

Sometimes to get a new perspective on a pose, it helps to go outside the yoga tradition. A world-renowned bodyworker shows three *Yoga Journal* editors how to approach their bodies' idiosyncrasies in Downward Dog.

To help *Yoga Journal* Managing Editor Nora Isaacs understand and improve her Downward-Facing Dog Pose, master physiotherapist **Jean-Claude West** provides her with hands-on neuromuscular retraining.



Old Dog, By Linda Sparrowe
New Tricks PHOTOGRAPHS BY DAVID MARTINEZ

IF YOU'RE LIKE MOST yoga students, certain poses just don't feel good to you. No matter how many times your teacher gives you corrections—tilt your pelvis forward, lift from the sternum, open your armpit chest—nothing helps. In fact, you think you *are* tilting your pelvis forward, lifting your sternum, and, well, what exactly is an armpit chest anyway? Even if you can do the pose the way you've been taught, or the way B.K.S. Iyengar does it in the asana bible *Light on Yoga*, you certainly don't feel the steadiness and ease Patanjali's *Yoga Sutra* says you're supposed to feel.

It might make you feel better to know you're not alone. Even the most accomplished yoga practitioners and teachers have challenges they can't meet without help. For John Berlinsky, a well-known Mill Valley, California Ashtanga Yoga teacher with a strong personal practice, Eka Pada Sirsasana (Foot-Behind-the-Head Pose) was the nemesis. Looking at him in the asana, you'd never suspect a thing; he has incredibly open hips and strikes a lovely pose. But his back was killing him. He knew something was wrong but couldn't figure out what. He sought out yoga teachers for advice, and other specialists too. They all wanted to dissect his backbends. But there was nothing wrong with those. He finally went to **Jean-Claude West**, a world-renowned kinesiologist (someone who studies human motion), who asked him to put his foot behind his head. "It's your scoliosis," Jean-Claude announced. Scoliosis produces an abnormal side-to-side curvature of the spine. John was exaggerating an already overpronounced curve, causing imbalance and pain.

Over the next several months, the two of them worked together, breaking down the elements of the pose to better understand its biomechanics. Then, through a series of stretches, manipulations, and exercises designed to change the habitual patterns of movement and posture ingrained in Berlinsky's body (a technique

called neuromuscular repatterning), Jean-Claude helped him find a way to do the pose that didn't hurt. Their collaboration did not produce a quick fix of John's back pain, by any means. It took months of sessions before John's mind let go of his old habits and his body finally integrated the changes. Although John can now practice Eka Pada Sirsasana with ease and comfort, he continues to see Jean-Claude regularly. Not only have his sessions with the kinesiologist helped him in his personal practice, John says they have made him a better teacher as well.

John's experience is far from unusual. Many practitioners have sought advice

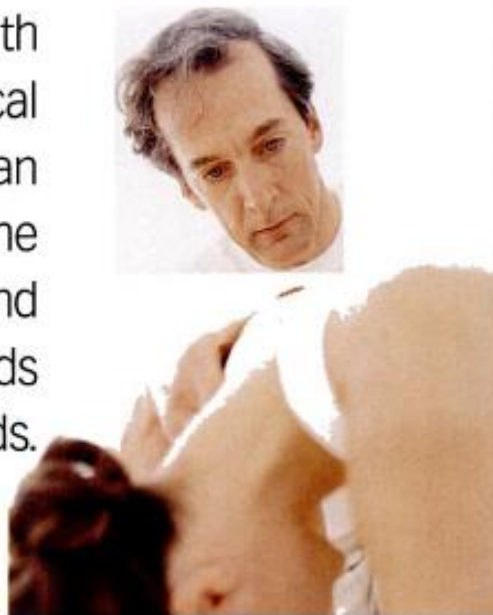
One benefit of working with chiropractors or physical therapists is that they can help you understand the biomechanics of the pose and the way your body responds to the pose's demands.

and adjustments from outside experts trained in a variety of systems like Pilates, Feldenkrais, the Alexander Method, and Gyrotonics (a movement system also known as White Cloud). Still others rely on sessions with chiropractors or physical or massage therapists. One benefit of working with such experts is that they can help you understand the biomechanics of the pose and the way your body responds to the pose's demands. Why, for example, can't you release your pelvis in forward bends? Just how do your tight shoulders make doing a headstand so difficult? Through hands-on manipulations, neuromuscular repatterning, or specific stretching exercises, the therapist can create more flexion in your pelvis or opening in the shoulders.

The downside of seeking this kind of outside assistance is that it's not always easy to describe to nonyogis exactly what

you're trying to achieve. How do you explain the dynamics of Trikonasana (Triangle Pose), for example, or the mechanics of Pincha Mayurasana (Forearm Balance), or the proper alignment of the body in Urdhva Mukha Svanasana (Upward-Facing Dog Pose)?

In order to figure out how to get the most out of a physical therapy session, Vesela Simic, Nora Isaacs, and Todd Jones, three of *Yoga Journal's* editors, agreed to have **Jean-Claude West** scrutinize each of them in Adho Mukha Svanasana (Downward-Facing Dog Pose)—and allowed us to capture the process on film. Although Jean-Claude is relatively new to yoga, he



has a worldwide reputation as a master physiotherapist who works with dancers to create more functional movement patterns. Ballet and modern dance companies all over the world have relied on him to fix injured dancers and correct the bad habits that may have caused those injuries. Mikhail Baryshnikov and Mark Morris are among those who have benefited from his expertise; so have dancers from New York City Ballet, National Ballet of Canada, Houston Ballet, and San Francisco Ballet. Lately Jean-Claude has turned his attention to yoga practitioners, and he sees students and teachers alike from many varieties of hatha yoga.

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STYLING: JENNA NANNING/WORSHIP; HAIR: FRANCES DUSHANE/ZENOBIA; CLOTHING: VESULA; CHAMPION (TOP); NIKE (BOTTOM); NORA: CITY LIGHTS; TODD: EVERLAST; JEAN-CLAUDE: GAP BODY

Vesela often feels congestion in her neck, shoulders, and upper back in Downward-Facing Dog and has difficulty incorporating her teachers' suggestions that she extend her spine by grounding through her legs and pressing into the thumb and forefinger while drawing her shoulder blades down her back.

Jean-Claude believed that Vesela had two problems that prevented her from comfortably orchestrating the pose. The first began when she tried to put some of her weight into her hands.

To create stability in the pose, the balls of the fingers should root into the floor

through a slight pronation (inward rotation) of the lower arms, while the upper arms externally rotate. Unfortunately, Vesela couldn't disassociate the movement of her lower arm from that of her upper arm. When she attempted to press her hands into the floor, her upper arms rotated in along with her lower arms, causing a pinching in the shoulders and tension in her neck (Figure 1). This first problem was related to a second problem, located in her torso: using the wrong muscles to extend her arms overhead. This also prevented her from externally rotating her upper arms and elongating her spine. According to Jean-Claude, Vesela used her latissimus dorsi muscles (the "lats") and her oblique abdominals, instead of the serratus interior. The lats are large back muscles that encourage *internal* instead of external rotation of the upper arm and *prevent* the arms from releasing overhead. The serratus interior, muscles that arise from the upper ribs in front and connect to the scapulae (shoulder blades) in back, keep the ribs stationary and allow full extension of the arm. Because Vesela could not engage her serratus, she compensated by using her external abdominal obliques and lats instead of her serratus. Vesela overpowered the ability of the muscles along her spine to lengthen, created exaggerated roundness in her thoracic spine, and rolled her upper arms in instead of out.

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Jean-Claude began working with Vesela's upper arm rotation in Child's Pose. As Vesela pressed through her thumb and forefinger, Jean-Claude held her hand down to keep it in place and, at the same time, gently twisted her upper arm in toward the body. Vesela resisted his twisting motion, moving her upper arm and shoulder outward.

Once Vesela could externally rotate her upper arms, Jean-Claude taught her to activate her serratus, increasing her shoulders' range of motion. The combination of externally rotating the upper arm and engaging the serratus creates what Jean-Claude calls a "close-packed position" of the shoulder ligaments, resulting in a strong, stable upper body base for the pose. To achieve this, Jean-Claude took Vesela through a series of subtle movements in Child's Pose designed to isolate the serratus. When Vesela could distinguish between gripping the lats and engaging the serratus, Jean-Claude had her move into Downward-Facing Dog. Once she had established strong upper body support, Jean-Claude cued her to lift up from the sitting bones and press the heels into the floor to help her spine extend properly. After Jean-Claude's coaching, Vesela could better align her upper and lower arms, create less constriction in her neck and shoulders, draw her shoulder blades further down her back, and more fully extend her spine (Figure 2).

Figure 1 (Before)



Vesela works to incorporate Jean-Claude's coaching in her Downward-Facing Dog Pose.



Figure 2 (After)

Less constricted neck and shoulders

Better arm alignment



Nora always thought her Downward-Facing Dog suffered because of the tightness in her shoulders and back. She also thought she had flat feet and that she tended to hyperextend her knees, but she didn't really think those lower body tendencies had anything to do with the pressure she felt in her upper body.

Jean-Claude disagreed. Actually, he said, Nora had quite a bit of rise in her arch; it just appeared flat because she turned the whole inner side of her foot toward the floor (pronated) in order to push her big toe down. The reason she did that, Jean-Claude explained, was that she couldn't dissociate movement of her first metatarsal (the bone that extends back from the ball of the big toe) from movement of the rest of her foot. In other words, when she pressed into her big toe, her whole foot collapsed toward its inside edge (Figure 3). In turn, pronating the foot led to internal rotation of her shinbone.

To ensure a stable lower body in Downward-Facing Dog, it's important to form what Jean-Claude calls a "three-dimensional dynamic model" with the foot—which is exactly what your yoga teacher means when he says, "Ground through your feet, distributing your weight equally from side to side and front to back." The lower part of the arch of the foot is made up of mostly ligaments and a few muscles, which spread the weight evenly between the metatarsal heads and the heel, helping you create a tripod of equal pressure and support.

Nora's pronation made achieving that tripod almost impossible and resulted in myriad alignment problems. Pronating her foot caused more than just her arches to flatten out and her ankle to turn in. It also caused a twisting in her entire leg, all the way up through the hip joint. The torsion

on one side diminished how far (and how evenly) her hips could rotate and stressed the soft tissue that stabilizes her sacrum and lower back. Nora's pronation also created a functionally shorter leg. On top of all this, because she couldn't move her hips up and back properly, her weight was moving too far forward, putting pressure onto her shoulders, neck, and upper back. All that just because she dropped in at the heel!

Nora

Jean-Claude worked with Nora in two ways. He started by helping her to isolate movement of her first metatarsal. To do that, he had her anchor her big toe into the sticky mat; he then supported the highest bone of her arch and asked her to draw her toes in toward the center of her foot, making

the foot smaller (Figure 4). This support allowed Nora to put weight onto the outside of her foot without lifting the big toe (Figure 5). If he had simply told her to move her weight more to the outside of the foot, she would have lost the ability to anchor her big toe down.

To further encourage proper action of the foot, Jean-Claude worked on Nora's lower shinbone. He did this by manually exaggerating the internal rotation of her leg, which he then asked her to resist. This allowed her to discover the proper degree of rotation her shin needed. Jean-Claude repeated this action several times. By the time Nora went up into Downward-Facing Dog, her heel no longer turned inward, and you could see the difference all the way up through her leg and hip.

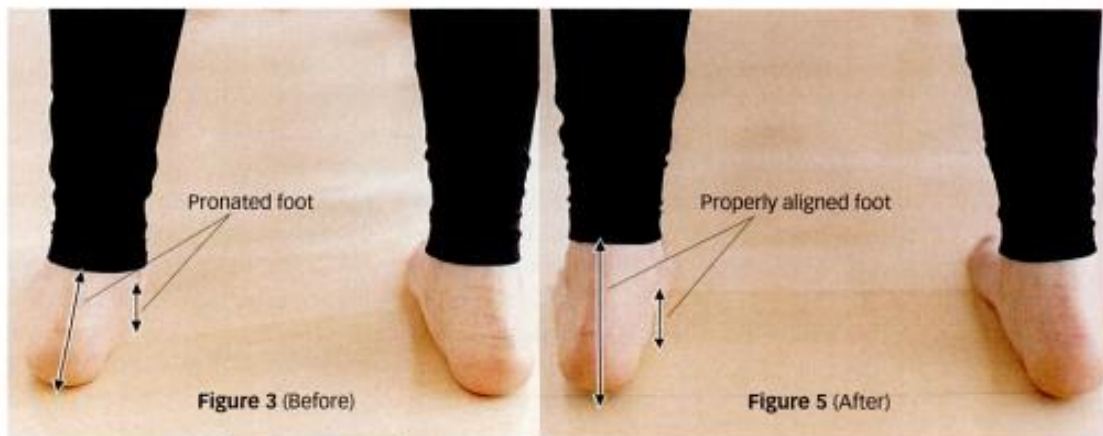


Figure 4

Jean-Claude coaches Nora to soften her abdominal obliques as she comes into Downward-Facing Dog.



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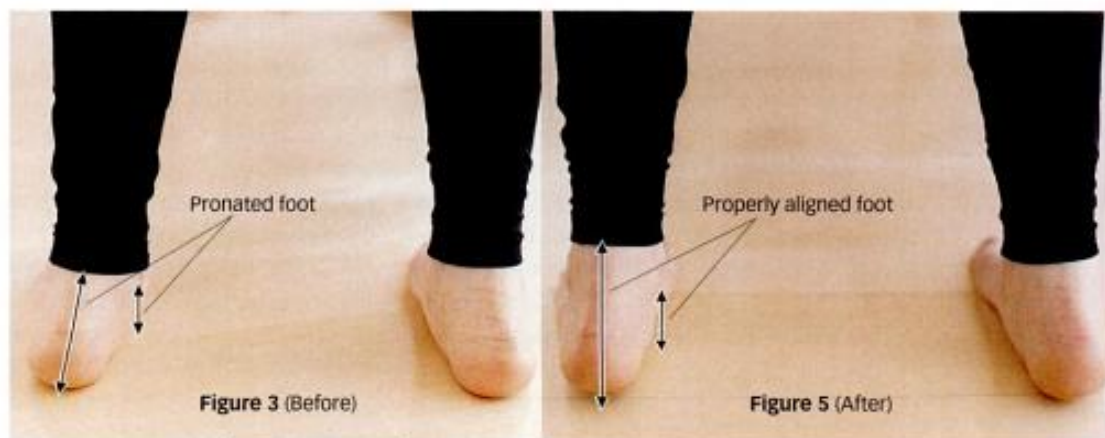


Figure 4

Jean-Claude coaches Nora to soften her abdominal obliques as she comes into Downward-Facing Dog.



Like Vesela, Todd experiences some difficulties with the arm and shoulder movements in Downward-Facing Dog, but even more trouble getting his thighbones (femurs) to press back and rotating his pelvis forward over the heads of his femur bones.

Jean-Claude noticed that in Downward-Facing Dog the curves in Todd's back run counter to those of a healthy back: His thoracic spine is concave (it dips in) while his lumbar spine, the lower back, is convex (rounded out; *Figure 6*). It appeared to Jean-Claude that Todd was compensating for the reversed curve in his lumbar spine by hyperextending in his midback area. This habitual hyperextension makes it more difficult for Todd to find a neutral

spine position in Downward-Facing Dog, and it could create further problems for him in seated poses if he tries to draw himself upright by arching from the midback region in these poses as well. Jean-Claude saw that Todd's inability to fully flex his hips, release his pelvis forward, and lengthen his lower back was largely caused by the fact that his femur heads did not glide from front to back when he bent his torso forward toward his thighs. This front-to-back motion of the thighbones is what Todd needed to work on in order to release his pelvis.

Todd began in Child's Pose, so Jean-Claude could figure out why his pelvis didn't tilt properly. With Todd in that position, Jean-Claude could determine whether

tight gluteal (buttock) or hamstring muscles contributed to his inability to release the pelvis. In Todd's case, those muscles were fine, but his femoral heads remained in a forward position, especially on the right side, possibly because of tight piriformis muscles (one of the hip rotators).

True to his methodology, Jean-Claude pressed down on Todd's sacrum, exaggerating the convex curve of the lumbar spine. Todd resisted this pressure, which caused him to engage (and shorten) his lumbar paraspinals and create a more concave curve in his lower spine (*Figure 7*). They repeated that exercise several times to begin retraining Todd's body.

Todd then moved into Downward-Facing Dog, and Jean-Claude applied pressure to his thighbones from front to back, overriding the gripping of the piriformis and thus allowing the femur heads to move back so Todd could get more hip flexion. (When a yoga teacher stands behind your Downward-Facing Dog and draws your thighs back, they're providing your body with essentially the same re-education.) Repeating this action several times helped Todd soften his hip rotators, release his femur heads, release and rotate his pelvis forward, and elongate his spine without creating as much hyperextension in the midthoracic region (*Figure 8*).

Todd

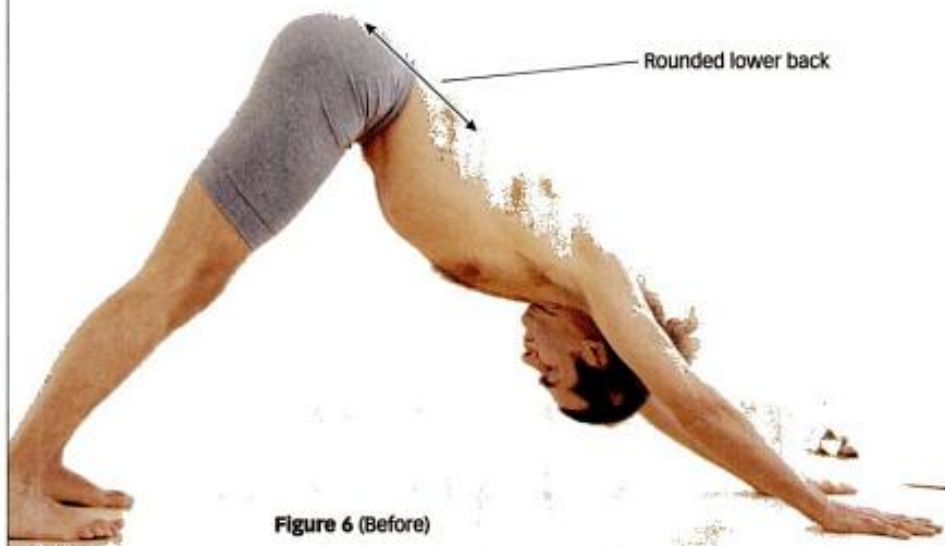


Figure 6 (Before)

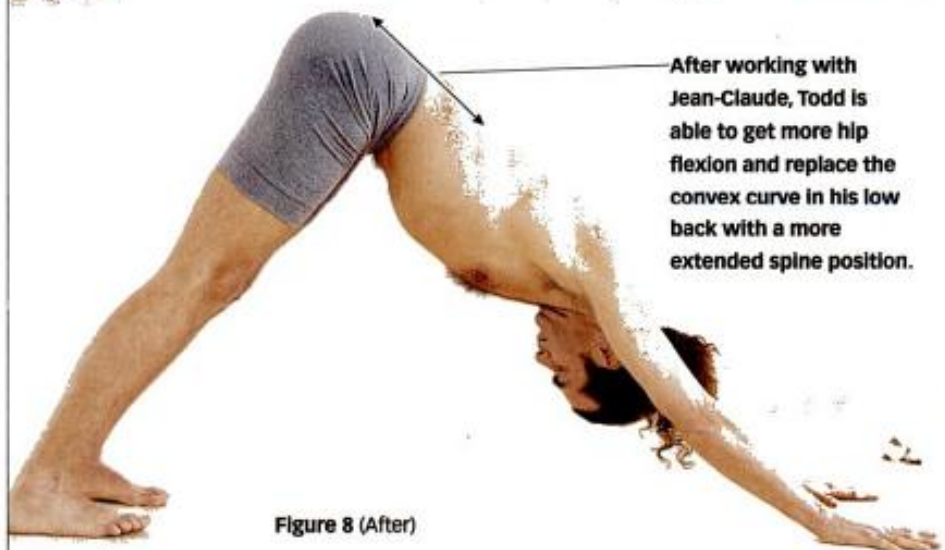


Figure 8 (After)

Figure 7



Meeting of the yoga minds

By Holly Woolard, IJ correspondent

THERE'S A YOGA PARTY in San Francisco this weekend, and as Madonna would say, "Strike a pose."

The four-day Yoga Journal Convention - Friday through Monday at the Hyatt Regency - will feature the world's most respected yogi, including Sarah Powers of Deer Run Zendo in Corte Madera, Tony Briggs of Turtle Island Yoga in San Rafael and Jean-Claude West of Mill Valley.

"This convention allows people to practice with some of the preeminent teachers in the world," said Dayna Macy, Yoga Journal communications director. "This is an opportunity for people to study all day with their favorite teachers."

An estimated 16.5 million Americans practice some form of yoga, and California is home to 20 percent of that population. There are more than a dozen yoga studios in Marin, and several hundred county residents are expected to be among the 1,200 participants at this weekend's conference.

Yoga dignitaries attending the 2005 conference include Dr. Dean Ornish, founder, president and director of the Preventive Medicine Research Institute in Sausalito. Ornish, speaking on "The Power of Yoga," will deliver opening remarks Saturday morning to kick off the main convention.

The clinical professor of medicine at University of California San Francisco is the author of five best-selling books and a renowned proponent of alternative medicine. His clinical research has demonstrated that comprehensive lifestyle changes may begin to reverse severe heart disease and prostate cancer.

And what's a party without music? Marin's own Jai Uttal will take center stage Saturday night when the San Rafael composer/musician leads the yoga faithful in Kirtan - ancient chants and prayers believed to be the heart of devotional yoga.

"These ancient chants contain a transformative power and healing energy," Uttal notes on his Web site. "By singing these prayers and expressing a full range of emotions through our voices we join a stream of consciousness and devotion that has been flowing for centuries."

Uttal will be returning to Marin just in time for the yoga convention after leading a New Year's retreat in Guatemala. The world music pioneer studied Kirtan in India, and has traveled worldwide, including Israel, Fiji, Brazil, Germany and Switzerland, singing the praises of Kirtan.

Following the call-and-response group chanting Saturday night, there will be

yoga trance dance with Shiva Rea. Saturday's chant and dance is from 7:30 to 10 p.m. and open to the public. Admission is \$15.

Whether you've been practicing yoga for decades or seeking a new activity to augment other physical endeavors, the 2005 Yoga Journal Conference has a pose for you. The three primary reasons people are initially drawn to yoga are to reduce stress, increase flexibility and weight control.

Friday is reserved for all-day intensive training sessions, many of which are designed for yoga instructors. For example, West, a highly regarded yogi, is leading an intensive for teachers on the use of postural analysis to visualize body mechanics for more intuitive effective adjustments.

Powers is going to be very busy during the weekend conference, giving five presentations. Her all-day intensive on Friday is on Dharmic yoga, which blends the insights and practices of yoga and Buddhism.

Two-hour sessions Powers will be leading on Saturday and Sunday range from examining how negative psychosomatic patterns can hinder clarity and openness to the psychological value of yin yoga and its relevance to vital energy.

Briggs, a senior teacher at Turtle Island Yoga, has been very busy over the holidays moving his studio from downtown San Rafael to San Anselmo. He's not so busy, though, that he'd miss this annual yoga gathering.

"I like meeting new students," Briggs said. "You want to educate and you want to help them get enthusiastic about their practice. Obviously, I love to do it."

Briggs is also excited to see other yogi who will be flying in from throughout the United States. The conference is a melting pot for a variety of yoga traditions, allowing instructors to learn new techniques and recruit experienced teachers, such as Briggs, for guest appearances at their own studios.

"I've been doing this for 30 years," he said. "I have friends all over the United States. Sometimes I only see them once a year."

Briggs will be leading afternoon sessions Saturday and Sunday. His presentations will focus on melting the outer muscular shell to access potential for inner stability and using twisting poses to find upright and expansive ways of relating to yourself and your surrounding.

For early risers, there will be Sadhana meditation Saturday and Sunday from 4:30 to 6:30 a.m. This is a meditation before sunrise, when the air is cleanest, quietest and most peaceful.

Although most intensives and many sessions are designed for yoga practitioners

with at least a year of experience, there's a beginner series on Sunday and Monday. Topics will range from "What is this thing called yoga?" to the basics of standing and seated poses.

There will be a closing meditation Sunday from 5:15 to 5:45 p.m. that is free and open to the public. Donations are encouraged to support victims of the tsunami disaster in Asia.

Considering that yoga first began in India 5,000 years ago, the Yoga Journal Conference this weekend in San Francisco is ideally timed so followers of this ancient practice may offer spiritual and financial support to those devastated by the worst natural catastrophe of our time.