OFF THE BEAT

est's Secret Weapon

"Werner wants to make Bucky available to the people," said the young woman, smiling, as she led me to "The Event."

"Werner", for everyone east of California, is Werner Erhard, former used-car salesman, now peddler of a surefire way to "get in touch with yourself." He is master of est (Erhard Seminars Training) — a self-help philosophy brewed of equal parts Dale Carnegie assertion training and Zen (SN: 1/14/78, p. 27).

"Bucky" is R. Buckminster Fuller, visionary, creator of the geodesic dome and "synergistic mathematics" — the ultimate alternate thinker. He is the 20th century version of the Renaissance Man — the "Leonardo da Vinci of our time," Marshall McLuhan is supposed to have called him.

"The Event"—or "The Bucky Event," as one est-er called it—was a day-long romp with Fuller through his own separate reality. Werner and Bucky, said the eternally smiling press aide, were addressing the pressing question: "Can an individual make any difference in the world?" Werner was making Bucky available to the nearly 2,000 attendees at \$35 a head—the "net proceeds" will support Bucky's work, the press release noted.

Four blocks from Washington's Sheraton Park Hotel, lest some passerby miss a chance to have his or her consciousness raised, orange-coated est-ers held signs saying "est" and, smiling, waved directions. In the press room, reporters were each given a blue, calligraphed tag that, like everyone else's yellow one, shouted the first name and whispered the last. FRANCINE something explained firmly (but smilingly) exactly where the press was sitting and that pictures were to taken only between 12:30 p.m. and 1:00 p.m. and 3:00 p.m. and 3:30 p.m. ELAINE something escorted another reporter and me to the auditorium.

Inside, The Event was happening. 'Gainst silver and blue silk, Jaime Snyder (Fuller's grandson), Werner and Bucky sat on a spotlit stage. Towering over them, an 8-foot screen let the masses see the players as The Event happened. In the next hours, the screen became real, the figures on stage mere puppets. They sat surrounded by orange geodesic spheres, yellow and red tetrahedrons, fluorescent green rhombohedrons — a playground of Fuller's imagination. Mylar acoustic baffles on the ceiling reflected the stunning spectacle, redoubling and recharging the — oh, for another word — charisma.

But what was R. Buckminster Fuller doing on stage with Werner Erhard that breezy Easter weekend? Erhard, it seems,

300

The Bucky and Werner Show:
Looming larger than life,
Buckminster Fuller (left)
leads a tour through the
universe. Ringmaster Werner
Erhard (below) contemplates
Fuller's geodesic world.

met Fuller in 1975, introduced by Fuller's
grandson, an est trainee. Erhard picked up
Fuller like a shiny dime. staging "events" in

Fuller like a shiny dime, staging "events" in 1976 and 1977 called "The est Foundation Presents Conversations with Buckminster Fuller." Fuller isn't trained in est, but his against-the-grain humanism is est-like enough to make the Fuller-Erhard union a natural one. According to Fuller's philosophy, the technology exists now that can blast us out of hunger and need forever. Trouble is, people don't know how to use it because they don't know the basic, simple laws on which it is founded. Once they get down the basics - and that's what Fuller teaches - the world is theirs. It is a philosophical raft to which Erhard can lash his log of "experienc[ing] yourself as the creator of your own circumstances."

Magnified on the screen, glinting from the shining ceiling, Erhard speaks: "Our purpose for today is to transform the ability to make a difference to having the world work for everyone, to transform our ability. That's not like doing something different to make the world work for everyone. There's a distinction between doing something different and transforming. We're not doing something different because that's related to something we've done before. We want a transformation, making the world work for everyone....

"No one is more eminently appropriate than Bucky [to do this].... I have tears in my eyes...he doesn't have the shield from the world ... he is true humanity ... he represents the best in each of us. I don't want to even say the best; he represents us....He has come up with some real, solid scientific information with which we can think readily....With those principles, you can think for yourself....

"We have hard work to do here today....

To sit there with no understanding—that's hard work. Not knowing is an educational process. We think it's almost an insult to not know, when the great men and women of the world are people who had the courage to not know. We have to get stuck in not knowing....

"You have a lot in common with Bucky. You have all the faculties, humanity ... as Bucky. Both of you have the courage, in a world which criticizes it severely, to entertain the idea that you might make a difference and that you can make the world work....I'm really glad to be able to introduce you and Bucky. Both you and Bucky entertain the possibility that the individual can count and that the world can work for everyone."

After 45 minutes, Bucky is finally available. A standing ovation; a screenful of Bucky—83, white hair brush cut, soft eyes magnified by his glasses.

To Erhard he says: "You really understand. You really understand what I've done with my life. When two think alike it's the beginning of a new era." Flash to Erhard. Are there tears in his eyes?

Fuller begins. He is wonderful. A little haltingly at first, he tells his now-famous tale of the flashpoint of his life: how, as a 32-year-old "out-and-out flop" he was snatched from the brink of suicide by a decision to "make his life an experiment" to help other humans, to become "absolutely a throw-away bundle."

Then he's off and running and the audi-Continued on page 302

SCIENCE NEWS, VOL. 115

... Scoliosis

iner looks for several things: an obvious spinal curve, elevation of one shoulder, prominence of the scapula, asymmetry of the waist, prominence of the hip, trunk shifted out of balance. Of greatest importance, however, is the forward bend test. Scoliosis in its early stages is most easily detected when the youngster bends forward, which causes an otherwise undetectable rib hump to become visible.

If abnormal spinal curvature is detected, there are three options, depending on the severity of the curve. For a minor curve, observation without further treatment is called for. If the curve is not seen to progress during follow-up exams every three to six months throughout the growth period, the scoliosis probably will not progress and will cause no problems.

Slight to moderate spinal deformities can usually be treated effectively by various bracing techniques (the Milwaukee brace is the one most commonly used). The brace, which must be worn for a minimum of one year, stretches, or distracts, the spine while applying constant pressure to the apex of the curve. This treatment, along with a rigorous physical therapy program, can halt the progression of the curve and correct the deformity.

The third option - for moderate to severe deformities — is surgical correction, and the most commonly performed procedure for scoliosis is the Harrington rod implant. A stainless steel rod with an adjustable hook at the top is attached to the posterior spinal column above and below the curve. The hook is adjusted upward until the spine is elongated as much as possible to correct the curve. The implant is permanent, but most patients achieve a fairly normal level of physical activity within one year.

Jesse H. Dickson, orthopedic surgeon at the Institute for Rehabilitation and Research in Houston, Tex., performs as many as 100 spinal operations per year. He describes his work as "a cross between ditch digging and eye surgery," and hopes that early detection through screening programs eventually will make the spinal correction operation unnecessary.

A thorough screening program could "obviate the need for surgery," says William J. Kane, professor of orthopedic surgery at Northwestern University and president elect of the Scoliosis Research Society. With the help of the society, the state of Delaware is already screening 100 percent of its school children, and several other states are reaching 60 percent to 75 percent of school children. Kane is optimistic that within several years all states will begin to take the scoliosis screening program seriously and that ideopathic scoliosis - although still an incurable enigma - will no longer have to result in unacceptable deformity.

.. Off the Beat

ence is with him all the way. How can you not love him? He explains the world with a child's freshness. Bobbing about on stage, he acts out his "six basic forces" of nature -axial, orbital, torque, inside-out, expansion and precession. The audience laughs, claps, nods. He scorns scientists who say they can't explain things "because they don't have a model." They're like your favorite uncle, he says, who, in answer to the inquisitive child, leaves the room saying, "I've got to get a cigar." They love it. He pulls out the typical schoolroom world map, which "shows Greenland as bigger than South America and Europe thousands of miles from Asia." He discards it disdainfully, and replaces it with Fuller's undistorted map of the world. They eat it

"By converting all our resources from weaponry to 'live-nry,'" he says, "in 10 years ... we can phase out fossil fuels and atomic energy and live on our energy income." Standing ovation. "But you know," he confides wickedly, "it would be devastating to the economy to have humanity be a total success." More applause.

Then he begins his work in earnest explaining the world as a triangle. The basic unit of nature is the triangle, he says, because "nature always works with minimum effort." If the square were the basic unit of nature, then it should be the most stable unit. But it isn't, he shows with his models. A cube cannot stand freely. He kicks it aside in disgust. A tetrahedron can. Voila - nature must be built on the noble triangle. A square is really two triangles; squaring should be called triangling; cubing should be tetrahedroning. "And saying triangling is the difference between whether we're going to make it or not." "Triangling," shouts the audience. The geodesic dome, based on triangles, is the strongest, most resource-conserving structure. The screen flashes with geodesic radar stations, geodesic homes, geodesic auditoriums until you believe they are as much a part of nature as a tree.

And how can you not believe it? He is Mr. Wizard. In the flash of color and light on stage he is the only real thing. In the midst of Erhard's meaningless mush of words, Fuller alone makes sense. And he is handing you the key to the universe.

He is tearing apart one of the geodesic spheres now, talking all the while. He pauses, holds up a single, bright red tetrahedron pulled from deep within the sphere. "This," he says, "is a quark."

"Wow," says a woman behind me. He is est's secret weapon.

-Susan West

^{the}SunMotor

This is a Stirling Cycle Engine. A remarkable machine that doesn't require water, steam, ignition nor sophisticated fuels, but needs only heat to run.

The heat may be from any source: open flame, glowing charcoal, an electrical element, or if the engine is fitted with a parabolic mirror, it will run on solar energy!



Dramatic and conclusive proof of man's ability to harness the power of the sun for his own needs.

CALIDIN .
* 3/4" bore 31/2" flywheels

- All metal construction Hand-assembled, factory
- tested and ready to run
- Speeds in excess of 2000 **RPM**
- Fully guaranteed

302



Telephone orders accepted: (602) 274-3541

Solar Engine	s • 2937 We	est Indian Sc	hool Road ● Ph	oenix, AZ 85017 U.S.A
Please send	\$ 9 \$15.00 \$			
Domestic shi		t postpaid. C	verseas orders	TOTAL
Check			☐ AM. EXP	BAC
INTERBANK NO		CAR	D NO	EXPIRATION DATE
SIGNATURE				
NAME (PLEASE PI	RINT)			
ADDRESS				
CITY		STATE		SN ZIP

Book Publishing

Manuscripts invited for prompt review and terms of publication. All subjects. Professional diting, design, production and marketing since 1920. Send inquiry or manuscript, or call (215) 642-8303. Ask for free Authors' Guide BE. DORRANCE & COMPANY 35 Cricket Terrace, Ardmore, Pa. 19003