parachute to a kind of plush red armchair on wheels; on the back of the chair is a propeller. After throwing the gas lever, he's ready for take-off. Directly behind his camping bus he's built a short runway in the desert sand. His paying passengers, who are all in his age-group, are not discouraged by the disclaimer Donna asks them to sign: „In the case of a crash we cannot accept any...“.

Bob accelerates. The engine briefly roars, and the parachute inflates until it is hovering directly above the pilot. The plush armchair is gaining speed. Bob takes off. He is flying. A dream has come true. For 23 years, he was a mechanic in the Air Force, prevented from becoming a pilot by his poor eyesight. Enviously he would watch the smartly uniformed guys taking to the skies in machines he had overhauled. Bob, the grounded Icarus. Naturally, his eyesight has not improved since then. But he flies all the same. „It's so simple with the motorized paraglider. It only takes a few hours to learn,“ he shouts against the wind. At a height of 500 metres, he has left behind him all traces of earthly gravity. The constant cough that has tormented him ever since he has a problem with his lungs -- gone. The sometimes bowed, shuffling gait -- gone. „Really, it's sooo simple,“ he cries. He feels free, at last, not far short of 70, in the sky above the desert.

Bob's lifestyle is typical of developed western societies at the beginning of the 21st century. His day-to-day life, like that of billions of other people, is integrated in all kinds of networks all round the clock: the system of freeways and interstates that allows him to go his nomadic way; the supply channels for water, electricity and commodities; electronic networks such as the Internet, e-mail and mobile telephony that he and his

wife Donna use to keep in touch with friends and the sedentary branch of their family; the spontaneous information exchanges established by the mobile pensioners to swap gossip and useful information; finally, the intricate web of globalization with its economic and political interdependencies that mean a bank crash in Shanghai can cause Bob's pension fund to plummet. Full interconnection as an endless loop of post-modern existence.

More and more people, however, are anxiously wondering if the networks represent freedom or captivity. Do we pay a high price for being integrated in the „web of life“, namely the price of fatal dependency? Naturally, there are drawbacks and darker aspects. When the world draws closer together in the networks, the different interests of north and south, east and west collide with all their might -- the „Clash of Civilizations“ (Samuel Huntington) becomes a tangible threat. Furthermore, the irritating thing about network structures is that they are difficult to control, are full of surprises, always teetering on the brink of chaos. Not at all to the taste of control freaks.

Yet the advantages of networking obviously outweigh the drawbacks. Otherwise we would not get wired and log in. For that reason, I intend to deliberately concentrate on the chances and options open to a committed networker. I don't want to merely describe networks, but also deliver feasible concepts as encouragement to try out „networking“ in practice.

Humans, as social beings, have always established networks with their fellows: in hordes and clans, village communities and urban alliances, monasteries and guilds, in states and multinational organizations. But the true hour of the networker has come in the modern world. Technological advance has furnished us with instruments that would have been pounced upon by the medieval traders who laboriously travelled throughout Europe. Computers, modems, data highways, video conferences, e-mails, and text messages are all part of the modern networker's arsenal. Faster than ever before, it's possible to integrate more and more people into networks over greater distances, and to maintain communication between all the nodes involved. The spheres of society, business, politics and culture are able for the first time, with the aid of this artificial neuronal system, to deploy the power of networks to the full.

Technology, however, is not the only key to network success. It is equally important that networkers alter their perspective. If we want to recognize something that is new, wrote the philosopher Samuel Kuhn, then we need the right metaphors. The „network“ is something new -- a wonderfully vivid picture describing what goes on in organizations of all kinds. Naturally, it's only a model, or intellectual construction, for in reality the relational systems of living creatures become visible only on the basis of external interactions. Yet, these relationships can break or hold. The network metaphor serves as a tool to describe reality, and its suitability can be measured against two criteria: first, whether the world-view it delineates is free from contradictions, and second, whether it supplies appropriate lenses through which to see the phenomena with different eyes, and to interpret them.

In the book section entitled The Laws of the Networks, both questions are answered with an emphatic yes. The analysis of biological as well as cultural and technical networks shows that evolution is sparing in its handling of principles, even if it is wasteful in regard to variants. There exist merely a few basic laws according to which all networks function, no matter how dissimilar they might appear at first glance. All ten „Network Laws“ together actually do deliver a new optical system as a basis for viewing the living network of relationships, namely network logic. This logic is something like a bionics of the networks. While conventional bionics is concerned with the way that biology inspires technology, network logic profits from the success of intelligent systems by transferring their modes of function to organizations like political parties, associations or companies in order to increase the efficiency of their management.

By teaching us to correctly assess complex systems, and by automatically incorporating into planning considerations elements such as unexpected and chaotic developments and spontaneous about-turns, network logic takes leave of the mechanistic world-view that dominated scientific thinking in the west for several

centuries. Chaos instead of control, network as opposed to clockwork -- that, in a nutshell, is the core of a philosophical revolution whose influence is not confined to some remote ivory tower but will affect every area of life. I venture to forecast that the network will become the scientific symbol of the 21st century, a matrix and metaphor for systems and organizations of all kinds.

„It's never too late for a happy childhood!“ declares the banner on the motorized paraglider in which Bob Johnson orbits round the mountain with the big white „Q“ that is the landmark of Quartzsite. Nor is it ever too late to make come true a childhood dream of flying. Flashes of silver and beige reach Bob from the desert below. The winter migrants' trailers stretch from one horizon to the next, their camps not designed as protection against raids, as in the days of the Wild West, but against loneliness. Bob feels a bit like a behavioural researcher studying the nesting habits of snowbirds from an aerial perspective. He neatly mixes business with pleasure and uses the extra income earned with his flights to finance a few thousand more kilometres a year. The Johnsons are modern-day nomads. They wander according to a seasonal cycle, always in search of the best „pastures“. Spring is at its best in their native Texas. When it gets too hot there, then they leave for Alaska. Texas makes a brief guest appearance in autumn once more, before they finally take up residence in their winter quarter in Quartzsite. „I couldn't live here all the time,“ say both Bob and Donna, „but for a few months it's ideal.“ Their migratory route combines the most beautiful locations with the best season; their mobility allows them to take the pick of the bunch.

They keep in e-mail contact with family and friends while travelling through the States. When a great-grandson was born shortly after they headed southward, the first photo was delivered electronically. Donna first got interested in computers when she was 63. „Most of the time, we just play about,“ she says, „but is that really very different from what office workers do?“ She records their experiences with a digital camera so that relatives and other snowbirds can share in the Johnsons' travels.

This unembarrassed usage of new media is typical for the „young old“ generation in the United States. There were no computers when they were young. When personal computers were launched, most of their generation was already close to retirement. „But we've got plenty of time to learn new things now. If you keep an open mind for these things, then things stay clearer up here --,“ Donna taps her forehead, „-- for a bit longer.“ She is very much of the opinion that, contrary to the proverb, you can teach an old dog new tricks. Her generation does not plead old age as an excuse for timidly avoiding new technologies. Instead, they attend crash courses, read „Computer for Dummies“, and surf the Net like there's no tomorrow.

These oldsters are different. They bear little resemblance to the German pensioners whose perspective for the last 20 years of life is in many cases to be stripped of their rights under the guise of being cared for, or to be callously neglected. The snowbirds' hunger for new experience, their pleasure in learning and the delight they take in networking is refreshingly anarchic compared to the „drink tea and wait for the end“ attitude in Germany. At the same time, however, there are compulsive undertones to the snowbirds' hectic activity, to the obligatory „Have fun!“ that determines their agenda. Anybody who is not on the move is, in their eyes, already dead -- or well on the way.

In the USA, escape per trailer is becoming a mass exodus: some estimates put the number of Americans who are permanently on the road at over 12 million, most of them senior citizens. Nobody has the exact figures -- these contemporary nomads are out of reach of statistics, of the fiscal authorities, of prying neighbours or prudish church communities. For political and administrative bodies, these mobile masses are unpredictable. What region do these semi-underground migrants actually belong to? How is a census supposed to record their data? These elderly people, many for the first time in their life, no longer want to be part of other people's planning. For them, places like Quartzsite are laboratories in which they can experiment with alternative lifestyles.

The Arizona snowbirds have a vast amount of catching-up to do when it comes to mobility and freedom. Their generation grew up in the „old world“ roughly divided into two blocks by the Cold War and pitted with ideological trenches, Iron Curtains and closed frontiers. Markets were regional or national at best, people tended to be buried in the town they were born in, foreigners lived abroad, and friends close by. Whereas the lifestyle and horizons of their grandchildren are quite different. The generation born after 1970 grew up in a world where border posts are falling with increasing regularity, where the Internet makes global communication affordable to all, where a global economy pumps billions of dollars through the networks of stock-exchanges and banks round the clock. This generation of „Globos“ is now entering the arena -- and beginning a wholly new chapter in the history of humankind (see chapter The Globos Are Coming).

We are witnessing a temporary highpoint in the history of a civilization spanning five thousand years. This history can be seen as the evolution of a very diverse range of human-made networks that expanded until they embraced the entire planet. 5,000 years of network expansion and intensification have left their mark on all four continents and radically changed our view of the blue planet. The ever-closer mesh of traffic and communications networks made space implode and declared real time to be a global affair -- chronography triumphed over geography (see chapter Honey, I Shrunk the Earth!).

This increase in network intensity means more and more people enjoy access to information, communication, travel and markets. Access means heightened opportunities. And makes possible participation in democratic decision-making processes. Totalitarian measures such as censorship or prohibition of demonstrations are much less likely to occur in highly networked societies than in isolated countries with no international linkage. Countries like Afghanistan and North Korea, to name only the most extreme examples, limit their citizens' freedom of travel and suppress information in order to better manipulate them without disturbing external influences (see chapter The Freedom of Being Interconnected).

Third-world groups, environmental organizations and trade unions are more and more getting involved in global projects, and joining together in international networks in order to enforce human rights as well as minimum social and ecological standards. They have no intention of leaving the globalization project solely in the hands of company bosses and financial jugglers who, with their goal of creating a homogenous worldwide marketplace, were far in advance of politicians and in some cases now possess more power than the nation states. In recent years, civil society has demonstrated that it is indeed able to mobilize the forces needed to restrain purely profit-oriented globalization and to create a social global economy (see chapter Globalization: Ready for the Third Wave).

The New Economy has not been alone in placing its bets on the power of the network. Increasing numbers of old economy enterprises are restructuring by integrating suppliers, field workers, clients and their social environments into networks that exceed the conventional borders and penetrate far into the markets. Such strategies also harbour risks: whoever opens up, is also open to attack. The consequence is that more and more firms are entering strategic partnerships in which their various strongpoints do not just accumulate, but are multiplied. Networks as opposed to pyramids -- that means less hierarchy, less control, more self-organization and creative chaos. Some company alliances copy the biological system of symbiosis, and must always be on their guard that one division does not, parasite-like, get the better of the others (see chapter The Win-Win of the Nets).

Being networked is not a value in itself, but an efficient instrument able to be used -- like any tool wielded by human hand -- for good as much as for bad. Among the most gifted manipulators of our time is thus a figure like Osama Bin Laden and his al-Qaeda terrorist network. Islamist terrorists use all the modern networks -- from the Internet to credit cards and mobile phones to air travel -- in preparing the attacks that are aimed to destroy precisely these networks as „satanic western tools“. However, threats come from other quarters too. With targeted attacks on central nodes, extremists and saboteurs of all political and religious persuasions attempt to paralyse entire societies. In terms of network logic, one effective defence measure is to design

vital infrastructures to be „fault-tolerant“, namely to shift away from centres and conurbations and move towards distributed swarm-like systems that are less vulnerable (see chapter @ Bombs and other Attacks).

The networked pensioners in Quartzsite think up activities that either delight or horrify their grandchildren, depending on who these grandchildren are. The worst thing is: the oldsters are unpredictable. Take Gwenn, who fell in love with the 72-year-old Jerry at the age of 69. They both come from Washington State, and met in a restaurant. They kept glancing at each other, exchanged a few jokes, then he asked her to dance. Jerry is tall and slim, with a sonorous voice and supple hips on the dance floor. Next to him, Gwenn looks fragile; but her hearty smile conveys something of her great inner strength.

Jerry and Gwenn's second spring broke out shortly before winter. When Gwenn's husband was still alive, they drove to Quartzsite every October. Now it seemed she might have a good reason to stay home -- Jerry had entered her life; why bother taking that long journey alone? All the same, she packed up her small dormobile: „What was I supposed to do back North? Wait for better weather?“

No sooner had she arrived in Arizona than Jerry phoned. Their yearning grew from call to call. Until Jerry decided to join her. He arrived three weeks ago, and since then they haven't been apart. Space is cramped in Gwenn's trailer, and it's impossible to avoid constantly brushing against the other inhabitant.

„Sorry,“ says Jerry.

„Don't do that again -- it feels too good,“ says Gwenn.

Three weeks later they've decided to get hitched. Possibly a bit hasty? „Tomorrow morning,“ says Jerry, „is sometimes too late.“ Neither of them feels young enough to postpone things that are important to them. How often has Jerry been married? He admits to four marriages, keeps silent about the others. „You're crazy,“ says Gwenn, and strokes his blue-veined hands. „How on earth could I have married a madman?“ Her eyes are shining.

Appropriately, the ceremony is conducted by an itinerant pastor, and witnessed by friends belonging to their „winter family“. The church is the trailer park club house, which goes by the name of Desert Gardens. Fingers trembling, Gwenn slips the ring onto Jerry's finger. She's just got over a broken shoulder. They break the news to their children on the phone. „They were shocked at first,“ says Jerry, „and then they said: You deserve to be happy. And then the teasing began: Don't you get Gwenn pregnant! You're both too old for that sort of thing.“

Networks reduce the world in size. Complexity researchers call this effect the „small world“ phenomenon. They even have a precise mathematical formula to explain it. According to their calculations, any website on the Internet is separated from any other site by no more than 19 clicks. The same phenomenon occurs in human relational networks. According to the law known as the „six degrees of separation“, any two people in the world are connected to one another by an intermediate chain of no more than six acquaintances. Intrigued by this possibility, the German weekly broadsheet Die Zeit put it to the test and did, in fact, establish in six steps a link between a Berlin snack-bar owner and the Hollywood star Marlon Brando (see Networks Make the World Smaller). Everybody and everything connected with everybody and everything else -- today, science can prove what we always guessed to be the case. Among those who are esoterically inclined, the knowledge of this explosively growing and intensifying web of life rouses hopes of a new utopia, namely networking as fulfilment of our eternal yearning for contact and intimacy, as something that gives meaning to and reinforces life. „I am networked, therefore I am.“

It is important to remember, however, that global interconnectedness is not all sunshine and light. Mafia

killers and child abusers, dictators and drug dealers -- they too are merely one click, one rail ticket, one scheduled flight away. And we are connected with them, too; via thousand-fold chain reactions, their surreptitious goings-on interfere in our daily lives. That explains the latent scepticism with which many contemporaries view our increasing dependence on networks. They are afraid of losing control over their actions, of being swamped by information, of a civilization threatening to become too much for its citizens.

The point is: we don't have a choice. There is nothing to indicate an about-turn in history's dominating trend -- namely the intensification of networks -- in the near future. Nobody is in a position to switch off, let alone get rid off, the Internet, nobody will be able to revoke the advances of globalization. The only option left to us is to grasp the chances of networking and at the same time create framework conditions that give the web of life a human face, philanthropic features, and a human voice.

The project is already underway. Very few people know about it, although they are actively involved. It is an adventure of humankind, more gigantic even than the building of the pyramids, more risky than the landing on the moon, more ambitious than the cracking of the genetic code. The project description reads: creation of a collective global intelligence, creation of the most complex structure in the entire universe (see chapter Global Brain: The Evolutionary Process Continues).

Only one thing is certain: networking will grow exponentially in all areas of life during the next hundred years. The Internet will be furnished with biologically optimized interfaces in order to more directly link up minds and computers. Processors and transponders will become smaller, more portable, and thus more mobile. Software laboratories and semi-conductor factories are currently feverishly pursuing the vision of enabling people to be permanently online everywhere: on the Evernet. If one day data networks are omnipresent, then they will undergo the same development as electric power beforehand: because it is available practically everywhere, it has vanished from sight. The Evernet will be invisible, too. As long as it's functioning smoothly (see chapter What Probably Comes Next).

Many of the oldsters in Quartzsite are beginning a second or third life. The desert offers ideal mating grounds for snowbirds. Couples wanting to take the plunge in Arizona can arrange to be married the very next day. No small number of these silver singles go there in search of a partner. To keep them company for the rest of their lives. Or for a temporary fling -- some consider the three months spent together in Quartzsite to be about the right annual ration of intimacy. Who knows what the next year will bring -- new trailer site, new opportunities? The status of marriage has not been the norm for a long time now. The state legal system, of all things in prudish America, is what has loosened morals. Many couples live together without getting married because if they did, one of them would lose their pension entitlement. And experience makes them cautious. After living through economic crises and world wars, divorces and various illnesses, they can afford to take a more relaxed attitude to conventional morality.

A now legendary trucker's warning broadcast over CB radio about the „pensioners' mating season“ in Quartzsite does the rounds at the square dances held there every evening. A sign reminds the pleasure-seekers that dancing takes place „at one's own risk“. Ladies Choice! The men chuckle complacently, knowing that attraction has a lot to do with availability -- and they're in the minority. Let a man glide skilfully enough over the dance floor, hisses one elderly cowgirl, „and he can have just about any woman he wants“. That the sweet nothings whispered during the Slow Fox lead to more seems pretty certain. On the other hand, tales about the extent of sexual activity are, as always, based more on hearsay than on reliable statistics. In Quartzsite, at any rate, the campers' rule applies as much as anywhere else: „If the rigs are rocking/Better don't come knocking“.

Otherwise, the snowbirds abide by their own rules, and specific routes. Quartzsite may be their headquarters, but they don't stay put for long. Every few days they hit the road. To Nevada for the gaming; to California to buy fruit by the crate; or to Mexico, no more than an hour's drive, because

health care is so cheap there. Prices for artificial hip joints, cardiac pills and dental crowns are only a third of those in the US. Most of the snowbirds are budgeting on a modest pension.

Living a life on wheels in cramped quarters welds together the couples -- every day they are confronted with new terrain in which their teamwork must function. That binds. Many of the partnerships seem intact and vivacious. How rarely do we see older people crossing the street hand in hand, or stopping and staring into each others eyes, then kissing ardently in a way we never dared dream our parents could.

66-year-old Roberta Adams uses the free space offered by Arizona to make a fresh start. She used to be a senior employee managing several wholesale outlets; she doesn't mention names, since the campers' etiquette considers it polite to screen out one's previous life and status. They're all travellers, detached from their ties, equals among equals -- another feature that makes them so similar to traditional nomad peoples and their egalitarian clans. Roberta now manages a camp vibrating with activity with all the enthusiasm she used to put into directing the flow of goods.

The meeting-point is underneath the star-spangled banner that has been set up and the hand-carved wooden sign reading „Retirement Cove“. Every year, more pensioners than the year before arrive: the Edwards from Oregon, the Giffords from Utah, the Shorts from Idaho. They all come from different states, yet are in fact stateless. During the summer, Roberta keeps them up to date with e-mails and congratulatory cards.

Right now, she's printing posters: Wednesday at 3pm, music and cakes, bring something along. She posts the sheets of papers on cactuses, where they're easily spotted. Public relations always helps. Sure enough, shortly before 3pm the place starts filling up. Artificial lawn greens up the dust; folding chairs, tables and shelves act as furniture. Although Roberta has made a few suggestions about who contributes what, a quantum of chaos is always part of self-organization. Seven types of cookie, for instance, but no lemon pie. A task force to remedy the problem is instantly put together; a crate of lemons is liquidized to obtain the necessary ingredient. One guest offers as a public toilet the facility in his trailer-- and already Retirement Cove has established itself as a day-centre for the elderly. All it lacks are the social workers. Nobody misses them.

Networking of the manner practised by Roberta Adams is the handicraft of the future. In a highly networked society, everybody will have a secret second job: working the network. This task will be mandatory for associations, companies, neighbourhoods, initiatives, discussion groups. Some people are born with a gift for managing social relations, others find it more difficult. The good news is that it's a skill one can learn! To do so, it's essential to understand the „laws of the networks“ and start using network logic. The reward is intact social relationships and professional success. Studies have discovered that people who cultivate an extensive web of social relationships climb the career ladder faster, get better paid jobs, and enjoy better physical and mental health than people without a back-up network. Contrary to what many managers believe, it is not the case that only those who go it alone and brutally eliminate potential rivals reach the top. In reality, co-operation and co-evolution are the more efficient long-term strategies. It's hardly surprising, then, that „networking“ is becoming increasingly important to managers, politicians, activists, planners and freelancers.

Networks have not one centre, but thousands of them. Every node is a centre if it so desires. As a basic rule, we are all at liberty to become an active node at which the strands converge and from which stimulating impulses are transmitted. But how do people become successful networkers? How can networks be set up intelligently and elegantly. Whether in their professional or private lives, many people feel daunted by the task of getting a grip on the confusing patterns of networked life. And they are well aware that however complex things may seem today, tomorrow they're going to be even more complicated.

In the section entitled *On the Benefit of Networks* you will find a catalogue of ideas and inspiration based on the findings of network logic and geared to practical application. It tells you how to construct networks in such a way that they cushion mistakes. How to ensure increasing revenue and growth. How to find the right balance between chaos and order. What technologies to use in searching for information, what filters to activate in order to avoid being swamped by the deluge of data. How to generate complexity that also functions. How judge the suitability of partners for symbiosis. How to forge unusual alliances.

In the glow of the campfire, the mythical Wild West returns evening for evening. Men dressed in jeans and checked shirts, women wearing cowboy boots -- pioneers in the shelter of their camp. William gives Bert (a former mechanic) a huge bag of oranges as thanks for repairing his air conditioner. Elaine (a former teacher) announces that she'll be holding a free Spanish course. Marty (a former barber) offers to call by in his mobile barber shop the next day, and asks Bob Johnson (former member of the US Air Force) for a free flight. The campfire serves as an emporium, and services are paid for in kind. The market is self-regulating.

Stories, however, are traded more than anything else. Nomads are storytellers, not writers. They relate the story of a violinist who had to have three fingers amputated after an accident, but had no intention of missing his regular jam sessions. He simply attached artificial fingers in place of those he'd lost. And there are said to be diggers who are practising nudists on La Posa West -- „their goldfingers dangle about while they pan out the gold“. And one man (nobody in the group is personally acquainted with him) is said to have pitched a tent next to his caravan and inside it he grows exotic plants. Nobody's allowed to peek inside the joint, they say with a knowing wink. And the Chinese are reported to be interested in buying it but -- alluding to the large numbers of Northerners -- „the Canadians aren't selling“. The stories have to be good but not necessarily true.

Time for the nightlife to begin. Pointing the way is a big yellow illuminated M as high up as a church steeple. The snowbirds convene in one of the few stone buildings in Quartzsite, the town on wheels. Bruce, the cowboy poet who writes odes to Harley Davidson, is already there. 72-year-old Vance rolls in, an oxygen tank attached to the back of his electromobile in order to give his lungs the extra dose they need after two heart attacks. Gordon is hanging about, on his hat the green frog that is his trademark and, as he readily admits on inquiry, is also tattooed on his penis. Lou Everette, 71 but still a fast hand with the pump gun („only for self-defence, of course“) is sipping a coffee.

The desert swallows them up by day, disgorges them by night. All of them: rock collectors and stargazers, off-roaders and dry swimmers, managers who've taken early retirement and missionaries who discovered their vocation late in life, choir singers and taciturn loners, desert walkers and chainsaw artists, sinners who were caught out and latter-day saints. And the musicians. Jerry clears his mouth organ by tapping it, while Gwenn helps the others unpack their violins, guitars and accordions. Books of music lie about between the cardboard cups with the big yellow M. Then, in an unspoken agreement -- the composition of the orchestra differs from evening to evening -- they start up the rhythm of the desert: a slow waltz, cautious and carefree, drowning out the noise from the hamburger joint next door whose junior burgers are the worst-selling item on the menu.

Lost to time and space, the oldsters listen to the music. Evening for evening, they occupy a piece of territory belonging to the global chain with the big yellow M, change the tempo from fast food to slow motion, transform the hamburger joint into a night-club. They've won the battle by the power of sheer numbers. And celebrate their stars: Slim Williams, who hears what he's playing only through his hearing aid but whose 88-year-old fingers fly across the strings of his fiddle with lightning speed, or Slim Jim, who accepts the applause with a quiet smile -- he's travelled a long way for this moment, and for that reason will keep playing halfway through the nights until the hot winter ends.