

# JOINT MINDS

JULY 4, 1997

We observe the highly integrated movements of flocks of birds and schools of fish and wonder how they can achieve such coordinated motions simultaneously and almost instantly. How are they communicating? An apparently unrelated phenomenon is the fact that sponges can pass through a filter, fracturing into small enough elements to pass through the spaces between the strands of woven cloth, then reassemble on the other side into a sponge again. But putting these phenomena in juxtaposition leads us to the surmise that there exist many possible levels of organization not obvious to us.

We can postulate an organizational scale such as: Individual organisms (lone wolves for example), wolf packs, human tribes, ant and termite colonies, human cultures, ecologies, then the 'semi-organism' level of bird flocks and fish schools, and finally up to an organism again. But an organism of a more sophisticated level of complexity.

We are aware that members of termite, bee, and ant societies appear to be linked to the queen no matter how far separated. Such linkages are also known among humans. Also we know from experiments in quantum mechanics that elements that have been at one time 'intimately' joined remain so regardless of spatial separation. What seems to be involved here is a communication, a transfer of information, in ways not currently understood. Physical communication, baryon, and lepton, appears to be limited by  $v \leq c$ , but in the quantum experiments this limit may be violated.

Also involved seems to something of the nature of what we call mind. The birds have created a 'joint mind'. Perhaps **mind** is a set of elements, organisms, joined by a different kind of communication than we normally use. This communication does not necessarily require neurons, synapses, etc. as the brain researchers posit as the basis of mind. For no such **wired links** are employed by birds, fish, and ants. Mind uses wireless communication, but not necessarily any new form. Its instant delivery over any distance calls for something beyond gauge bosons

# THE BIRDS PART I

JANUARY 23, 2001

In 1963 Alfred Hitchcock made a movie entitled "THE BIRDS". As with most of his films there were the usual elements of suspense, mystery, and horror. In this picture Hitchcock indulged one of his favorite ploys of having the threats and horror arise in a place ordinarily deemed safe and from agents conventionally perceived innocuous. In this case the innocuous agents that turned threatening were birds. How could this twist of having birds become frightening monsters work against the contrary ingrained experience of an audience? But it did work! I think it worked because of a mystery that surrounds these "innocuous" creatures. In some sense we have always held birds in awe, maybe similar to the awe we bestow on our deities. They can fly and for millennia we have been envious and dreamed of ways we could imitate them. But in the century in which we finally mastered their skill to fly, we look at them once more and see they are masters of other skills that leave us again in awe.

To watch hundreds of birds simultaneously take off from a wetland. rise chaotically into the sky, fly and counter fly in all directions, never colliding; then to suddenly emerge into a pattern that we can perceive as order, all moving in unison to the tick of some unknown clock; then returning to one massive chaotic scramble, only to re-emerge in two or more orderly flocks, flying and counter flying in many directions; repeatedly altering between chaotic and orderly patterns. If flying is one of their skills, their mastery of coherence is an even more remarkable one. The birds seem to know something very basic that we in all of our sciences have entirely missed.

We can only speculate: Do they use some unknown mode of communication? Or is it they possess built in non-invasion zones to avoid collisions? and the size of such a zone depending on their flight speed. Or are they demonstrating pre-scripted dances? Or are all attuned to a single director of a flight orchestra? In any event it appears to us that from time to time they create a super-organism which contains each bird and which in turn each bird seems to contain.

The division between order and chaos as birds perceive the world is apparently quite different from our perceptions. Watching their performance makes us feel that we appreciate only the simplest forms of order. Their level of handling complexity seems far superior to ours. But order is not only an objective mathematical arrangement, it involves the observer and his subjective limitations. Perhaps the explanation lies in dimensions. Human experience, until the present century, has been almost entirely two dimensional. The birds may have evolved their superior abilities for coping with complexity from the demands of motion in three dimensions.

For hundreds of aircraft to fly without a collision in the close proximity in which a flock of birds operate is beyond imagination. Humans have great difficulty trying to achieve anything resembling laminar flow on a one-dimensional freeway. But maybe a clue to the secret of the birds lies in our learning how to turn automobile traffic into a "super-organism".

## BIRDS PART II

FEBRUARY 1, 2001

C. G. Jung notes that a flock of birds assembling in an unlikely place bears a traditional mantic symbolism of an impending death. He recounts a typical incident<sup>1</sup>:

The wife of one of my patients, a man in his fifties, once told me in conversation that, at the deaths of her mother and her grandmother, a number of birds gathered outside the window of the death-chamber. I had heard similar stories from other people. When her husband's treatment was nearing its end, his neurosis having been removed, he developed some apparently quite innocuous symptoms which seemed to me, however, to be those of heart disease. I sent him along to a specialist, who after examining him told me in writing that he could find no cause for anxiety. On the way back from this consultation (with the medical report in his pocket) my patient collapsed on the street. As he was brought home dying, his wife was already in a great state of anxiety because, soon after her husband had gone to the doctor, a whole flock of birds alighted on their house. She naturally remembered the similar incidents that had happened at the deaths of her own relatives and feared the worst.

This same symbol of impending death was experienced by our family. My wife, Donna, had been driving when she had a stroke and was taken to the hospital with minor injuries. For several days she seemed to be in a stable condition. Returning from the hospital one afternoon, I saw on the roof of her book store, where she spent most of her time, a score of crows, sitting or flying back and forth to a nearby tree. I remarked the event to others, but none of us at that time had heard of the prophetic symbolism associated with such a gathering of birds. Donna died a day later.

When placed in juxtaposition with other powers that flocks of birds seem to possess, the view becomes compelling that some basic aspects of nature escape the epistemology of science. Part of this may be that individual birds do not possess unusual powers; those powers emerge only in an aggregate. A reductionist-oriented science, predicated on the view that explanations are to be found in the parts, will never explain such emergence. But more important is the inference that our particular sensory windows on the physical world are partial. And that no matter how we may extend them with telescopes, microscopes, or other devices, there are parameters that remain inaccessible and unknown to us. And this becomes even more disconcerting when it implies that our way of thinking and reasoning, the processing and assimilate of our experience, may itself be a box blocking us from access to the real nature of the world we live in.

It is here that we must express our respect to peoples such as native Americans, who recognize other creatures as brothers, not as inferiors. All creatures are specialists, some have developed faculties and skills exceeding ours, others have developed faculties and skills totally different from any that we possess. The special development in which Western man exceeds seems to be arrogance.

---

<sup>1</sup>From "The Interpretation of Nature and the Psyche" by C.G. Jung and W. Pauli

# CRITICAL SYSTEMS

JUNE 18, 2010

To watch the uncanny synchronization of a starling flock in flight is to wonder if the birds aren't actually a single entity, governed by something beyond the usual rules of biology. New research suggests that's true.

1. Mathematical analysis of flock dynamics shows how each starling's movement is influenced by every other starling, and vice versa. It doesn't matter how large a flock is, or if two birds are on opposite sides. It's as if every individual is connected to the same network.

That phenomenon is known as scale-free correlation and transcends biology. The closest fit to equations describing starling flock patterns come from the literature of "criticality," of crystal formation and avalanches -systems poised on the brink, capable of near-instantaneous transformation.

" "being critical is a way for the system to be always ready to optimally respond to an external perturbation, such as predator attack," wrote researchers led by University of Rome theoretical physicist Giorgio Parisi in a June 14 Proceedings of the National Academy of Sciences paper.

Parisi's team recorded starling flocks on the outskirts of Rome. Some had just over 100 birds, and others more than 4,000. Regardless of size, the correlations of a bird's orientation and velocity with the other birds' orientation and velocity didn't vary. If anyone bird turned and changed speed, so would all the others.

In particle physics, synchronized orientation is found in systems with "low noise," in which signals are transmitted without degrading. But low noise isn't enough to produce synchronized speeds, which are found in critical systems. The researchers give the example of ferromagnetism, where particles in a magnet exhibit perfect interconnection at a precise, "critical" temperature. "More analysis is necessary to prove this definitively, but our results suggest" that starling flocks are a critical system, said study co-author Irene Giardina, also a University of Rome physicist. According to the researchers, the "most surprising and exotic feature" of the flocks was their near-instantaneous signal-processing speed. "How starlings achieve such a strong correlation remains a mystery to us,"

# CROWS

OCTOBER 3, 2006

A story related by Khakendra Pun, a Nepalese who lived in a remote mountain village.

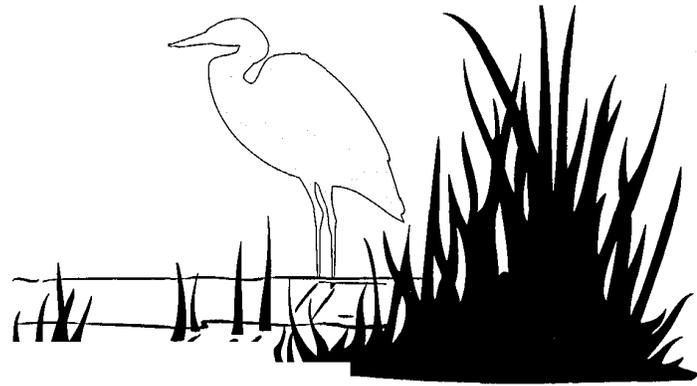
"I grew up listening to the crows sing in our village. Over the years I learned to understand the meaning of their sounds. We believed that the crows brought us messages. We were familiar with two of their sounds. Whenever the crows made this sound, 'kaa, kaa, kaa' speaking very fast and flying over our heads it meant, someone was coming home from far away. And if they made this sound, 'kaa, kaa, kaa, kul-dung, kaa, kaa, kaa, kul-dung' in a very soft voice we knew they meant someone was sick and was going to die in our village."

But such anecdotes are just lore, because only standardized repetitive events can be called scientific. Nonetheless, many of those unstandardized events that repeat here and there from time to time remind us that much of reality lies beyond the grasp of science.

*Flocks of crows collect before death to assimilate <sup>th</sup> BEING of the one to die*  
*Flocks of vultures collect after death to devour th flesh of th one whodied*

## BEING VS DOING

● The White Egret who lives in the Laguna has become my guru. I watch her patience, standing on one leg for long hours on end, not asleep, but intensely alert, awake, and in the present. When the fish moves then the egret strikes. The lack of motion is not the sign of inactivity, rather it is the preparation for activity. In our world of ubiquitous noisy activity, most of it has little significance. The fish is either scared away or is caught at great expense of energy. We have much to learn from the white egret.



I sometimes speculate on whether the egret centuries ago observed the Buddha and adopted his wisdom, or the Buddha observed the egret and emulated her wisdom. Perhaps they both independently discovered the proper way to retrieve life's fish. And this perhaps was the source of the old adage: don't give someone a fish, teach them how to fish. Tell them to watch the egret.



12/12/1989

This morning winter was in full bloom (so far as is possible in California). The temperature dropped to the low twenties, the bird bath was frozen solid, and a thick frost whitened the orchard. The frost on the shingles created the illusion of snow on the roof and the junipers and cedars bending under the weight of the heavy frost conformed to the greeting card shapes of trees burdened with snow. A thick fog settled all around shrinking the world into the intimacy of a cozy room. The lagoon loomed through the fog dark, frozen, and bleak. Last year's solitary egret whose whiteness stood in stark contrast to the December darkness was missing this year. But even in the absence of that luminous symbol of life, the scene paradoxically radiated a strange warmth and coziness. Some invisible presence suffused the world with peace. How strange this affinity of closure with completeness, of solitude with joy

I think we have never understood the true nature of winter. We glimpse its inert beauties and briefly behold its transforming spirit, but its real power eludes us. What we glimpse of winter we attempt to subsume with our cultural symbols, but we only capture a spoonful of the ocean. To recognize the warmth in winter's bleakness and the joyfulness in its solitude requires a different kind of sensitivity than that inculcated by our urban culture. It requires the sensitivity of Mila Repa sitting alone under the stars naked on a lofty glacier. Or the sensitivity of the white egret standing alone on one leg enshrouded by fog in the frozen lagoon

## TURKEYS

One of the joys of living in the country is viewing the visits of various species of wild life. Where I live, we are frequently visited by deer, foxes, racoons, and wild turkeys. Some visits are random, some quite regular. Over the past year we have noted the regular appearance of a flock of wild turkeys who evidently have a tour route that takes them about 10 days to cover. When first noted we counted about 25 adult birds in the flock. But over the months their number gradually decreased. It dropped to 9 and held steady at 9 for several cycles, then dropped to 2. We could only speculate on the causes of their diminution, was it something wild or domestic killing them? And for the last few weeks I have been saddened when only one turkey showed up.

Today has been a difficult day for me. A tooth infection, a back problem, feeling down all day. Now it is evening, about 7 PM. A few minutes ago, I went to close a window and saw something moving in the yard. Then it appeared several things were moving among the grass and weeds. Then a turkey came into view from behind some brush. Immediately I saw that the things moving in the grass were chicks. I started to count them and more and more appeared following the mother turkey. There were at least a dozen wandering around but always remaining near mom. Then a second turkey appeared bringing up the rear. This turkey was making sure there were no stragglers and was on the lookout for any danger. This must be dad doing just what fathers are supposed to do.

My mood had changed completely. Suddenly my feelings of depression were gone, replaced by a knowing joy. Seeing this archetypal family somehow reassured me that God was in his heaven and all was going to be right on earth. The missing turkeys were here again. Life was going to continue with both guidance and protection. And the message was that the guidance and protection are ever present and at all levels.

## ABOUT DUCKS AND QUACKERY

A few weeks ago, I believe it was September 20, Rupert Sheldrake was in town and we went to hear him review his recent book on Dogs. He related many curious anecdotes regarding the "telepathic" powers of dogs and cats. According to his stories, animals can not only pick up on human thoughts at a distance [e.g. master's or mistress' intent to return home at an unusual time] but can perceive human intentions [e.g. we will be going to the vet]. Many of these cases were done under strict controls and could therefore be considered scientific results, some even being repeatable.

Yesterday [October 7] I was in Rohnert Park and driving past a large artificial pond noticed numerous water birds-ducks, geese, even a couple of swans-out on the lawn. They were scattered, but in groups, resting, some sleeping. A great photo-Op! Being about 1:30 pm I guessed they were taking their afternoon siesta. I got my camera and approached carefully. They were unconcerned and indifferent to my wandering among them shooting pictures. I was grateful to all the humans whom they had previously encountered for engendering in them such an attitude of trust. My picture taking didn't disturb them, except here and there one or two would wake up look me over and go back to sleep.

On my way back to the car after taking about a dozen pictures, I felt that I should thank them for being so cooperative. So, I stopped a short distance away, turned toward them, stood silently and sent them a mental message, a silent blessing of love and oneness. Almost immediately a great many of them got to their feet craned their necks up and began clucking and quacking. A great chatter seemingly in response to my silent message. After a short time, they fell silent but still stood erect as though waiting for me to reply to their response. I left, but later looking back saw that they had settled back to their siestas.

My physical presence did not disturb nor arouse them, but my mental message did. Is there some medium by which living organisms can communicate but is unsuspected by physicists? It is not sonic communication nor is it making use of some part of the electro- magnetic spectrum. Is it possible that there may be some entirely different "spectrum" that emerges only at the level of complexity of life? If so, some animals have developed it far more than have humans. For those who drive on the freeway the coordinated movements of flocks of birds and schools of fish is nothing but awesome.

Legend has it that at least one human, St Francis of Assisi, mastered this mode of communication. So, with humility perhaps humans can learn from our animal brothers and sisters something about ourselves we have long ignored. <sup>1</sup>

By the way, What is the origin of the term "Quackery"?  
'I checked, October 4' not October 7' is St. Francis' feast day

# BIRDS AND OMENS

By David La Chapelle

In August of 1939, only few days before the outbreak of war, two hundred and fifty pigeons attacked each other in Trafalgar square in London. That same week scores of blackbirds were found dead, washed along by the waters of the Danube. At the time these unaccountable deaths were considered an omen of war. A recent spate of robin deaths across Central Texas is under investigation by the Texas Parks and Wildlife Department's Kills and Spills Team of environmental scientists. Observations of dead and dying robins were first reported near Dallas in mid-January and have tracked the bird's migration as far south as Gonzalez. The incidents range from a few dead robins observed in suburban back yards to several hundred in a five-block area in Waco. (From the Texas Parks and Wildlife web site in February of 2003)

Omens might be conveniently dismissed as the imaginings of the deranged except for the fact that Einstein is turning in his grave. We live in a non-local universe and we now have scientific proof of what we know from the wisdom of our souls. There is a way in which life unfolds as if it were aware of what is happening within and around us. Events large and small confirm the undeniable intelligence of this unfolding. As we move through our world the world reflects back our progress in the form of synchronizations, accidents and omens.

When the space shuttle Columbia broke apart, it broke apart not over India, nor Asia, or Europe, nor even the Pacific. The first pieces hit the coast of America and the bulk of the debris fell upon Texas. The state that is the home to the President that is launching a war to ensure our freedom. Omen? You decide.

What we do know now about the Columbia is that engineers envisioned the precise pattern of action that accompanied the disaster before it happened. In the end the warnings were dismissed as the worst-case scenario and nothing was done. The result was disastrous

The robins' deaths and the Columbia's terrible end may only be accidents. But then again, in this highly charged time, they may not be.

The arrogance, unilateral insistence, bullying, refusal to listen to other points of view and rush to action without a compelling case for such speed is the mark of hubris. And as the Greeks, the progenitors of our western civilization, understood only too well, when hubris flies high, it must come crashing down to earth. The robins' deaths and the Columbia's terrible end may only be accidents. But then again, in this highly charged time, they may not be.

Paul Tillich, a theologian and a deeply soulful man, described this process as Kairos: An outstanding moment in the temporal process, a moment in which the eternal breaks into the temporal -shaking, transforming it, creating a crisis at the depth of human existence.

If this is a non-local universe, one interconnected and intent of evolving a self-reflecting image of its own inherent unity, then the omens of the physical world become important signposts of humanities progress. Freedom appears as true alignment with the self-revealing nature of consciousness. Illusion appears when man's ego projects his own agenda onto the world and hopes to control the outcome of his ambition.

*These paragraphs are excerpts from David La Chapelle's article:  
A NON-LOCAL UNIVERSE, FALLING BIRDS, AND THE RUSH TO WAR.*