



What's there to read?

- What's Owaze's business?
- Editorial
- Wwoofing it!
- Earthship in Sweden
- Close encounters
- Fuel cells: the solution?
- Architects Without Borders
- The ecocathedral
- Taos seen by Ties
- Institute for Sense and Deluded Sense
- Launching of Recyclicity.net
- And more



Wwoofing it!

Owaze recently discovered an ally in architect Marien Faasse, who has a credible track record as a builder and seems successful in handling municipal authorities. His point of departure as an architect is the interplay of several generations living, working and learning under the same roof. His project is called De Werkwerf and attracts young volunteers from all over the world, mainly through WWOOF (World Wide Opportunities on Organic Farms). Many of these prepare for setting up ecovillages or other alternative communities, so the project is a hotbed for alternative lifestyles and goes much further than just building practice. As these volunteers have to be housed, the partnership being negotiated between OWAZE and the Werkwerf concerns the design and building of an earthship style hostel. A business model has to be thrashed out. One point of departure is the notion of a Citizens Multinational Network, a communal fund for liquid trading capital that provides interest free loans. As we are novices to the higher economics involved, we do not try to explain them right now, but in future we'll try to keep you posted on how they are getting implemented in our daily practice.

www.livinglifeartfully.tk
www.wwoof.org



As our loyal readers may have noticed, OWAZE Rotterdam has been trying to keep in touch with developing earthship projects in Europe.

We have invested a lot of time and thought to earthship building and like to share our conclusions with existing and aspiring earthship builders anywhere.

Hence our decision to publish in English this time.

As he coined the EARTHSHIP idea and practice, I dedicate this issue to Michael Reynolds of Earthship Biotecture personally and preface it with this editorial article. Any feedback from our readers may be published in a later issue, as an installment in the ongoing "earthship saga". On the Earthship Biotecture website we found out about Michael's tsunami relief effort.

www.earthship.org/build/disaster_relief.php

In the meantime a delegation of Earthship Biotecture went to the disaster area. We are very interested to hear the results.

Owaze also did try to get involved in the relief programs through the international aid agencies and presented ourselves at a conference in The Hague. The aim of the conference was to decide how to put the roughly €200.000.000,- collected from the Dutch public to the best use.

We proposed to send "scrap architect" Jan Körbes over to India as he has experience in functioning in "no go areas". He realized play grounds for kids in gipsy camps, in war zones (Croatia) and in black townships (South Africa) and he always succeeded in working with debris and in

getting the parents involved in building them.

www.complett.nl

As Jan volunteered and asked just for a plane ticket and board and lodging with an existing project team being sent out by the big boys, our proposal was probably ignored for not creating enough of an indent in the existing budgets.



As we did not want to develop plans before we knew the lie of the land and the local idiosyncrasies, we wanted to have things checked out before taking any further action and to assess the necessary budget. We still do hope that Jan Körbes can be involved with Earthship Biotecture's ongoing projects in India and when we have some reports and an invitation from them we might get some fundraising going for his plane ticket and his expenses.

Jan is also involved with other "scrap architects" like 2012 architects, the guys that Kirsten visited while in Rotterdam. Further on in the newsletter you find a description of RECYCLICITY.NET, their latest venture (see also page 6).

To be continued.....

Theo Lalleman, chairman Owaze



Theo Lalleman

Michael Reynolds

OWAZE organizes an earthship building party in Spain. June 14th - 28th

- 08.00 - 13.00 hands on - Lunch is provided
- 14.00 - 19.00 siesta, beach, whatever you like
- 19.00 - 22.00 Dinner in the khaima (communal bedouin tent)

Presentations and discussions about realizing earthships. Cheerleader and master barn raiser is Berthus Lalleman

When you want to join, be quick. Full is full.

info@owaze.nl

What's our business?

OWAZE wants to build earthships in Holland. An earthship is a completely off grid building made out of waste materials like tires, cans, used wood etc.

OWAZE drafted a project plan that includes the foundation of an infocenter, exploring the legal and technical loopholes in local building practice and to educate people in earthship skills and concepts. To "translate" the earthship base techniques to the Dutch legislation and building practice OWAZE started an open source knowledge transfer.

We offer workshops in designing with waste materials and our fees are moderate for kindred souls all over Europe. We can provide lectures and workshops in most European languages.

www.owaze.nl

Owaze projects are also sponsored by SBAW (bureau for project development in Rotterdam) and the Rotterdam Environmental Centre.

www.sbau.nl
www.milieucentrum.rotterdam.nl

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Web: www.owaze.nl - mail: info@owaze.nl
Donations: giro 9604506: Stichting OWAZE te Rotterdam o.v.v. Vrienden van OWAZE

VAXHÛSET: Earthships in Sweden: Volunteer Project Summer of 2005

Many people are showing interest in the Swedish Earthship Project. For those who would like to be involved in the building of Scandinavia's first Earthship, there will be a volunteer opportunity this summer.

During the following dates we offer three volunteer periods, each lasting for two weeks:

1. 18 – 31st of July
2. 1 – 14th of August - in English!
3. 15 – 28th of August

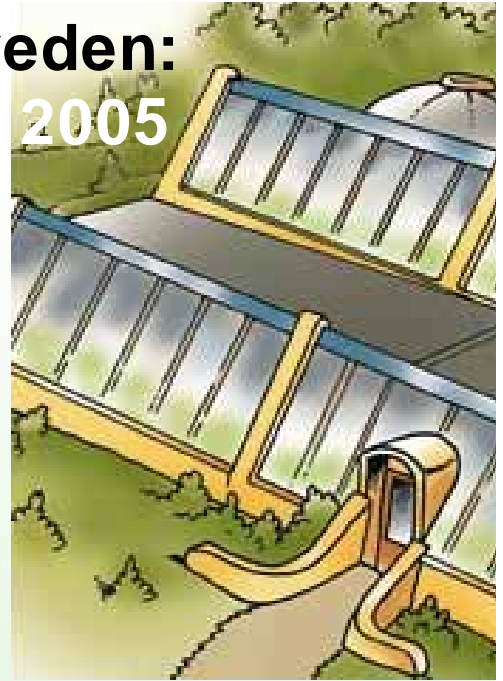
The second period – from 1st to 14th of August – is particularly meant to be our international period, when English will be our 'working language'. We hope to have the pleasure of hearing many other languages also during this period! Each period includes both practical work, theory on energy and sustainable building methods. No prior experience or knowledge is required. We are hoping for a mix of ages and gender, as well as work and other experience. All are welcome! As a volunteer, you have free lodging in our 12-sided guest house, Solcellen (the Solar Cell). It is simple but cozy. The rooms have two or four beds and you share a toilet and shower with the others. There is a total of 18 beds in Solcellen, but we are planning on receiving a maximum of 12 volunteers per period. For 70 SEK (8 Euros) per day you will get one cooked meal in the middle of the day and ecologically grown vegetables and other staple foods so that you can prepare

your other meals in the kitchen. Travel expenses are paid by the volunteer. (Bus from Stockholm costs €22,00 and train is more. We can pick you up at the nearest bus stop, Mohed).

For your stay at Ekocentrum we ask that you follow the rules and times set up for volunteering. You will be part of either the morning (08.00 – 15.00) or the afternoon (11.00 – 18.00) shift, six days a week. Let us know which shift you prefer, and we will try to meet your needs. One day a week you will help with other tasks, for example in the kitchen or in the garden.

Ekocentrum is beautifully located near lake Edesjön where you can swim and fish. There are bicycles you can borrow to check out the countryside around. We will also arrange common excursions and outings, for example to Ålsjön's nature reserve in nearby Söderhamn. Please also tell us which period you would prefer and, if possible, an alternate period. Be sure to let us know if you have a preference to work either 8.00-15.00 or 11.00-18.00, and we will do what we can to schedule accordingly.

Volunteers during the last period (August 15 - 28) will also participate in organising **Earth Day** on August 27. We will have an



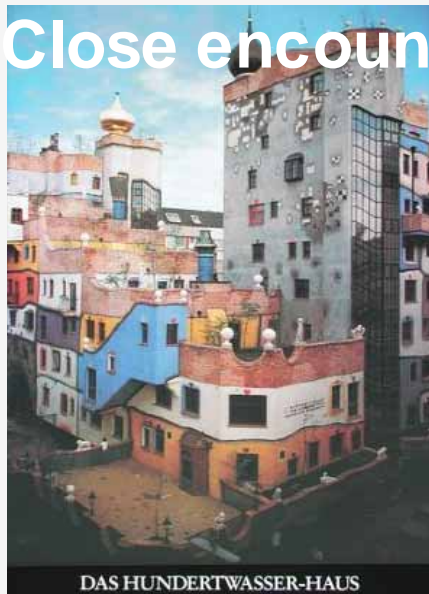
Open House for the public to show the Earthship project as well as a variety of activities for adults and children, such as lectures, music and games. To sign up for one of the volunteer periods, you can email Ralf

Palmpers. You can also reach Växhuset by calling +46 270 427050. In the evenings you can also call Åse Seeligson at +46 270 13834 or +46 73 9800597.



info@vaxhuset.se
www.vaxhuset.se

Close encounters of the contemporary kind



DAS HUNDERTWASSER-HAUS

Last year, as Owaze ran out of funds and got no place to build, we squatted in a derelict former drugstore in Rotterdam that had been vacant for six years.

We intended to use it as an easily accessible information- and meeting centre and place for practising sustainable building techniques. Since then our sense of reality has been put to some severe tests. We get the feeling that we play unwitting parts in some soap series involving distorted ley lines and other intangibles. We also experience some close encounters of the contemporary urban kind.

Seventy percent of the people living around us are immigrants from at least 70 different countries, are on welfare, are involved in some kind of hassle with the authorities and/or some kind of hustle with their fellow men. In some cases we have been trying to be helpful by lending an ear, by writing letters to lawyers or to the immigration authorities and by organising food packages. In short: the timeless practice of the lame helping the blind. Nonetheless we did manage to fix the pla-

ce up a bit and right now we are organizing some workshops in mud plastering, mosaics and building models of dream houses. Behind the shop window we exhibit some samples and get rewarded by the puzzled looks of the passers by and the fact that a good number of them even manage a seldom practiced and hesitant smile.

As to the building that houses the shop, we are considering to doctor it Hundertwasser style. As to retrofitting existing buildings in an urban setting this Austrian artist gave some useful and inspiring clues. We are setting up a project group for that purpose. Anyone sharing Hundertwasser's views is welcome to join us in this venture.

www.leninimports.com/hundertwasser_bio.html

FUEL CELLS: THE SOLUTION?

Leonard Jones, an American involved in the earthship network, living in the (cowboy) west of that county, gives, as a result of an intense mail discussion, his view on the use of (car) batteries for off grid power supply. Batteries are oldfashioned, he states. This is his opinion on the use of fuel cells.

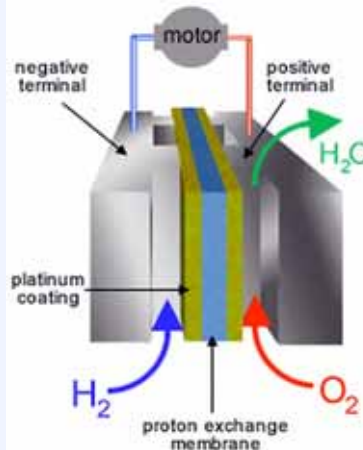
I am inclined to agree with you about batteries being a "bump in the road" as far as off-grid power technology is concerned. Batteries are about the only economical way to store off-grid power at present; they are kind of ugly and "old-tech" but unfortunately quite necessary for now. Your "whiz kids" have apparently mentioned the possibility of using fuel cells in this role. However, I believe that they may be barking up the wrong tree... or maybe hollering into the wind... about possible advantageous relationships between fuel cells and earthships or other off-grid situations. It is not my intention to discourage anybody from seeking opportunities to utilize fuel cells. A lot of human progress has resulted from people who heard "Can't be done!" and reacted with "The Hell you say!" and then went on ahead and found a way to make it work. However, a lot of obstacles stand in the way of residential-level fuel cell use.

I've been following the saga of fuel cells since very early in their development. At about the time they began to make an appearance in the commercial market I was employed as the Manager of Commercial and Industrial Natural Gas Engineering for a large utility company near Milwaukee, Wisconsin. We had a VERY large interest in fuel cells as it looked like a lot of our large customers had appropriate situations for employment of such technology. Of course, we were interested in methane-based fuel cells than hydrogen, but the principles are the same. There are some issues:

Cost - The last I heard, the smallest fuel cells that were available cost around \$250.000. Annual maintenance cost is also in the same order of magnitude. I have yet to meet an earthship builder - or other off-griddler who is not building on a shoestring - squeezing every nickel hard, trying to get a dime out of it. This amount of money would be totally out of the question for all but a few well-heeled (rich!) Dennis Weaver types. (Actor Dennis Weaver was an early proponent of the earthship concept and paid for building an elaborate earthship house near Ridgway, Colorado.) In comparison, a good sized battery bank can be had for about MUCH less than that amount, and annual maintenance requirements will involve a few gallons of distilled water, some testing, and some bolt tightening.

Hydrogen Supply - Hydrogen won't liquify at ambient temperature like propane or butane, so the only practical way to get it is to produce it on-site, in real time, with electrolysis. On a total cycle basis, producing and using hydrogen locally might not be much more efficient than battery storage, which is technologically MUCH more simple and much less capital intensive. It might be more practical to power a fuel cell for this kind of application with methane, which can be produced on-site from human, animal, and plant waste using simple biological processes.

Hydrogen Handling - At one point in my career, I worked for a few weeks as a power plant operator in a chemical plant at Henderson, Nevada. This plant produced hydrogen as a by-product; it was piped to the power plant and used as boiler fuel. What I learned at Henderson is that the hydrogen molecule is so small that it cannot be contained in ordinary piping. It leaks right out of threaded and flanged pipe joints that will hold methane (natural gas) or other gaseous fuels just fine. Special thread compounds and flange gaskets were used, and even with those, we were required to check the hydrogen piping



with a flammable gas detector every 8 hour shift. An additional problem is that electrolytically-produced hydrogen is nearly pure. Unlike odorized natural gas, it has no odor, which compounds hazards whenever leaks do occur.

Hydrogen Storage - Storage is subject to the same leak issues as piping. Moreover, hydrogen is not very energy dense, like liquid fuels are. A large volume tank would be required to hold a few day's supply. Compression could be provided to reduce the volume of storage, but would require more energy and further complicate an already complicated system.

Scalability - The \$250K fuel cell mentioned above is too large for all but the very largest residential buildings - far too large for the kind of reasonably modest dwelling envisioned by most e-shippers. Further, the use of a "neighborhood" based system doesn't seem appropriate for e-shippers, who tend to value the solitary life. I know that work to reduce fuel cell size continues, but progress is slow... Perhaps the research on fuel cell vehicles that the automotive companies are doing will yield suitable results at some point.

Redundancy - My current off-grid power battery has four strings of four 6V batteries each for a nominal voltage of 24 VDC. If a single battery goes bad, I can simply cut the string where it belongs out of the bank while the battery is being repaired or replaced. My power capacity will be reduced during this period, but I'll still be up and running even though I may have to limit my consumption to some extent. Most off-gridders I know have similar systems with multiple battery strings and can continue limited operation during battery trouble. It seems unlikely that an off-grid fuel cell plant could afford more than one unit; this leaves the off-griddler with a single point of failure...

Heat Cycle - Getting the most out of a fuel cell means not only being able to use the electricity produced by the cell, but also being able to use the heat that is produced as a by-product. Properly designed passive solar thermal mass houses like earthships require little supplemental heat in most climates - so the heat thrown off by the fuel cell would largely go to waste. This is why most of the practical fuel cell applications identified thus far involve commercial and industrial processes where both heat and power can be produced and used simultaneously. Examples: commercial laundries, hospitals, metal plating plants, and similar institutions.

Training - It is possible to teach anyone with average intelligence and reasonable manual skills to do necessary maintenance work on batteries with a few hours of instruction and on-the-job-training. The technology is very simple and the hazards are manageable. Fuel cells and the processes surrounding them involve technology a couple of orders of magnitude above that of the battery. The vast majority of current and potential e-shippers do not have the necessary technical skills or aptitude. So outside maintenance help would be required from time to time. But a major point of earthshipping is to become more self-sufficient, not less.

Complexity - My experience in plant and facility operations has taught me that the reliability and the "fixability" of any system is inversely exponentially proportional to the number of components in the system. Battery systems are very simple with few components, hence quite reliable and easy to fix. Fuel cell systems are much more complex, hence likely to be less reliable and certainly more difficult and expensive to repair.

I think that we will be seeing a lot more fuel cell applications in the years ahead. With more research and commercial field experience (the BIG and only real laboratory!), a lot of improvements in efficiency and scalability are likely to be made. I just have a lot of doubts that fuel cells will ever be much of an answer for the remote off-grid e-shipper.

Please let me know if you have any questions.

Leonard Jones, P.E.



One of the aspects of autonomous and sustainable living is water purification. Some major breakthroughs have been achieved by a project group headed by Dr. Käthe Seidel of the Max Plancke Institute. Step 1 is composting silt or

slush in cane beds.

Step 2 is the the main purification with 20 different wild marsh or water plants. The plants are planted in lava filters with a thickness of about 30 centimetres and the waste water is guided horizontally through the roots of the plants. The lava filter forms an ideal biotope for the roots and hosts an ideal mixture of micro-organisms. The diversity of the pre-hardened plants combined with the lava filter guarantee a high reliability, even in an urban setting. On the following site you see an

application on the flat roof of a photo lab:

www.asap-fotolab.be/pages/waterzuivering.htm

Belgian contractor Marc Daelemans leads a company that has further perfected this method and will demonstrate it at the earthship seminar being organized in Sweden and is willing to help setting up mini-systems at other earthship projects. For more details (Dutch only) you may consult

www.pure-milieutechniek.be or mail to: pure@village.uunet.be

PORTUGAL

People interested in setting up an earthship project in Portugal may get in touch with:

Rui, tel (351)917 720 584 or Albino, tel (351)964 378 38.

They have done an earthship seminar with Michael Reynolds and are looking for a chance to build. They can also help scouting a terrain in Portugal.

Info per mail: canelaboy@esapi.pt albi_nu@portugalmail.pt

Architects without Borders

Architects Without Borders Belgium (Asf-Be) goal is to improve the living conditions of the poor, war torn, and victims of natural disasters, regardless of race, political, religious or philosophical convictions. The statutory goal is to deliver services in the field of architecture, building, city planning (zoning) and the environment. Asf-Be is part of the international network of Arquitectos sin Fronteras Internacional. Exchange programs are set up to pool knowledge and resources more efficiently within this network. Architects without Borders Belgium (Asf-Be) is a non profit organization.

Asf-Be works both in Belgium and foreign countries. In this article I

especially like to discuss the Belgian project. We work in the field of housing and poverty. The target group are people who are disabled. These can be both physical and / or mental and financial disabilities. We choose explicitly for those people who don't have the resources to renovate or maintain their own house. In Flanders, where 75% of all people are owners of their own home, we have to deal with old houses. In a lot of cases, these are inhabited by people with a disability. Cases are recommended to us by local social workers, and after consulting the occupants we write a report jointly. This is a common procedure in our region, but Asf-Be goes further. Because an advice does not count for much without effective implementation, the organization also draws up an implementation plan (financing, time plan) also in consultation between the occupant and the social services. To reduce the costs of implementation we are setting up a data-

base of second-hand or end range construction materials, or products with small production fault. This material is donated by the construction manufacturers or comes from demolished buildings. They are identified by the architect prior to demolition. Beside the materials database we have a network of job services and volunteers who also carry the work out free of charge. This way, it is possible to create a more acceptable situation by adapting it to the needs of the occupant. Important in this whole process is the involvement of the occupant. He participates in both the preparation as well as the execution of the job. The social worker's collaboration is also a must. By adapting the surroundings, an impulse is given. Also, the occupants can learn a lot about practical aspects of living. Not just in the use of the house, but also in the maintenance of it. Given the long-term cooperation of the social worker with the occupant, the former is the best placed person to

guide this process.

For example: A woman with three children owns her own house. One of the children sleeps in a wet cellar. The child suffers from asthma and his lungs are affected. In the house sufficient space can be created to let sleep the child somewhere else. The entire adaptation has been examined with the woman. Moreover, she learned a lot about the correlation between health and living conditions.

As architect you must come down from your ivory tower and come in contact with everyday people. Collaboration on such project is satisfying: because you see the occupants really grow through the whole process and the implementation. Want to participate? Contact our secretariat: Asf@architectenhuis.be More information please refer to www.asf-international.org, as our own Internet site is under construction.

Heartfelt greetings, Bruno Deraedt.

The ecocathedral

A centre for our future urban society

Today's urban surroundings are a prefabricated environment. In them, people are observers, not participants. They exist disconnected from space and time. Within such a limited urban ecosystem, how can a natural system develop:



a complex set of surroundings in which time is given space and in which space is given time? This is the key issue proposed in this essay. Such a development would mean a fundamental change that would be directly opposed to the current structures of politics, money and regulations. According to Le Roy, these natural structures could be created by involving available energy and by the interaction of humans, plants and animals. We could call these structures 'eco-cathedrals'. Le Roy bases his vision on new scientific insights. The Chaos Theory, for example, proposes that complex systems

develop by means of self-organisation by giving free reign to the time factor. The more complex a system, the more autonomy can develop, and the more autonomy that is given, the higher the degree of order that is possible. He sees complexity as the opposite of diversity.

Thirty years ago, he started his experiment known as the Ecokathedraal in the Dutch town of Mildam, a project that was open-ended in terms of time. At the basis of this experiment was the three-fold question posed by Nobel Prize winner, Ilya Prigogine: Ilya Prigogine: "What can nature do, what can living humans do, and what are living organisms capable of?" Le Roy wondered what a single person could do and then set about to find out by doing something himself. On a four-hectare site, he started planting in a completely random manner. The signing of a contract with the municipal government was followed by having road workers dump their residual materials at the site for several years. Le Roy processed this material by hand without any outside assis-



could participate creatively in building a living environment without a ground plan and without the boundaries of private property. Following his ideas would mean a revolution in designing urban space.

For the time being, Le Roy advocates a double city: an alternative system as well as the existing one. Within this double city, the available energy of people must not be seen as tampering with the market. His ideas have met with



much positive response elsewhere in Europe, especially in Germany and Switzerland, in recent decades. To date, however, all the very enthusiastic experiments launched in urban spaces have been prematurely abandoned. According to Le Roy, political systems will never allow creative potential applied to space and time to be really carried out in full. To change such a situation would require radical decisions to be made by politicians, industry and consumers, enmeshed as they are in the regulations of the current consumer society.

www.ecokathedraal.nl



tance. The result was the building of assorted structures, low walls, pathways and towers that due to their ingenious construction could serve as purification plants for acid rain. His Ecokathedraal demonstrates the potential of human energy interacting with the forces of nature. Employing all the potential available from all human beings would provide a mega-source of clean energy. Using such a method, a new habitat could take shape in which everyone



Taos seen by Ties

Just before I left for a conference in Vancouver Theo told me: Why don't you say hello to our friends in Taos on your way from Vancouver to San Francisco? Too much of a detour, I thought. After checking the renewed and pleasant website of www.earthship.com it proved to be feasible and after a financial windfall I decided to chance my ticket to San Francisco for one to Denver, to rent a car there and drive to Taos and back. .

For a Dutchman the Southwest is an improbable environment. So open, so empty, such distant views and yet sporting all modern amenities like airfields, freeways, and showcases of corporate culture like Burger King, Starbucks Coffee and Shell petrol stations - like biospheres implanted in a deserted landscape.

India with Michael's building team on a tsunami disaster relief mission, she gave me a bed there. So I experienced three night in a genuine earthship. In theory we all know it, but it really works: The cold nights are warm inside, there is electric current from the sun, the shower gives solar heated warm water from the cistern and the plants grow to the greenhouse ceiling. The only problem was that it was not quite finished yet. Which appeared often to be the case with self built earthships. The

blackwater system still did not function and most of the walls had not been plastered yet, which made it dusty inside. The community around the visitors' centre mainly consists of self built earthships. Around many earthships tyres are abound and the sunlight is reflected by all the cans protruding from the unfinished walls. All earthskippers seem to have dogs and fierce looking cats. The latter have to keep the mice and the desert rats out of the earthships. And everyone has two or three cars parked in their yard. It's America after all.

A building that has been completely finished is the home of ex-US-marine Robert. His fulfilment of the American dream. A three storied building with a hydro and veggie oil limousine parked in front, nine bedrooms in different styles with as many bathrooms, magnetised healing water, solar healing systems, home cinema and so on. And still self supporting by solar and wind energy stored in a fuel cell and a

generator fed by biodiesel. "This is the future", says Robert. We have corporate America visiting us every day! I give them sustainable Disneyland! That's what America wants! We even had Schwarzenegger visiting! He loves it!"

To my Dutch eyes and ears it all seemed a bit overdone, but it is fascinating to witness that it is all possible in the U.S. of sometimes incredible A.

Meanwhile Michael builds the "Phoenix". It appears modest in comparison to Robert's "sustainable freedom fortress", but is still sizable with the extra heat buffers in the back, two beautiful bathrooms and the double greenhouses that will grow a substantial amount of food. During my last day I also met Kirsten Jacobsen in the visitors' centre. Solar survival architecture is a thriving enterprise, judging the atmosphere in the office. People were busy with various projects and like at OWAZE's, people were cordial and friendly. On the reception table some books and magazines about earthships were spread out. And believe it or not: the Dutch earthship book of the NB! series and Jan Jongert's recyclicity booklet had found a prominent place between them.

Ties Rijcken

Friday June 10th Ties will show the pictures he took from his trip on the video beamer at OWAZE headquarter at Vlietlaan 56^b in Rotterdam.



Taos wasn't quite the desert town I had expected. From the east you first cross a mountain range with woods and lakes, then Taos and then the desert. It proved to be a tourist attraction breathing the atmosphere of a hippie village. Visitors come to experience the splendid scenery, the often freaked out inhabitants, the Indians and the fairytale like adobe architecture.

Luck was on my side. Jennifer, the girl working in the visitor's centre, had the keys of Ted's earthship. Ted being out in



An example of a successful international scrap artist is Adriaan Schalken. Starting from an empty warehouse and working with scrap materials and objects found in the street, he created an oasis in a derelict industrial zone in the city of Enschede. Nowadays "the paradise" is managed by Prashanti Janssens en Ronald Heukels. They offer their guest (veggie) meals, tours and workshops. A treat for earthskippers on a binge and going Dutch.

www.hetparadijs.com



Institute for Sense and Delusion

The scale models exhibited in the Owaze shop-window recently attracted two young artists, Tjalting Visser and Erik Sep, who professed that they wanted to incorporate them in their Instituut voor Zin en Waanzin. In English this literally means "Institute for Sense and Deluded Sense". The latter proved to consist of derelict warehouse on the premises of an abandoned shipyard in the city of Dordrecht. There they had created an Alice in Wonderland landscape filled with miniature buildings made out of scrap materials. When I visited their project we got along so well that we decided to form an alliance. There is an empty floor in the Institute and OWAZE architects and technicians can use it as a testing ground for designing floating and other earthships. Earlier Owaze played with the same idea. As Holland is waterlogged and below sea level, the most obvious calamity that can befall us in case of global warming and a resulting rise in the sea level is an inundation. So why not build a variation on an old theme, Noah's Ark? And use earthship concepts to make it self-supporting? The movie Waterworld is based on that theme and we may also find inspiration in the work of Richie Sowa, an Englishman who single-handedly created a floating island out of plastic bottles.

www.playamayaneews.com/article235.html
www.ivzw.nl



Deepening frog pools in a Belgian version of Sherwood Forest

Being Dutch April 30th should have been dedicated to celebrating our Queen's birthday, but maintaining friendly relations with Earthshipbelgium VZW carried more weight with me than the commotion around Hare Narigheid. (A pun on Her Majesty meaning something like "Her Troubleness". A good friend of mine knew Beatrix personally during her student days at the University of Leyden and calls her that ever since).

In front of the Gent Ecological Centre chairs and tables had been put out on the streetwalk and David Verstappen, chairman of Earthshipbelgium VZW and his cheerful partner Lydia welcomed me warmly. A radiant sun conspired with a sizzling local white beer in spreading a festive mood. And tasting the plat du jour in the open air chased all traces of hypochondria. This feeling dominated the rest of the meeting, even when it was held in a backroom designed more for concocting shady deals than for boundless visionary fervour. I could imagine a contemporary Karl Marx finding the right inspiration there to add a few chapters to Das Kapital. There were around ten people present and the prevailing mood was Belgian. Meaning softspoken and self-effacing towards authority. The Dutch ear tends to suspect subterfuge or even self-mockery there. An additional proof of the fact that speaking the same language does not always lead to better understanding.

David first asked me to sketch the latest developments in OWAZE and then started to read aloud a letter drafted in Belgian officialese. It stated the reply of the Municipality of Schilde to his request for permission to start a permaculture project within their boundaries. Apart from some mysterious clauses about frog pools that may be deepened but not widened, no obvious reasons for their refusal were given. Probably the local sheriff, after pondering for more than six months on the meaning of the word permaculture, considers it as a newfangled attempt at Sherwood Forestization and thence fears attracting a new breed of Robin Hoods. There was some discussion about the feasibility of appealing to some administrative court and of consulting a legal expert on zoning regulations. To be continued.

Theo Lalleman

Recyclicity.net publicly launched on June 2nd

Recyclicity.net is an open source website and database that facilitates the reuse of materials in building projects. Organiser and host is O₂ NL, the Dutch branch of the O₂ global network for sustainable design and production. **Location:** Auditorium U of the faculty of industrial design, Landbergstraat 15 in Delft.

The programme of the evening:
19.00 reception and opening
19.30 launching Recyclicity.net
20.15 break
20.45 presentation of onsustain.com
21.30 opening exhibition Re(f)use

Recyclicity Foundation.

The point of departure of Recyclicity Foundation is to make waste materials reusable for building purposes with a minimum of energy loss in transportation and processing. As one of its main tools it has developed **www.recyclicity.net**. This online database aims at connecting builders and demolishers. The site also catalogues potential applications of other waste materials in building processes and makes it available for designers and

builders. The network thus furthers reuse on a local scale and knowledge about new applications on a global scale. The knowledge base is founded in Rotterdam and starts with an inventory of waste materials available in the region. It hands other institutions a tool to chart other areas and also illustrates possible applications. Recyclicity is an initiative of 2012Architects and is supported by a number of governmental and non governmental institutions.

www.recyclicity.net

Onsustain – Creative sustainability

This is a web-based platform that puts sustainable products and their designers in the spotlight. It consists of a virtual showroom filled with creatively designed sustainable quality products and a showcase where the crème de la crème among eco-designers share their concepts, their ideas and their experiences.

www.onsustain.com

Reffjuse

Reffjuse consists of some 120 examples of estetically designed products and has travelled all over Europe. Permanent abode: Fa-

culty of Industrial Design at Delft Technical University.

www.re-f-use.com



From Russia with love by Aleksandr Filipchenko



LIVING TOGETHER IN HARMONY WITH NATURE



Earth Architecture

The internet site of Dutch Architect Enno Wiersma (who applies, develops and promotes healthy and earth architecture) will show you various forms of Earth Building like Straw Bale Building, Children build with Earth, Living in/on Earth, Living in Harmony with Nature, Adobe Architecture around the World.



round wood poles and knotted with ropes, although metal joints can be applied. The fill and body of walls, floors and ceilings is adobe (a mixture of clay, sand and straw), which is applied on a weaving of willow branches. Such techniques are reminiscent of the so called (german) 'Fachwerk' houses and wood frame houses with wattle and daub fill. Therefore the design ideas are syntheses of futurism and traditionalism.



This specific article deals with what we think is a very interesting way of building we found on this site: Model of a House for the Future. It is a detailed proposal for a way to live together in harmony with nature. The house can be build by a group of people as a form of recreation. There is much more fun in building a house together, than to go jogging and burn up a lot of energy.

A cave like bath stores excessive heat of the greenhouse and fireplaces, as do the adobe masses. The roof can be finished with thatch, which is grounded in the adobe finish of the wattle and daub outside surface. These are ancient techniques, which can be applied for the future.



This house is designed for northern climates, where the sun heat can be collected in a greenhouse facing south and stored in the north wall, which is insulated with straw bales. The frame of the house is made of

To be able to see a lot more of information on this interesting subject we insist that you to take a look at:

<http://www.stratosphere.org/index.htm>
(choose earth architecture / living in harmony with nature)



Fertile Aliens

Promoting earthships in Holland one gets involved in some weird discussions. Mostly because the Dutch people mistrust extravagance and prefer everyone to behave in a matter of fact conformist and predictable manner. A result of centuries of Calvinism no doubt.

Existing New Mexico earthships definitely look exotic to the Dutch eye. And the influx of three generations of fertile aliens, many of whom are Muslim and unlettered and whose children tend to flood city centres with petty crime, has put tolerance for the exotic under some strain. Nationalist feelings and shifting political priorities tend to seek solutions in reinstalling lost innocence by appointing more police officers, by building more prisons, by reducing civil rights and by bewailing the loss of norms and values in nostalgic overtones.

Also there are rules and regulations. The prevailing political practice has spun a bewildering and sometimes paradoxical web of them. Catches 22 and other double binds abound. In Holland we don't have a two party system and as every government is a coalition of parties trying to form a majority by consensus, the heady wine of clear decision making is often watered down by compromise and adjournment. Furthermore environmental issues are not high on the political agenda. Subsidies for wind turbines or photovoltaic cells for private use have been withdrawn and are only granted to large power companies, so

the electricity won privately is still expensive compared to the juice coming from the grid.

Another factor weighing heaviest against earthship acceptance is that fact that Holland is densely populated. This results in forbidding prices for land. This again favours multi-storeyed buildings and as there are no mountains and hardly any hillocks to terrace them against, artificial means have to be devised to make layered earthships feasible. Of course I read Michael Reynolds' landfill option in Earthship vol. III and his suggestion for a diagonal high rise concrete slab that carries terraced earthships on its south face, but that is in the realm of city planning and asks for political pull and for getting professional well reputed project developers involved. That will take time, as our reputation as dependable and financially sound burghers is still somewhat shaky.

But we do try. And how. The government is telling every alien that it is his/her duty to become a good burgher. *Inburgeren* in Dutch. When we tried to explain this notion to OWAZE guest artist Habib Diagne, who hails from Senegal, he hand carved the wooden bicycle shown here to show his appreciation for the finer aspects of Dutch burgherhood.





Agenda		
Date	Place	Event
June 1st, 17h00	Theater Hal 4, Watertorenweg 200, Rotterdam	Presentation of Cultural Map Kralingen-Crooswijk edition 2005
June 2nd	Auditorium U of the faculty of industrial design, Landbergstraat 15 in Delft	Recyclicity Foundation launches pilot version of Recyclicity.net, an open source website and database furthering reuse of materials in building projects.
June 3rd	Erasmus University, R'dam	Transitionmarket. Info secr. Owaze.
June 6th, 17h30	Owaze, Vlietlaan, Rotterdam	Workshop Mosaic
June 10th, 20h00	Owaze, Vlietlaan, Rotterdam	Ties Rijcken presents slideshow of his trip to Taos
June 14th to 28th	Valencia, Spain	Building training Owaze at Earthship Spain
June 17th to 19th	Goes, Holland	Ragnarock: 40.000 square meters of Music, Spirituality and Mysticism
August 1st to 14th	Mobodarne, Sweden	Building training at earthship Sweden.

For all further information: call Theo at Owaze: +31104627348

OWAZE ECO-WORKSHOPS

OWAZE started a series of workshops in sustainable building techniques like mosaics, papier mache, mud plastering, model building etc.. We enable OWAZE certified craftsmen to pass on their skills. the summer we concentrate on earthship projects elsewhere in Europe, we will resume workshops in September. When you are interested to register or to teach, mail us and we will inform you of the possibilities. As during

the summer we concentrate on earthship projects elsewhere in Europe, we will resume workshops in September. When you are interested to register or to teach, mail us and we will inform you of the possibilities. As during

info@owaze.nl



Taos-based Earthship Biotechture offers acclaimed one day intensive Earthship / Sustainable Building Workshop. Michael Reynolds will be presenting at the Ramada Plaza Hotel International in San Francisco, California on Saturday, July 23, 2005.

The One-Day Intensive Earthship / Sustainable Building Workshop educates architects, builders, students and individuals on how the Earthship concept is executed. Earthships are being replicated throughout the world by novice as well as experienced builders. Individuals and communities are coming to understand that fully sustainable buildings meet, and often exceed, existing regulations. Earthships have gained attention worldwide for their unique, completely off grid design featuring walls made from scrap automobile

tires rammed with earth.

The Earthship is defined by:

- Thermal/Solar Heating and Cooling
- Natural and Recycled Building Materials
- Solar & Wind Electricity
- Water Harvesting
- Contained Sewage Treatment

The One-Day Intensive Earthship / Sustainable Living Workshop will be held July 23, 2005.

Ramada Plaza Hotel International
(415) 626-8000
1231 Market St - San Francisco, CA 94103

Advance tickets are \$100 per person. At the door \$150. Earthship books and DVDs will be available for purchase at the event. For additional information or to inquire about group or students rates, send an email to

jen@earthship.org

Or call 1-800-841-9249.

You may also book online at www.earthship.org