

# Octopus's Garden 2030: Emerging Developments in Deep Sea Exploration

In the 20th century, we extended our reach up and out to the birth of time 15 billion years past — and in and down to the frozen motion of molecules. But the Hubble space telescope and scanning electron microscopes are merely tools to let us see. What we really want to do is visit. Just as we are pushing up and out of the gravity well with spaceflight, we are also pushing in and down to the bottoms of our oceans.

Ye gentlemen of England  
That live at home at ease,  
Ah! little do you think upon  
The dangers of the seas.  
— Martyn Parker

By Wendy Schultz

**We already live on Waterworld:** oceans cover over seventy percent of the Earth's surface. With scuba gear, divers routinely swim to depths of 300 feet. But everything below that is considered "deep sea," and deep sea comprises 60% of our oceans. Here, then, is both the opportunity and the risk: the ocean depths offer more daunting technical challenges than deep space.

Space vehicles, of course, must tolerate sunside temperatures of 250 F in tandem with lows of -250 F, and shield their contents against both radiation and space debris. Yet deep ocean vehicles must tolerate a similar temperature variance — 35 F in the coldest depths to 750 F near hydrothermal vents — as well as protect against one of the most corrosive substances on Earth: saltwater. Where astronauts need only suit up for a one atmosphere

difference in pressure, divers endure a one atmosphere increase in pressure for every 33 feet (10 meters) they descend.

Furthermore, as Marcia McNutt, CEO of MBARI (Monterey Bay Aquarium Research Institute), reminds us, "solar panels are capable of powering most interplanetary voyages, but sunlight does not penetrate beyond the uppermost regions of the ocean. Space is virtually transparent to the transmission of electromagnetic energy, while the oceans are opaque to [it]." Consequently, many deepsea exploration devices are tethered to their launch platforms. Imagine this limitation in space.

Given these constraints, why bother? Scientists would answer, for

continued on page 5

### Octopus's Garden

I want to be  
under the sea  
in an octopus's garden  
with you.

— Lennon & McCartney

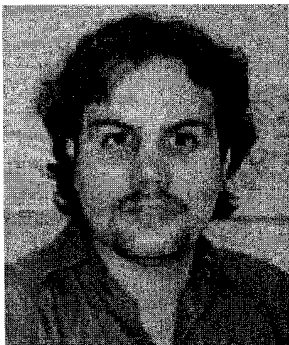
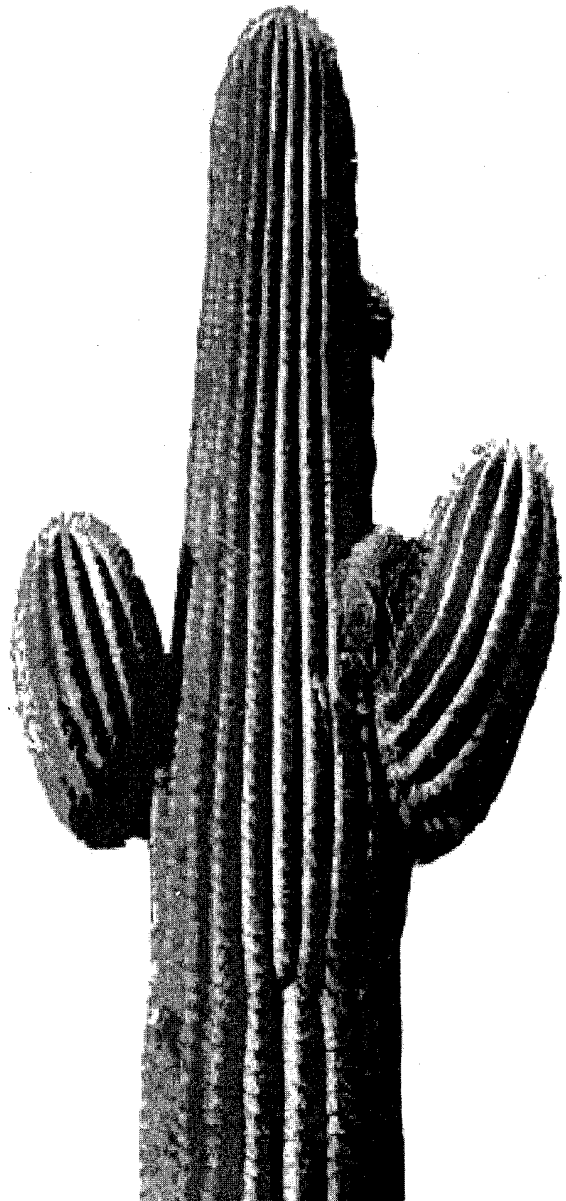
ALSO IN  
THIS ISSUE:

- Ocean Futures
- After the War
- Futures for Turkey
- Publications and Reviews

# contents

October 2003

- 1 OCTOPUS'S GARDEN 2030  
by Wendy Schultz
- 3 EDITORIAL
- 9 THINKING ABOUT OCEAN FUTURES  
by Keith Poster
- 10 THE FUTURE OF THE OCEANS:  
A CALL TO ACTION by Linda Groff
- 12 PUBLICATIONS RECEIVED
- 14 FUTURES FOR TURKEY 2020  
by Semih Kandiyoti
- 16 POEM: FRAGILE PEACE  
by Jocelyn Ortt-Saeed
- 17 FUTURES EDUCATION WORKING GROUP  
by David Hicks
- 18 WAKING UP AFTER THE WAR  
by Richard A Slaughter
- 13 BOOK REVIEW: TENDING THE GARDEN  
ISLAND by Oliver Markley
- 16 CONCEPTS FOR AN INTERNATIONAL  
STUDENT UNION by Jose Ramos



---

**Jeremy Mancuso** is a second-year student in the MS Studies of the Future Program at University of Houston–Clear Lake where he recently served as vice-president of the Student Futurist Association. His interests include futures of the built environment and urban development. Jeremy was a volunteer for the WFSF and also attended and participated in the WFSF 18th World Conference in Kure City, Japan.

---

## Contributions Welcome

Contributions by members in the form of announcements, news articles and / or features are always welcome.

Please accompany news articles and features with color or black & white photographs whenever possible.

### *Please send all contributions to:*

World Futures Studies Federation  
PO Box 82488  
Phoenix AZ 85071-2488  
USA

Or via e-mail at:  
secretariat@wfsf.org

Copyright 2003 © World Futures Studies Federation.

Permission is granted to reproduce any part of this publication providing that full credit and citations are given.

Photos on pages 2, 4, 21 & 22 Copyright 2003 © Christopher B. Jones

Credits for glyph icons: © Boise Matthews and Michelle Peterson

<http://go-southwest.com>

# EDITORIAL

CHRISTOPHER B. JONES

2003 has been a year of many difficult personal and organizational changes.

For professional and personal reasons (as most of you know who keep up with the wfsf-listserv) I left the University of Houston-Clear Lake in May to care for my 80-year-old parents in Phoenix, Arizona, in the desert southwest of the USA. Family crises were a major theme of the year and they continued through last month when my partner and I were forced to abandon our plans, our care-giving, and that uncertain future for another path entirely. We are now back on our own, envisioning new opportunities. I have rededicated myself to focus on the work of the Federation half of my day and to private consulting (www.neofutures.com) for the other half. After 20 years in the academic environment, it was time to breathe some fresh air and get my head out of the "ivy-covered tower," thanks to some advice from Joe Coates.

This has also meant taking the WFSF out of the ivy, as well. With the Executive Board's blessing, the WFSF has incorporated as a non-profit corporation and is operating independently. This has meant establishing for the first time in decades, our own bank account, merchant status, and legal independence. It means that we can acquire and transfer capital equipment, for example. But it also means that we must be more financially self-sufficient, so financial contributions from members are essential to our operations. We now need not only your dues, but also your donations, gifts, and bequests. If you are interested in information on how you can donate proceeds from your estate, please contact the Secretariat. I would like to thank our new attorney, Ron Adams of Hoopes & Adams, for guiding us down the path toward legal personhood. We are also working on grant and philanthropic sources for long-term operational and project funding.

In locating a new home for the Secretariat, we were able to connect with our peace movement roots by entering into a cooperative agreement with the Arizona Institute for Peace Education and Research (AIPER) whose offices are located close to the campus of the Arizona State University in Tempe, where we share an office, public meeting room, and board room. In addition to new physical offices, we are also embarked on a path toward a "virtual secretariat" to ease future transitions for the Secretariat — to maintain as many documents, policies, and procedures in online repositories connected to the wfsf.org website. Work begun in Houston enters its second phase to digitize and electronically publish historical papers and proceedings.



Astute subscribers will notice a number of changes in the Bulletin. When the last Bulletin was published, we asked who would be willing to receive it in the Adobe (.pdf) portable document format. Robin Brandt suggested that the Bulletin be formatted in such a way that .pdf subscribers might be able to better read it, thus we are using a split-page, or half-page, flow. This way it may be read a screen load at a time on a computer while hard copy readers will read the top and then bottom half of a printed page. Please let us know what you think of this change and if you have any suggestions to improve its readability and accessibility. Please let us know if you, too, would like to receive the Bulletin in its electronic (.pdf) format to help save us the cost of mailing it (secretariat@wfsf.org). Thanks to the 2 dozen who have asked for the switch. Of course, we will continue to make the printed version available to all those who want it. The Bulletin is behind schedule, but we plan to get out another combined issue before year's end thanks to the support of the faculty and students at Swinburne University in Melbourne, Australia & regular contributors.

Work has continued on the wfsf.org website, with the recent additions of the first set of documents on the History of the WFSF and the futures movement, on this the 30th anniversary of the organization's official founding. You can find five personal reflections on the website (see back cover). We are also developing a Youth Section (see Jose Ramos' proposal for a Student Union in this issue) and putting greater effort into the Education section (see the call for participation by David Hicks). One of the year's developments is a move toward greater interactivity on the web site among and between members. We are also planning to publish many of the Kure World Conference presentations on the web site by year's end.

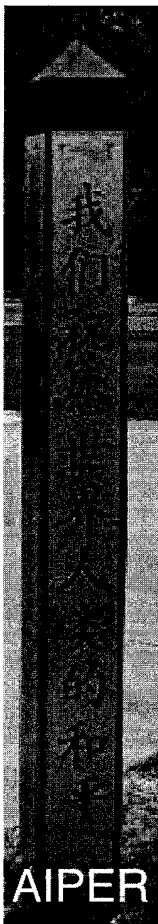
Planning for the next world conference has continued and as this issue goes to press we are poised to make a decision about the next conference venue based on one active proposal and the advice of participating members during the General Assembly meeting in Japan. While the venue is not yet locked in, we are mandated to hold a World Conference and General Assembly on or near September 2005. Three contributions in this Bulletin come from the Kure World Conference: Schultz, Groff, and Poster.

The Iraq war of hegemonic occupation continues as we go to press with the death today of the 381st American and, by now, untold tens of thousands of Iraqis. Despite some very animated discussion on the wfsf-l listserv last year, it has been awkward to take a stand for the entire WFSF on the war given our need to be politically neutral as an organization whose mandate is to promote futures education, not a particular ideology. Yet, the WFSF has roots in the environmental, peace and justice movements and so it should go without saying that violent conflict continues to be counter-productive. Moreover, the motivations behind the occupation of Iraq stand against the values of the founders and heritage of the WFSF. President Slaughter addresses the matter in an article in this issue. And I am working politically on regime change here in the USA!

The listserv continues to be active and recently confronted a series of exchanges that have challenged our laissez faire administrative approach and resulted in the need for etiquette guidelines, now drafted and soon to be posted on the website. Contact the Secretariat if you wish to be added to the listserv or need to be reinstated due to address changes, etc.

Also, please remember to let the Secretariat know when you move or change your address information. This can be done via the web. See the back cover for details.

Enclosed with this issue is an invoice for 2003 annual dues. Please accept our apologies if you have



already paid; you can ignore the invoice. Remember that membership dues are "suggested" and that any contribution will be gratefully accepted. We would also like to thank those who have contributed to the Solidarity Fund established at the Brasov Conference to support students in financial need to attend the world conferences.

Changes to the Executive Board. We would like to thank Graham May and Azizan Baharuddin for their service and we look forward to their reports in their new roles as regional representatives. We would also like to welcome to the EB new members Anita Rubin and Ivana Milojevic who have agreed to join the board through 2005. Work is underway to build our network of regional representatives and rapporteurs.

Richard Slaughter and I continue to work together closely to realize our vision for a WFSF fit for the new millennium. We spent a week together in April in Australia and a day together in July in Las Vegas, we talk on the phone regularly, and email almost daily. Richard regularly contributes presidential updates via the listserv. For those of you who are not interested in the listserv, but are interested in those reports by email, please forward a request to the Secretariat. As time compression and the pace of life continues to accelerate toward the Singularity, the Abyss, the Omega Point or (fill in the blank), the WFSF community is more important than ever to nurture, grow, and sustain.

## CALL FOR PARTICIPATION -- WFSF HISTORY

The WFSF recently initiated a project aimed at creating a better understanding of ourselves, as many have acknowledged the WFSF is in need of a 'history'. The WFSF has a rich tradition, but our innovative work needs to be documented and communicated better. A broader and more inclusive project is aimed at unearthing the individual narratives woven throughout the life of the WFSF. In this 'WFSF Narratives' project, we hope to get contributions from many of the individuals who have participated in it.

We invite people who have taken part in WFSF related activities to tell their personal stories. These contributions will help tell the history of the WFSF, to be posted on the official web site, or published in another capacity. Copyright will ultimately remain with the authors. Go to: [www.wfsf.org/members/](http://www.wfsf.org/members/)

We hope each contributor can respond to some aspect of each of these four questions posed:

1. How were you (or are you) involved with the WFSF? What were some of the outstanding accomplishments or highlights of your experience with the WFSF?
2. Why is the WFSF meaningful to you? What are some of the key values, perspectives and principles that the organisation represents for you?
3. What is your professional practice (i.e. sociologist, anthropologist, forecasting, business consulting, activism, etc.), and how this been influenced or enhanced by membership to the WFSF?
4. What criticism do you have of the WFSF, how could they be addressed, and by whom? What challenges do you think the WFSF faces? And what do you think the direction and future of the body should and can be?

Contributions can be short (500 words) but should be no more than 2,000 words. In addition, contribution can be in any language, and we can help liaison for translation if necessary. Please submit contributions or questions to Jose Ramos:

[jramos@swin.edu.au](mailto:jramos@swin.edu.au)

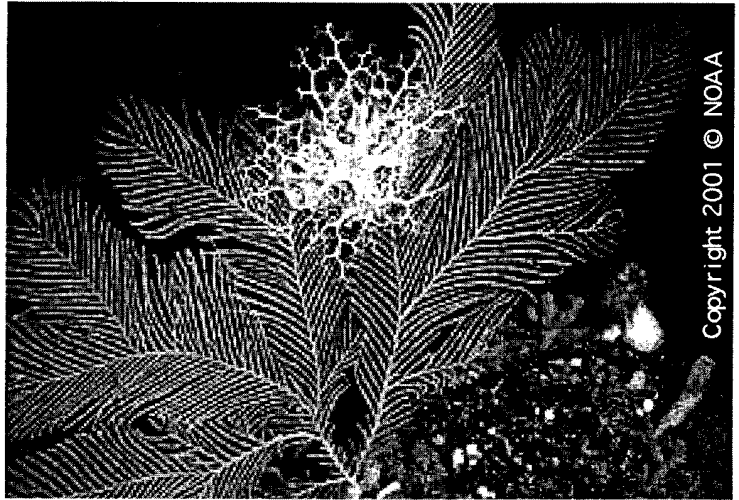
## Octopus's Garden 2030 (continued)

plankton and algae offset rising carbon dioxide levels in our atmosphere? (By absorbing excess.) What role do coral reefs play in maintaining viable fish stocks? (Approximately 10% of fish caught annually for food live in reefs.) Investors would answer, for profit: minerals on the ocean floor and dissolved in sea water itself; biochemicals indigenous to marine plants and animals; new food sources. And archaeologists, anthropologists, and historians would answer, for the ancient artefacts and the stories: of sunken cities, of lost ships, of old wars.

But let us go and make our visit: how do we get there? Basically, we have three choices. We can visit the ocean depths virtually, piggy-backing on the senses of aquatic robots and remotely operated exploration tools. Or we can build vessels that withstand the temperatures, the saltwater, and the pressures, and visit the sea depths in the nautilus shell of our own inventiveness. On the horizon, emerging technologies might one day enable us to build "sea suits," and explore in conditions more nearly skin to sea.

### Virtual Exploration

We can extend our reach beneath the waves three ways. We can use cables to lower sensor arrays from ships, as the oceanographer Robert Ballard did to explore the Titanic with the sensor sled Argo. We can build undersea robots, like Japan's Aqua Explorer 2000, or Woods Hole's ABE (Autonomous Benthic Explorer). Or we can deploy sensor stations on the ocean floor, like the GEOSTAR station of the Mediterranean "Biodeep" project. Economics and durability both support continued use of towed equipment arrays, but microminiaturization, chip design, new materials research, and biomimetic



robotics point to autonomous undersea vehicles (AUVs) and robots as key marine tools of tomorrow.

If bees are an aerodynamic impossibility, then Gray's Paradox tells us that fish are a hydrodynamic impossibility. In order to swim, fish should need ten times more power than their muscles can produce. Yet from a standing start, pikes can accelerate at 8-12 G's to achieve velocities of six meters per second, according to John Kumph, who created the world's first robotic pike. They are also highly maneuverable, capable of turning on a fin at speed.

Biomimetics is the art of "reverse engineering" nature to borrow design concepts from the elegant efficiencies of evolution. Researchers in both academia and industry are applying biomimetics to design highly efficient, fast, and maneuverable underwater craft for the future. In 1994, David Barrett - a PhD candidate at MIT - created the first robotic tuna. He and his advisor, Michael S. Triantafyllou, determined that fish swim so efficiently because they have mastered "vorticity control." That is, they can manipulate the eddies and turbulence of the water around them as they swim.

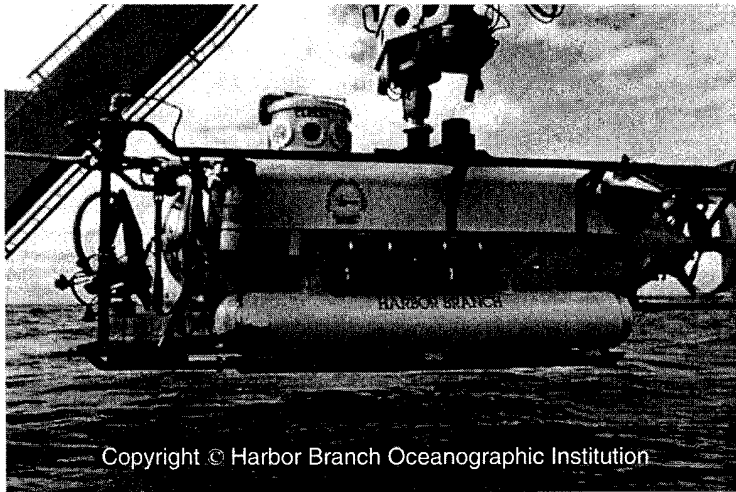
Both MIT's Ocean Engineering department and Mitsubishi Heavy Industries (MHI) in Japan have continued exploring marine propulsion by creating robotic fish: the robopike and robomuskie at MIT, and the robotic sea bream, sea bass,

and coelacanth at MHI. The newest robofish is an eight-foot device called the "VCUUV" (Vorticity Control Unmanned Undersea Vehicle), developed by the Draper Laboratory of Cambridge, Massachusetts. Designed to mimic a yellowfin tuna in shape and shimmy, this flexible robot can perform a series of 90° turns every ten seconds, allowing exploration of tight spaces underwater.

In essence, we are designing the next benthic life-form: it will hunt anomalies, taste its surroundings, excrete data, and return to us periodically to ingest energy for continued existence. Some may not even need batteries: a heat engine generating energy from the ocean thermocline powers the Slocum Glider. For the sake of efficient movement, it will mimic its organic neighbors in design, like Draper Laboratory's VCUUV. Another imaginable addition to this technological aquarium will drift along passively collecting data: tiny, free-floating robots that will include chemical sensors on their microchips and buckytubes to filter particulates for analysis. These zooplankton mimics will trade and pool data among themselves and store observations until sucked up by a larger robofish for collection.

All this robotic sea life will function within an ecosystem of instrumentation emerging from initiatives like the Neptune project. An underwater observatory stretching from Vancouver Island to northern California, the Neptune project will feature 2,000-miles of fiber optic cable, a host of

free-roaming AUVs, and high-definition television cameras. As of 2006, your video wallpaper could display live feed from the deep ocean (of course, by 2015 the opposite wall may feature live feed from Mars).



### Deep Sea Exploration Vessels

In 1953 Auguste Piccard and his son Jacques dove nearly two miles into the ocean depths in the bathyscaph Trieste. Since then both engineering and materials advances have made a wide variety of vessels available to oceanographers and other marine explorers: Woods Hole Oceanographic Institute's Alvin, which makes over 150 dives a year and can dive over 4,000 meters; the French submarine Nautille, capable of diving 6,000 meters; and the Russian Mir 1 and 2 - used to film the Titanic - capable of 18-hour-long dives to 6,300 meters. One of the newest 3-passenger exploration submersibles, Japan's Shinkai 6500, can reach depths of 6,500 meters.

But these submersibles use twentieth century technology. Graham Hawkes, a private entrepreneur and inventor,

believes that "closer and endlessly richer in life, resources and mysteries... it is earth's oceans - not space - that will fuel man's future into the next century." His response to this imperative is the world's first underwater "aircraft," Deep Flight. A single-person submersible, the pilot plunges into the deep in a prone position. Inverted wings on the craft create "negative" lift, pulling the sub into the ocean depths without need for ballast. This enables a fast descent, optimizing "bottom time" for exploration purposes. Deep Flight II will be proven to over 12,000 meters with an "Ocean Everest" expedition to the Marianas Trench; sponsors are still being arranged for this expedition.

Deep Flight's smaller cousins will basically be atmospheric dive suits with "attitude." Atmospheric dive suits (ADS) are by definition jointed, human-shaped, single-person submersibles which can descend to almost 760 meters while maintaining



internal pressure close to one atmosphere. This eliminates the need for compression or decompression schedules, but requires a suit so heavy the wearer moves it using built-in propulsion. The next generation of ADS will easily reach depths of 1,000 meters, include directional thrusters for increased maneuverability, and carry enhanced sensor, data, and communication arrays onboard. But the Exosuit, designed by Dr. Phil Nuytten, represents the most promising future for ADS - a lightweight, non-tethered dive suit so flexible that divers will be able to swim wearing it.

### Creating a Sea Change

Scuba gear and wetsuits come as close to swimming like fish as humans can get. New materials developments may allow us literally to swim like fish - or like sharks and dolphins. Another strategy exists to overcome Gray's paradox: study the skin. Turbulence at the boundary where skin meets sea creates drag; creating a laminar (streamlined) boundary reduces drag and resolves the paradox. SPEEDO (r) Fastskin(tm) mimics shark skin, which is covered by "denticles" - tiny v-shaped protrusions which direct the flow of seawater over and around the shark. Fastskin(tm) directs water along grooves in the fabric, allowing the water to swirl in microscopic vortices, reducing drag, creating greater efficiencies of movement and higher speed - as swimmers at the 2000 Olympics discovered.

The next step may well be oil-filled wet-suits which mimic dolphin skin. The layer of viscous oil - blubber - between a

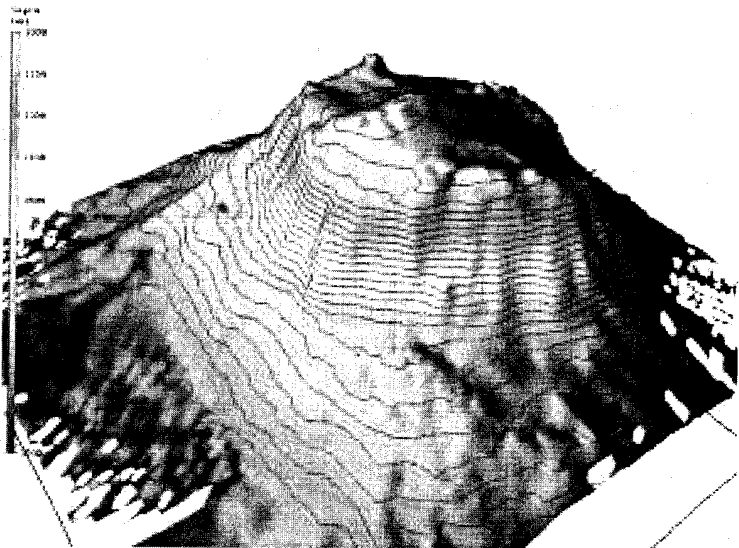
dolphin's outer skin and the inner membrane streamlines the flow of water over the dolphin's body via "dynamic viscous damping." Combining the effects of shark skin and dolphin padding with other acts of mimicry could grant us greater ease and freedom in personal ocean exploration. Whether we go down to the sea in ships or in skin, biomimetic design will transform our technologies more and more towards the organic.

But access to the ocean depths requires not just streamlining the hydrodynamically clumsy human form, but addressing the dangers inherent in being an air-breathing mammal in a high-pressure environment. One potential answer would be a fluid breathing apparatus, like that spotlighted in the movie "Abyss." Replacing the air in our lungs with a highly oxygenated fluid would sidestep the decompression difficulties arising from breathing gases under pressure. Such a liquid - perflubron (perfluorooctyl bromide) - is currently undergoing clinical trials for therapeutic use with patients suffering respiratory failure from infection, burns, toxic substances, or premature birth. Significant technical problems - circulating the liquid easily through the lungs, eliminating the carbon dioxide that is exhaled, draining the lungs in the transition back to breathing air - mean this technology will take a decade or more to develop. But its development will allow humans much greater freedom of the depths.

## A Deeper View: What Structures Our Relationship with the Ocean?

Deep sea exploration requires deep pockets: because of the considerable engineering challenges, it's an expensive proposition. Auguste Piccard's first bathyscaphe, Trieste, was funded by Italy. His second, the FNRS-3, was funded by France. When Piccard's achievements caught the US Navy's attention, they bought the Trieste for \$250,000 (in 1958). Don Walsh, one of only two people to have descended into the Challenger Deep, estimates it would cost \$100 million to mount a return voyage. Batteries alone for the Shinkai 6500 cost \$2,630,000, equaling a power cost per four to five-hour dive of \$35,000. And more state-of-the-art exploration, e.g., Project Neptune, will cost \$250 million during its first ten years. While perhaps cheap in comparison to a moon landing - or even a shuttle launch - these are still prohibitive expenses for most companies, and many smaller economies.

So who profits from these intensive investments? Remaining optimistic and idealistic, we can point to many endeavours that seem indeed to be pure research for research's sake. Project Neptune, for example, focuses primarily on monitoring seabed conditions and data-gathering. But much of that data-gathering involves marine life, which will undoubtedly filter out to the fishing community. The



Copyright 2001 © NOAA



The history of deep ocean exploration is also the history of salvage, often military salvage. In 1963, the Trieste spent five months searching for the US submarine Thresher. In the next two years, the US Navy built the Alvin (which it later sold to Woods Hole) and their first underwater robot. By 1966 they were trolling the seabeds for lost hydrogen bombs and Soviet warheads. In 1968, the US Navy's submarine Halibut, designed to lower sensors on mile-long cables, secretly examined the remains of a lost Soviet sub. Having built the Trieste II, the US Navy sent it to probe the wreckage of the USS Scorpion. Perhaps the best example of the extent to which the Cold War prompted a "benthic race" as well as a space race was the construction and deployment of the GLOMAR Explorer. In 1974 this \$550 million project, disguised as seabed mining, raised half of a Soviet Golf-2 class ballistic missile submarine off the ocean floor 4,000 meters below, complete with its nuclear-tipped torpedoes.

If we continue to use these exploratory paradigms, who gets locked out of the garden? Most of the rest of the world. The Pacific island states, in particular, are disadvantaged in this technological race to explore and exploit the deep oceans. Ironically, their constrained economies limit the extent to which they can even monitor, much less develop, the deep ocean resources of their vast Exclusive Economic Zones. But this is true of any small or struggling economy.

In addition, the more effective and efficient our technologies of deep sea exploration become, the more effective and efficient our technologies of deep sea exploitation will become - a potentially disastrous improvement, given that world fish stocks are dropping now.

Of course, the preceding emerges from instrumental, Western traditions of science and engineering. What alternative epistemologies might we engage to explore the ocean depths?

Taking the perspective of deep ecology, we might strive to understand the gestalt of potentials embodied in the deep marine ecosystems, via meditative, minimally intrusive observation. This would then focus our deep questioning regarding human relationships with the oceans. Or we could take a "conscious evolution" approach, and ask ourselves how the systems of the rapidly maturing noosphere could better enable us to understand and ethically explore the deep places of the world. Or we could meet depth with depth: using techniques of depth intuition, such as remote viewing, to non-intrusively open ourselves to information about inaccessible environments. Finally, John Lilly would advise us to simply ask the alien intelligences with whom we share this planet: his final years of research involved attempts to communicate telepathically with dolphins. Isn't it time we learned some new ways of knowing?

## Farther Futures

In the very long term, beyond the scope of this essay, we may learn enough not only about ourselves, but also about our marine neighbors — dolphins, orcas, blue whales — to understand how they survive plummeting to great depths and rising again to the sun and the sky, in one breath. We may then apply that understanding to redesigning our own physiognomy. And so, in some far future, we may need to paraphrase Shakespeare to visualize our childrens' lives:

**Full fathom five our daughters dive,  
and all their bones of coral\* made;  
deep ocean pearls delight their eyes,  
and nothing of them doth fade  
but celebrates a sea-change  
into something rich and strange.**

And then, to mix our literary lines and move to Eliot, will we hear the mermaids singing? Will we even perceive the cultures that arise when terrestrial intelligence and marine intelligence mesh? Or will archaic paradigms and epistemologies cripple our relationships to life in the deep sea, as they have crippled our relationships to life across the land?

---

\*The porous, limestone skeletons of coral are being studied for use as bone grafts.

**I have heard the mermaids singing, each to each.**

**I do not think that they will sing to me.**

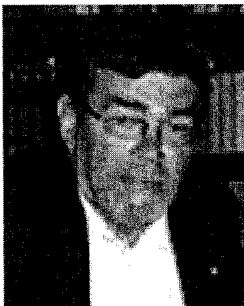
**I have seen them riding seaward on the waves  
Combing the white hair of the waves blown back  
When the wind blows the water white and black.**

**We have lingered in the chambers of the sea  
By sea-girls wreathed with seaweed red and brown  
Till human voices wake us, and we drown.**

Dr. Wendy Schultz is a futures workshop designer, facilitator, and advocate of *futures fluency*. She is a futures studies professor, consultant, and owner of Infinite Futures, and former WFSF Executive Board member.



## IN MEMORIUM -- Rolf Homann



We were saddened to hear that he had a heart attack while giving a speech in Zurich, spent 16 days in a coma, and died peacefully on Saturday, 27 September. He was buried 2 October in Wädenswil. He is remembered fondly. Rolf was an exceptionally active and important member of the WFSF especially during the 1980s when he was at the Duttweiler Institute in Zurich. He hosted several regional conferences, and served as the European Liaison for the WFSF during a particularly critical period of its life.

He moderated over 100 workshops, gave scores of keynote speeches, and as a travel journalist, worked for several Swiss daily and monthly newspapers. He recently taught culture management in Switzerland and lectured in Austria on trends in tourism.

His publications include "Erfolgsfaktor Kundenerlebnisse" (Factor of success: customer experiences) in collaboration with J. Löffler and R. Zimmermann, "Zukünfte - heute denken morgen sein" (Futures - thinking today, being tomorrow) and "Die Zukunft des Tourismus" (The future of tourism). His latest book is "Die Zukunft der Banken" (The future of banks) with M. Röthlisberger.



# Futurists & Thinking About Ocean Futures

Jean Michael Cousteau, son of famed explorer, Jacques Cousteau has followed in his father's footsteps by promoting the necessity of a maintainable stewardship of the world's ocean resources. He currently heads OceanFutures, which is dedicated to that end, but is misleading to futurists in that it doesn't actually include applied futures tools and thinking to the oceans and its resources. Perhaps that is as it should be, in that it leaves a golden opportunity for actual futurists to develop real futures concepts such as alternative scenarios for ocean futures.

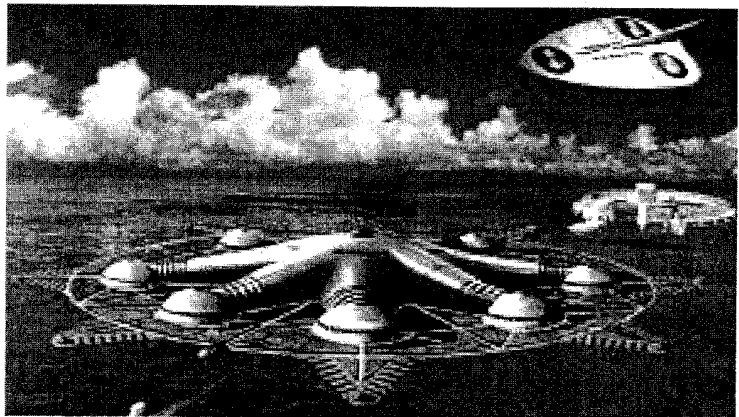
In a recent study conducted by the Pew Foundation it was reported that 90% of the ocean's large fish populations have vanished, due in part to over fishing and habitat destruction. At the same time, the United States' National Marine Fisheries Service (NMFS) released a report that identifies fishing gear debris from professional trawlers and monofilament line from recreational fishing as the primary cause of injury and mortality to dolphins and whales, worldwide.

**By Keith Poster**

The continued demise of the living ocean resources also means that the world's societies, at the very least, may risk the loss of future discoveries that could benefit mankind. It is hard to understand why we face such a dire possibility in light of modern technology and growing global consciousness. Futurists should be included and even at the forefront of organizations like the NMFS and the Pew Foundation to produce alternative scenarios to help to better illustrate the problems and challenges ahead.

One self-described futurist that is producing futures concepts and scenarios is Jacques Fresco. He has created The Venus Project, named for its home base community in Florida. This is a living experiment that includes actual housing using radical concepts of sand-based construction. The Venus Project website includes a section dedicated to "Cities in the Sea" found "above, on, or beneath the sea." It also explores alternatives that promote ecological balance while still mining ocean minerals and resources. Other concepts include mariculture and sea farms, as well as the reclamation of pollutants.

The potential growing interest or trend to include futures thinking regarding oceans resources is exemplified by the 15th Biennial Conference of the Society of Marine Mammalogy, which meets in December 2003. One category for abstracts is "Future Technology" whose objective is to recog-



nize the innovations that will change the way dolphins and whales are 'monitored, protected, or even used again as a sustainable commodity. This may come as a surprise to a casual observer, but in actuality there is nothing that precludes the resumption of "harvesting" of marine mammal populations— akin to harvesting deer or cattle on land. If oceans in the future can again increase and sustain abundant mammal populations the question arises, "why not?"

Keith Poster is a second-year student at the UH-CL Studies of the Future Program and State Lab Coordinator for the Galveston-based Texas Marine Mammal Stranding Network.

Editor's note: In the beginning stages of planning for the Kure Conference, those of you who then subscribed to the listserv will recall a short discussion of the proposed modes for the world conference. A proposal that I put forth borrowed from the Kyoto Forum on Future Generations (1995) that used a vision/action plan format. To my knowledge the Action Plans from that conference were never published, so I thought it might be useful for the WFSF to attempt to follow a similar format for the Kure World Conference and publish them the visions/actions plans in the Bulletin and on the web. The proposal included the notion that these would serve as inspirations and guides to action.

My proposal was ultimately abandoned in deference to a traditional paper panel and poster session format. More people were able to attend the conference, given academic funding criteria, and that was fine with me. In the interim, Linda Groff had sent me the following Vision and Action Plan. Although the conference format took a different turn, in honor of the vision, Linda Groff's contributions to and participation in Kure, here is her thought-piece. Please keep in mind that the Action Plans were not expected to be comprehensive, but provocative and inspirational. The editor welcomes other general short vision/action statements related to preserving and sustaining the Earth and Oceans.

# THE FUTURE OF THE OCEANS: A CALL TO ACTION

## Vision Statement:

There is something in the human spirit that seeks to push back boundaries and to explore the unknown. Humanity has now progressed, in varying degrees in different places on the planet, through the Hunting and Gathering, Agricultural, Industrial, and now Information/Communication Revolutions. What is next? Given our curiosity, humans have always pushed against boundaries. Currently unexplored frontiers for humanity (which are sometimes discussed as the next stage/stages after the Information Revolution) include: outer space, the oceans, the human genome and biotechnology, and inner space/consciousness. This paper will focus on envisioning futures for humanity in the oceans—one of the great frontiers still largely to be explored, as well as another potential future habitat for humanity.

**By Linda Groff**

Different perspectives for looking at humanity's relationship to the ocean futures include the following:

- R. Buckminster Fuller viewed the earth as one large interconnected landmass (made up of all the continents, plus Antarctica) within one large interconnected ocean—made up of all the world's oceans. Fuller's geodesic map of the world, which is generally true to scale (unlike most map projections), connects us all through the oceans.
- Water is essential for all life. Humans need water to survive—to grow food and to drink to maintain the water content of their own bodies, which indeed all life requires.
- The oceans are enormously rich in the diversity of species—vast numbers yet to be discovered and catalogued.
- All kinds of chemical and biological human waste products are being dumped into oceans (and fresh water) around the world, increasing pollution, destroying beaches, and decreasing the diversity of

life forms in the oceans, thereby increasing the number of known species on the endangered species list, not to mention untold numbers of yet unknown species.

- Human pollution is threatening the future of the oceans, which show signs of various types of disease indicating that humans are not taking proper care of it. A few examples of such ocean sicknesses include:
  - Coral reefs are dying
  - Whales, porpoises, and sea lions are beaching themselves and dying
  - Salmon are having difficulty returning to their spawning grounds, and
  - Farmed salmon (along pathways of wild salmon returning to spawn) are endangering the quality of wild salmon by inbreeding with them.


Just as we need sustainable development of land ecosystems and environments—where humans do not take from Mother Nature at a faster rate than she

can naturally repair herself—so do we also need sustainable development of the world's oceans. Nonetheless, there is great concern about the over-fishing of the world's oceans, endangering the total future fish catch available to humanity. This has led to efforts in the United States and other countries, to limit the fish catch allowed (by weight), as well as the number of days per week species-specific fishing is allowed, in an effort to reestablish sustainable levels of fish in ocean waters. The destruction of coral reefs in the world's oceans is another pressing issue in need of being addressed.

It is said that we are well into the sixth major cycle of mass species' extinction on this planet, advancing due to the loss of diversity of ocean species as well as terrestrial ones. Unlike the earlier fifth mass extinction (including the dinosaurs) which was due to an external catastrophe, the mass of species extinction is accelerating this time due to human activities in the biosphere. Therefore, only a change in human policies and behavior can avert another mass extinction—if it is not already too late.

### Action Plan:

All of the above points imply the need for a "Marshall Plan" of some sort to preserve the oceans (and our



people—especially in port cities where more people live by the oceans and therefore are most likely to impact the oceans and their ability to support life. The goal would be to educate local populations about all of the impacts of human activity on the oceans—in general and especially in their local area—leading to a recognition by people that it is in their enlightened self interest to become stewards of the oceans to ensure their survival for future generations.

The questions regarding impacts would include:

- What are the local species and types of fish in local ocean waters?
- What species are currently on the endangered or threatened lists?
- Is local over-fishing contributing significantly to this problem?
- How is the local community polluting estuary and ocean waters?
- What are things the local community could do to reduce the pollution that they are creating?
- What are ways that the local community could change to become more sustainable in their activities?

Local cities and communities, with the support of national governments, would fund the training of local people to answer the above questions, so that

environment in general) and their rich diversity of life for future generations. Since this plan would focus on the oceans, it might well be called a Cousteau Plan to Preserve the Oceans for Future Generations, after Jacques Cousteau, who devoted his whole life to this work.

Until recently, humans have tended to look at the oceans as an unlimited source of food and resources solely for human consumption. We have also established cities on our oceans around the world to serve as fishing ports and places of shipping and commerce. We have not, however, been conscious about the responsibilities we have in return — being caretakers of the oceans — to ensure that their waters do not get polluted and that the biodiversity of species in our oceans survives for future generations. In short, we have taken a one-way relationship, without being aware of our responsibilities to also give back. A Cousteau Plan to Preserve the Oceans for Future Generations would focus on both what humans get from the oceans, but also what humans must do to protect them.

Possible action steps could include establishing Museums, Living Aquariums, and Community and School Educational Programs, focusing on educating

local people trained for the task and committed to carrying it out. Local city councils or private ocean-environmental groups could give awards to people in these communities who especially help preserve ocean habitats. Such awards would be well publicized in print and television media, and on the Internet, so that people in other parts of the world would learn about their activities. Art shows would be sponsored in schools on students' visions of ocean stewardship. The Internet could also be used to feature activities that were especially effective and why, as well as other activities that may not have worked as well, so that others can learn from their experiences.

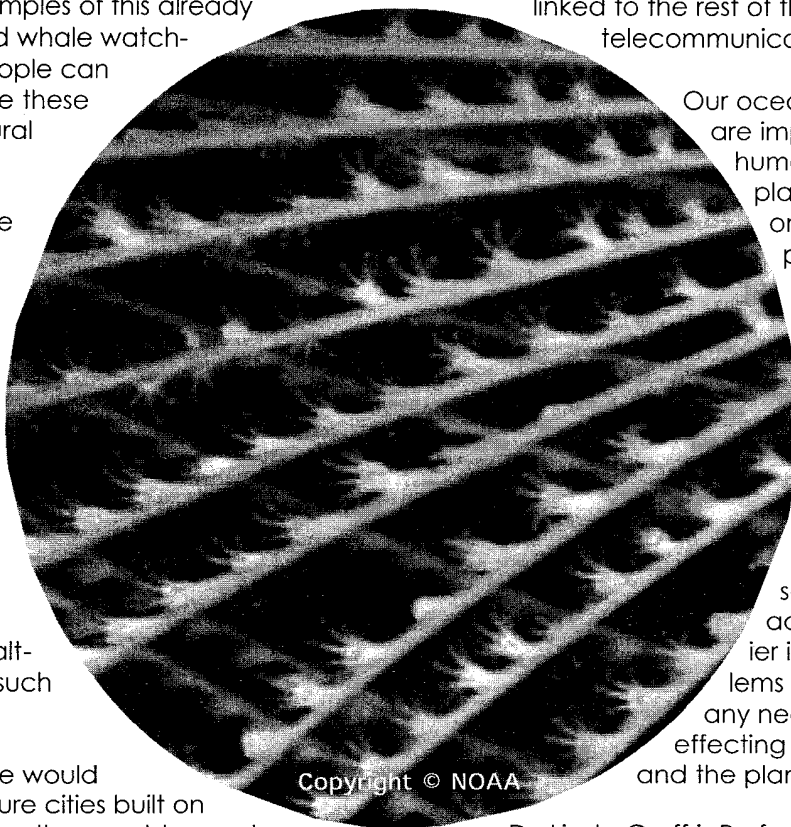
Local city councils and businesses could also help retrain people for new jobs when the old ones are temporarily or permanently endangered due to fishing restrictions and environmental regulations. People could even sponsor futures brainstorming sessions in the community to come up with ideas about how people's old skills could be retooled for new jobs. For example, fishing folk who know about the local species of fish could be trained to educate people in schools, community groups, aquariums, or ocean museums about what they know about these species and their habitats, and fishing techniques in the past. Just as people take "eco-tours" to gain knowledge about the rainforests and how to sustain life there,

there could be "eco-ocean tours" that do the same for the oceans. Examples of this already include dolphin and whale watching tours, where people can come to appreciate these species in their natural habitats.

Universities would be funded to do ever-deeper ocean exploration to discover and catalogue new species of fish and other ocean life. Research would also continue to explore the merits of fish farming, as there is increasing concern about the consequences of salt-water fish farming, such as for salmon.

In the longer run, we would explore possible future cities built on the oceans, and how they could use solar and wind energy, even hydro energy and ocean thermal energy, and do sustainable fish catches, to

be largely self-sustainable as communities, yet still linked to the rest of the world through modern telecommunications.



Our oceans and their preservation are important for the future of humanity and the health of the planet. Even serious action on a few fronts could help to preserve our oceans and their rich bounty of food and resources for future generations. Suggestions here have included ideas that people could implement in their own communities, especially ones located on the oceans' coasts and ports. As with all ecological issues, the sooner humanity moves to address these issues, the easier it will be to get these problems under control and reverse any negative trends currently effecting the future of our oceans and the planet as a whole.

Dr. Linda Groff is Professor of Political Science and Futures Studies, California State University, Dominguez Hills and director of Global Options Consulting.

## Publications Received

### BOOKS

Azam, Ikram. *21<sup>st</sup> Century Education and Educational Skills*. Islamabad, Pakistan: The PFI and Margalla Voices, 2003.

Boyer, William. *Myth America: Democracy vs. Capitalism*. New York: The Apex Press, 2003

### SERIALS/SPECIAL ISSUES

*AFB*. Newsletter of the Peace Research Information Unit Bonn. Bonn, Germany, Info. 1/2003.

*Futures Research Quarterly*. World Future Society.

Spring 2003, Volume 19, Number 1.

*Geneva Association Information Newsletter*. The Geneva Association Risk & Insurance Economics. Risk Management, Research on Risk Management, Assessment and Prevention. May 2003, No. 33.

*Geneva Association Information Newsletter*. The Geneva Association Risk & Insurance Economics. Insurance Economics, Information for Risk and Insurance Economists. June 2003, No. 48.

*Geneva Association Information Newsletter*. The Geneva Association Risk & Insurance Economics. General Information, Activities, News, Subjects of Special Interest. July 2003, No. 175.

*Geneva Association Information Newsletter*. The Geneva Association Risk & Insurance Economics. The Four Pillars, Research on Social Security, Insurance and Retirement. August 2003, No. 33.

*Journal of Futures Studies*. February 2003, Vol. 7, No. 3.

*Journal of Futures Studies.*  
May 2003, Vol. 7, No. 4.

*Journal of Futures Studies.*  
August 2003, Vol. 8, No. 1.

*Just Commentary.*  
International Movement For  
A Just World. April 2003,  
Vol. 3, No. 4.

*New Renaissance.* A  
Magazine for Social and  
Spiritual Awakening.  
Renaissance Universal,  
summer 2003, Vol.12, No.  
1, Issue 40.

*Future Times.* "Social  
Futures." New Zealand  
Futures Trust. Journal  
2003/Volume 1.

*Future Times.* "Of Geese  
and Golden Eggs: Future  
Wealth Creation." New  
Zealand Futures Trust.  
Journal 2003/Volume 2.

*Future Times.* "Pacific  
Futures." New Zealand  
Futures Trust. Journal  
2003/Volume 3.

SZF. Zukunfts-Forschung.  
Oberrieden, 1/03.

UNESCO. *Directory Of The  
190 National Commissions  
For UNESCO.*

ERC/NAC/NCLI No. 70,  
Paris, 09/05/2003.

UNESCO. *Link.* Newsletter  
of the UNESCO-NGO Liaison  
Committee. March 2003,  
No.3.

UNESCO. *Natural Sciences  
Quarterly Newsletter.* April-  
June 2003, Vol. 1, No. 3.

UNESCO. *Natural Sciences  
Quarterly Newsletter.* July-  
September 2003, Vol. 1,  
No. 4.

UNESCO. *The New Courier.*  
"Literacy for Change." April  
2003, No. 2.

UNIDIR. *disarmament  
forum.* "Making Space For  
Security?" United Nations,  
Geneva, Switzerland,  
2003/1.

UNIDIR. *disarmament  
forum.* "Nuclear Terrorism."  
United Nations, Geneva,  
Switzerland, 2003/2.

UNIDIR. *Lutte contre la  
proliferation des armes leg -  
eres en Afrique de l'Ouest.*  
United Nations, 2003.

*WIDER Angle.* World  
Institute for Development  
Economics Research. United  
Nations University, No.  
1/2003.

## **OFFERINGS AND PROGRAMS**

Global Progressive Forum.  
The First Global Progressive  
Forum. Brussels, Belgium,  
27-28 November 2003.

*Prospectus 2003-17 Years  
of The PFI.* Islamabad,  
Pakistan: The Pakistan  
Futuristics Foundation &  
Institute, 2003.

Republic of the Earth.  
International Conference in  
Jerusalem. Jerusalem,  
Palestine-Israel, 22-30  
November 2003.

UNESCO. World Science  
Day for Peace and  
Development. 10 November  
2003.

## **IN MEMORIUM -- Alan Fricker**

Alan died at his home in Golden Bay on the NE tip of New Zealand's South Island in September 2003. He was 65. Alan had a scientific and engineering background primarily in the mineral industry, which included academic and research work in several parts of the world. For 25 years he was based in Wellington, New Zealand. About 15 years ago he began a move that progressed through waste minimization, cleaner production, industrial ecology and thus to sustainability. After becoming an independent researcher he convened the Sustainable Futures Trust, a network of people of diverse skills, concerned more with the root causes of unsustainability (attitudes, behaviors and systemic dysfunctions in social organization) rather than with the external symptoms (environmental degradation and social injustice).

He published several well-received articles in *Futures*, the *Journal of Futures Studies* and *Future Times*. Through the Trust Alan organized meetings, seminars, and courses, particularly around visiting authors and futures researchers including Richard Slaughter, Richard Douthwaite, Sohail Inayatullah, Paul Wildman, and Hazel Henderson. The Trust also worked through interactive theatre as a way for people to reach inside themselves for deeper meaning. He was from time to time associated with New Zealand Futures Trust, and introduced the concept of the ecological footprint into *Future Times*. -- Richard Slaughter

# Futures for Turkey 2020

**Four** scenarios will focus on the future of Turkey in the year 2020. While creating these four scenarios that you will find below, I used a scenario development style from a study at the Wharton Small Business Development Center at the Wharton School, conducted by Doug Randall.

The scenarios below were built around the two dimensions:

- \* Is Turkey going to continue civilizing in the future?
- \* In which direction is Turkey going to face in the politic arena?

The main driving forces considered in these scenarios are:

- \* Productivity
- \* World politics

by Semih Kandiyoti

## Scenario I. Rising Star

In this scenario the country's annual growth rate is 9 percent for the last fifteen years up to 2020. The productivity of the labor markets are their peak point. The economy is focused on three major sectors: energy, textiles and tourism. Newly-

discovered oil fields help to boost the economy but some environmental problems start to occur. In the country, the average income per person rises up to US\$15,000/year. Due to the strong national and international economy, politics stabilize. Turkey becomes a member of all the major western trade blocks and the lifestyle of the people reaches that of Greece and Spain. The government spends a lot of money in order to develop the education system. The society is satisfied and looks forward for the future.

Key driving forces:

- \* The society is very hopeful for the future.
- \* The economy can stand on its own feet.
- \* The world starts to recognize the country as one of the driving forces of the world economy.
- \* The more society is enriched and civilized, the more it has close relationships with the western world.

## Scenario II. Best Buddy

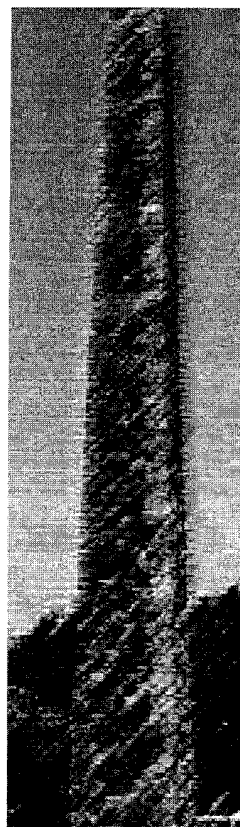
In this scenario, due to poor productivity and worker efficiency, the country cannot meet satisfactory growth rates. Economic support from western institutions, especially from United

States, helps to prop up the Turkish government and economy. The country finds it difficult to find its own independence from international policies. The lifestyle of the society splits in to two different groups. The first one is the people who have money and their lifestyles are almost westernized. The other, which is the major proportion of the population, lives in poor conditions and has little connection to western lifestyles except movies and TV.

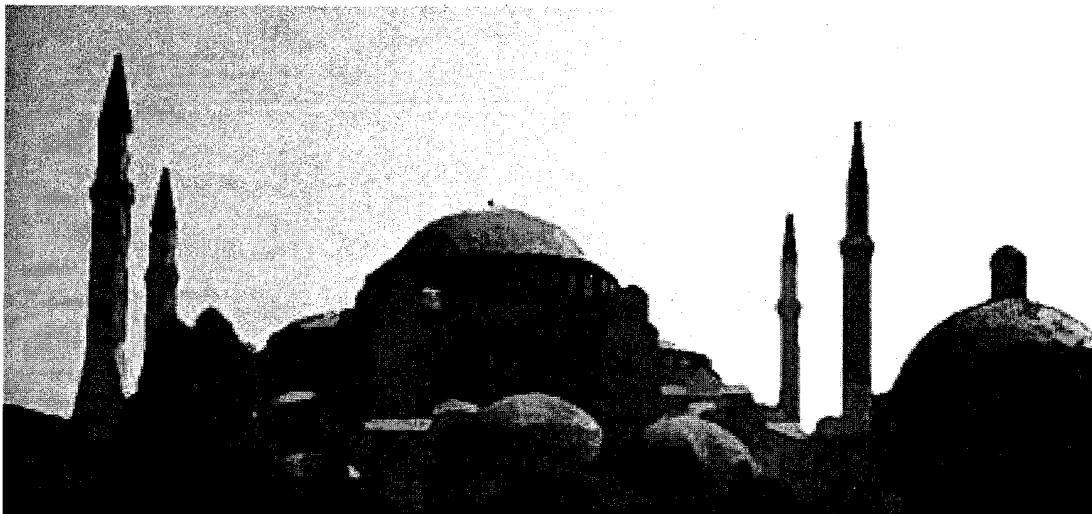
- \* Things go the same—as always.
- \* Try to find a new strategic role.
- \* Always there is a fear that fundamental Islamists will try and gain power to change the Republican regime.
- \* People's daily lives have almost no plans for the future.

## Scenario III. Once upon a time we were...

This is the worst story among these scenarios. Turkey's relationship with the United States changed after the second Gulf War. Because of



the Cyprus problem, Turkey is seen as an invader of European Union soil, and almost all the world joins in applying economic sanctions against Turkey. The outcome is: very low GDP, high inflation, and high unemployment rates. The society seeks the



old powerful and prosperity days of the Ottoman Empire. A new political movement rises up that is a mixture of fundamental Islam and Turkish nationalism. Their logo is: "As a proud Turkish nation, the only people we can trust are ourselves." They are cut off from the family of nations.

- \* Turkey is like a closed box and alone in world politics.
- \* Try to gain power with the cooperation of countries in Central Asia with historical and cultural ties
- \* People use scapegoats that they feel brought them to this point.

**Semih Kandiyoti is a student in the MS in Studies of the Future Program at the University of Houston-Clear Lake**

#### **Scenario IV. Shamanism**

The economy is basically on the right track. Having close economic ties with central Asian countries and China has helped the economy to get stronger. The deal is simple; Turkey sells every kind of goods to central Asia and gets energy instead of money. A more powerful China and Turkey act together in the world political arena. For Central Asia countries, Turkey is the main door to western countries. A Turkish people are very happy that they do business with western countries but feel they do not share western values or lifestyles. People try to find their real origins in Central Asia and reject fundamental Islam. By 2020 people start to believe that their country can be a superpower like the USA and China in the near future. The lawmakers promote economic independence as the key to the country's success.

\* The new world politics will be based again on bipolar politics: western countries versus eastern countries. The big brother and the leader of the Far East will be China, and Turkey will be in the same position in respect to Central Asia and the Middle East.



\*The relationship between western and eastern countries will not be based on forces or threats. China and other Far Eastern countries will have too much cultural influence against over Asian countries.

\* On both sides of the world, western and eastern, religious influence will lose power and a type of personal inner belief system will replace the missing point of the human souls.

What strategy to follow these possible scenarios?

\* The country has to find a way to be more productive in labor markets.

\* The relationship between other societies must not be based on military power or economic aids.

\* Try to create some close relationship with central Asian countries that have original Turkish cultural values.

\* In order to consume solely, the society has to create things that the world may use/consume.

\* The logo has to be: "If you have a problem, first, try to solve it by yourself, and don't expect any help from others."

# **FRAGILE PEACE**

**By**

**Jocelyn Ortt-Saeed**

**The year's last days have eyes for no one.**

**No one hear. No one calls.**

**Despite all talk and pleas for calmness,**

**Violence has our world enthralled.**

**Friends murdered. Cars burnt.**

**Still the army is the law.**

**And our leaders and advisors**

**don't speak from the heart anymore.**

**I think life up, down and always,**

**going over what might be,**

**if we could let peace take root in us**

**and be instruments of destiny.**

**There's already some enchantment,**

**a vision of another way,**

**as we try to make meaning**

**and rehearse the truth we need to say.**

**So we talk and talk our future hopes**

**in a discourse that reveals**

**the unconscious assumptions**

**of this fragile peace we're making.**



# WFSF Working Group ~ Futures Education

One of the key areas that WFSF wishes to give more attention to in the immediate future is work in schools with children and teachers.\* The former 'young people's working group' has consequently been renamed Futures Education (Schools) to distinguish it from work at the post-school level.

The group has a three-fold focus in relation to futures education:

- \* Schools: primary and secondary
- \* Teacher education: initial and in-service
- \* Educational research: policy and practice

by David Hicks

There will be three main tasks in relation to each of these three areas:

- \* Mapping: who is doing what and where
- \* Networking: making and extending contacts
- \* Good practice: identifying nature of

The initial steps are mapping what is already going on and beginning to exchange news and information. In doing the above it is also hoped, of course, that we can expand WFSF membership. In order to begin this process we have begun to put together a basic Directory of Futures Educators. To be on the working group's new address list please briefly complete the form below and return it to the address given. If you know of other educators who might be interested because of their work in futures education please persuade them to join WFSF!

Currently we are working on the first task of compiling the directory - which is slowly growing. If you work in schools, with teachers, with trainee teachers or you are an educational researcher interested in related issues please join us. Once we have identified an active core group we can move on to further tasks.

To be added to the WFSF: DIRECTORY OF FUTURES EDUCATORS, please send the following information:

- \* Name & address
  - Postal address
  - email address
  - Website
- \* Main interest (please tick)
  - Schools
  - Teacher education
  - Educational research
- \* Experience (in relation to above)
- \* Formative influences (re- futures ed)
- \* Publications (relating to above)
- \* Case studies (you can provide)

Please return to:

Prof. David Hicks  
Centre for Global & Futures  
Education  
School of Education  
Bath Spa University  
Bath BA2 9BN, UK  
d.hicks@bathspa.ac.uk

---

\* See for example: Hicks, D. *Lessons for the Future: The Missing Dimension in Education*, RoutledgeFalmer (2002)

# Waking Up After the War

In the aftermath of the Iraq war it's time to bring fresh thinking to the wider problems that face the world. To do so means raising some awkward questions, challenging a number of strongly held beliefs and deeply offending some people. Yet the pay-offs could be enormous.

The early conclusion of the war, and the fact that it did not start a broader conflagration, understandably brought widespread relief. The worst fears were not confirmed. The strong prevailed. Order was restored (or so it seemed). The reality, however, is rather different because there remain serious unresolved concerns about the prevailing world order.

**By Richard A. Slaughter**

The underlying drivers of the world economy, the current model of 'wild' globalisation, the continuing deterioration of the environment and a raft of social problems undermine hopes for a peaceful future. SARS notwithstanding, I don't believe that we have collectively grasped the scale of the challenges facing us. New waves of instability will emerge both from unresolved conflicts and injustices, and the



implementation of successive technological innovations in technically advanced nations. Genomics, nanotechnology and ubiquitous computing power are all advancing rapidly. Each has positive and negative implications. The former are constantly exaggerated in order to stimulate 'demand'. The latter generally emerge through social experience, which includes warfare. With so much at stake this is not a great way to proceed.

Some years ago Barry Jones wrote a book called 'Sleepers Wake'. I once asked him what he would have these erstwhile sleepers do, were they to wake. He said: 'I'd have them see that there are different ways to do things.' The wisdom of that comment has remained with me.

We live in a nation and a (Western) world where depth understanding of the present is not valued and high quality futures work remains all-too rare. As a society we remain 'asleep' to deep processes of change and to their implications for ourselves and future generations. Many people I have met show some level of understanding of the global predicament. But avoidance and denial are widespread. Thus far, there is precious little installed capacity to respond, particularly in laid-back Australia. The Bali bombing has changed nothing in this respect. The collective blinkers are still firmly in place.

The Commission For the Future attracted many criticisms and few friends. Yet it was a forerunner of what I later termed 'institutions of foresight'. The latter are emerging because more people recognise that, in order to deal with the problems and potentials facing us, the first step is to really pay attention - to 'attend in depth' - to what is happening now. That's one step toward the kind of intelligent and deeply grounded futures enquiry that we desperately need.

If we consider the assumptions that underlie the global system there is little or no evidence of in-depth questioning or re-thinking by the most powerful actors. Growth is still good. Forget the long-term future. You can't study something that doesn't exist. Moreover, the market will provide. The sum of individual purchasing decisions will add up to collective wisdom in the long term, right? Well, wrong. The so-called 'invisible hand' of the market is a failed theory that remains firmly in place despite being moronic in conception and outlook. Market-led economics get more unreal the longer they continue.

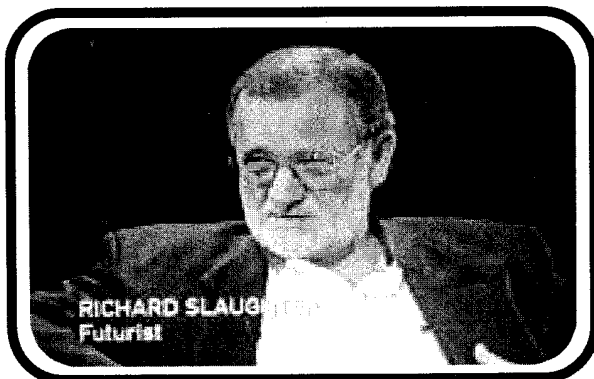
It is now widely believed that the value of all annual trade in 'real' goods and services around the world is equalled every day by the global casino of currency speculation - a game for the rich if ever there was one. Growth - the 'engine of capitalism' - makes sense for limited periods of time in limited contexts. It does not make sense as a central tenet and primary goal in a world with significant limits. Nor, it seems to me, can societies discern viable ways forward through the wide and seductive avenues of commerce. The compulsive marketing of consumer products and mass recourse to ever more compelling digital fantasies certainly have their appeal but they also operate as expensive distractions. It is essential to 'clear the fog' and re-focus our attention on the collective tasks that really matter. Culturally we need to wake up.

The Iraq war had its supporters and its detractors. But the main game was not there nor is it on any other military battlefield. Terrorism is a continuing scourge of tragic proportions. Yet it too is not the main issue. It is a symptom of a deeper dysfunction - that of uneven development. The human agony thus created every single day is beyond the experience of affluent populations and lasting solutions will not be easy. They will necessarily question, and then profoundly change, the current model of international business, finance, development and cultural valuation that consistently hands most of the



winning cards to the USA and its client states. The single greatest priority must be to support the fulfilment of basic human needs. The failure of current development models means that the seeds of future wars, terrorist incidents, famines and other assorted nasties, continue to be sown.

If we were really interested in 'safeguarding the future' we would insist that all governments worked toward a more balanced and equitable world. We would withdraw our assent from the many interests, organisations and projects that continue to create instability and danger. We would insist, one by one, that the major players - from Hollywood to the White House, from Wall Street to the IMF - be held to account both for their successes and their failures. We'd ensure that what Robert Jungk called 'look-out' institutions were integrated into the very fabric of our society. Staffed by people with some of the keenest minds around, they'd show how the perception of disastrous future outcomes can provide motivation for changes in the here-and-now. They'd also incubate a wide range of social innovations and support the emergence of social foresight.



Waking up after the Iraq war means deliberately and patiently critiquing the current world order and moving forward with values and assumptions that actively break the current gridlock in world affairs.

Richard A. Slaughter is President of the WFSF, Director and Foundation Professor of Foresight, Australian Foresight Institute. He is the author or editor of 15 books and has written numerous articles and papers on futures themes and methodologies.

# Book Announcement

## Changing Values – Forming New Societies: Youth for a Less Selfish Future

**Edited by Erzsébet Nováky, Tamás Gáspár, Gergely Tyukodi**

The new book of Hungarian futurists summarises the content and conclusions of The Budapest Futures Course (BFC), which was organized for the second time by the Futures Studies Centre of the Budapest University of Economic Sciences and Public Administration in 2001. By the nature of interdisciplinarity of the field of Futures Research, the course was diverse in terms of age and profession of the participants, as well, who had different professional background and who arrived from Australia, India, Philippines, Russia and various European countries.

The series of BFC courses originate in 1999 when the participants from all over the world discussed the future orientation of the youth transnationally. As we had already known before, values are present in every field of our life determining our decisions and actions. Still, the main outcome of this course was recognition for all of us, since it turned out that also future orientation is defined by values. This is the reason why we decided to go on exploring this field. The articulated hypothesis was that we can observe a transition of values in our society that has the power of forming our future.

The volume is unique in expressing the general values of the venue, which by nature appears in all papers and analyses. Tamás Gáspár, one of the main organisers became a "value-tourist guide" when introduces the book with investigation for the spirit of the place: Budapest.

The BFC 2001 book is to specify exactly which values are driving forces and where they drive us. To be able to conduct a detailed investigation, respected experts from various fields of science contributed. For instance Anita Rubin discussed values related to future studies. Social aspects were carried out by Rakesh Kapoor – values and civil societies – and Cesar Villanueva – values of alternative future societies. Several other viewpoints are discussed too in the book; thus giving a complex image of changing values. Such as environmental (Merrill Findley), technological (Bruce Tonn), urban (Ferenc Vidor), ethical (László Zsolnai) or social-ecological (Guido-Henri de Couvrer). Tony Stevenson was talking about modern information technologies and also Ervin Laszlo contributed with provocative thoughts on future values of a new world order.

The Hungarian Futures Studies Centre also prepared a questionnaire on changing values expressed by the participants. The results of the survey as well as of the discussion are evaluated and summarised by Réka Várnagy.

The papers of the volume express that the methodology of BFC was strongly based on participation: all lectures were followed by workshops and discussions. Cultural diversity of the participants resulted in a "melting pot" of ideas and suggestions. In order not to lose this multicultural spirit, the outcomes were transformed in scenarios every day. Their overall conclusion is presented and evaluated by Erzsébet Nováky, Éva Hideg and Tamás Gáspár. Professor Nováky, besides her professional tasks, did the honours of the house during the event, as well.

The book is much more than just a collection of papers, because the colleagues of the Futures Studies Centre created a framework for the content, as well. It is also a nice memory to all participants, as it contains photos of BFC scenes.

Copies available:

Futures Studies Centre

Budapest University of Economic Sciences and Public Administration

Fovam ter 8.

Budapest, H-1093

Hungary

# Book Review

## Tending the Garden Island

**Oliver Markley**

*Tending the Garden Island: Toward New Kauaian Governance*, by Ken Stokes (Kauaian Press, 2002), is a "must buy" book for anyone with a practical interest in the future and how to help the people you love prepare for it. How do I know this? Being a retired professor of "futures studies," one of the clearest indications that I have found such a book is to be overcome with the thought: I wish I had had the wit to write this!

Although at first glance it might be thought that this book is relevant only for the locality of Hawaii's "Garden Island" of Kauai, nothing could be further from the truth.

This book is first and foremost, a case study in globalization from below in which that well-worn ecology phrase from the sixties, "Think Globally, Act Locally," is translated into a clear-cut road map for sustainable development in a way that is relevant both for Kauai and elsewhere.

Because Kauai has a variety of sub-cultures, not all of whom trust each other very much when it comes to matters of political and economic influence and control, and because Kauai's has tourist attracting status as Hawaii's "garden island," about all that everyone here agrees with is the need to "keep Kauai green."

Using an artful mix of demographic data, environmental indicators, and ecological theory-but all based on traditional native Hawaiian cultural understandings-Stokes demonstrates how to weave together an attractive vision of how to do sustainable development in ways that are at once politically, economically, and demographically feasible.

Ecological-economist Stokes takes it another step, and argues that out of the lives of the people on the Garden Island, it is possible to draw guidelines on how to build a healthy society that includes everyone and cares for land, culture and people. One conclusion: "If natural and social capital are as important as financial capital, Kaua'i is already wealthy," Stokes writes.

Much of "Tending the Garden Island" is based on what Stokes has experienced first-hand over the past decade, as he's worked for Hawaiian sovereignty and volunteered as a researcher, networker, webmaster and computer trainer and media producer for community organizations around Kauai. He has found that people are eager to take back their communities, and he is excited that his book can help contribute to the groundswell of "globalization from below."



As Stokes proposes in the Foreword, "After 9/11, some folks may wonder whether the world will veer toward barbarism or leap toward sustainability, yet there is little doubt what must be done to promote the latter on this "Garden Island." Weaving together the need for restoration in our ecosystems, retrofit for our infrastructure, and reinforcement with our Aloha Spirit, this book depicts a community-based governance process for managing Kauai's social and natural capital that is already emerging and seems likely to engage Kauaians for generations to come as we co-create our future."

He says that it is possible to bring the entire island along on a sustainable path - "neither pro-business nor pro-government, but pro-community. Not motivated by ripe profit nor raw power, but by our vision for real progress. Neither left nor right, but forward."

In Stokes' vision, the island is a garden, and its people are gardeners, responsible for feeding the community today and at the same time responsible that decisions made today will ensure that the garden is still capable of sustaining the community in the future.

It requires not linear thinking, but a kind of thinking that constantly comes back on itself, draws in more information, more people, and a widening awareness of the environment and of one another. He argues that

the isolation fostered by newcomers who want gated communities and walled estates is anathema to the Kauaian ideal.

Capturing all aspects of the island's ecol-economy in one place is the book's principal strength. Stokes excels at presenting a plethora of data in attractive and readily understandable formats. Maps make clear how different economic activity is clustered around the island, and trend lines clearly depict key relationships in time, as between the rise of tourism and boosts in local per capita income.

The book's second half recount of "lessons learned in Kauaian community work" is especially helpful as a far-ranging progress report of sorts. Stokes argues, in effect, that the route to community empowerment runs through memory lane, in the sense that by remembering their own history Kauaians can form a stronger launchpad for the changes just ahead.

Admittedly, much of the point-by-point analysis is merely suggestive, since the book's design around the two-page spread limits the space available for in-depth coverage of particular issues. For example, titillating suggestions regarding how to achieve greater property tax equity or how to tilt island ecosystem functioning back in favor of native species are simply dangled and then dropped.

Most daunting is the need to wade through all the cases and causes in order to get a true feel for the underlying vision of more self-reliant communities managing their own ecosystems. The nitty-gritty is really only required reading if, as Stokes insists, "what it is is up to us."



Last, but perhaps not least, *Tending the Garden Island* uses humor as a path to wisdom, in part by quoting the immortal Chancey Gardner (the character played by Peter Sellers in the movie, *Being There*) at the beginning of each chapter. All in all, this is a good read for anyone interested in state-of-the-art thinking on "globalization from below"—especially those who think it can't be done.

Oliver Markley is Emeritus Professor of Studies of the Future, University of Houston-Clear Lake.

Snapshot from BFC 2003



Professor Erzsébet Nováky judges the team-built, cross-cultural Bridges Game during the Budapest Futures Course 2003. She is the Director of the Futures Research Center and a WFSF Executive Board member. The next issue of the Bulletin will feature a report on BFC 2003.

## Concepts for a WFSF international student union

If futures studies is to grow as a discipline, more emphasis needs to be placed in engaging undergraduate and graduate students with no previous knowledge of the field. For example, if one walks through a US campus on the first day, one sees a diversity of clubs. Many of these clubs are national in scope, and some are even international. Could the WFSF have a campus presence as a student group? What would the WFSF have to provide to enable this? Student groups often attach themselves to an identity - student groups are often a way of belonging (conventional vs. post-conventional), and what better identity to have than a group about exploring alternative futures and creating a better society.

Perhaps student membership could be granted in exchange for a project or task done by the student - a sort of initiation. But instead of having to drink a whole bottle of vodka to join up, students would contribute some personal research or intellectual labor. Students are often money poor but have the time and willingness to volunteer.

Groups such as these could engage in shared futures projects. What activities, projects and opportunities would students be excited to participate in? The WFSF might even be able to 'outsource' needed research activities / projects to students that could also be used by students as academic research projects.

An extension of such research might be WFSF international 'internships' for students - perhaps a global network of interns from various countries that could share thoughts about proj-



ects, or even collaborate on a project. This project might provide practical experience and something to put on their resume. Such a 'post-national futures circles' could help plant some seeds for shared global futures. Students could be matched up with other students (on-line, phone card, video phone conferencing etc.) with people of different cultures and nationalities, to discuss & compare respective cultural interpretations of futures, issues & visions of peace.

A student press corp. would be another way of engaging students and fostering deeper participation. This could be an international network of futures oriented student journalists who could cover events using foresight concepts and perspectives, gain publicity, and generate publicity for WFSF conferences and events. Note how effective Indymedia.org has been at garnering a broad support base through the creation of regional hubs. If set up right, groups of student social entrepreneurs could be the operational intelligence of such an on-line network, and help make WFSF publications money-makers or at least visible. Money generated could flow back into a WFSF sustainable publications fund and students would get paid (or get credit) for successful publications projects.

At very least we need to ask students what they want from a future oriented peek body. Perhaps a survey project could uncover assumption we have about the WFSF: questions for students like 'why, how and when would the WFSF be relevant to me?' could be asked. We need to reinvent the WFSF from the grassroots: students can help create the future of the WFSF. We should embark on an initiative to garner broad student participation to re-create the WFSF in new ways more relevant to emerging and future generations.

Jose Ramos, Melbourne May 5th 2003



[www.wfsf.org](http://www.wfsf.org)

## **WE NEED YOUR FINANCIAL HELP!**

Please let us know if you would like to receive the Bulletin in electronic (.pdf) format. It will help us save costs and you will get the benefit of full-color graphics! Email: [secretariat@wfsf.org](mailto:secretariat@wfsf.org)

Please pay your 2003 dues online at: [www.wfsf.org/members/](http://www.wfsf.org/members/)  
User ID: future  
Password: worlds

See the new materials on the WFSF Narratives (History) Project.

Donations for Secretariat operations and for the Solidarity fund are greatly appreciated. We need your support more than ever.

## **OUR NEW ADDRESS/YOURS?**

Please send any address changes to:

**World Futures Studies Federation  
PO Box 82488  
Phoenix, Arizona 85071-2488 USA**

**[secretariat@wfsf.org](mailto:secretariat@wfsf.org)**

**IN THE  
NEXT ISSUE:**

- Digital Continuity
- Critiquing the *Clash of Civilizations*
- After the War, Part 2
- Annual Report
- BFC 2003 Report