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N°5 SUMMER 2012

ENERGY ART POLITICS



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Scraping the Earth

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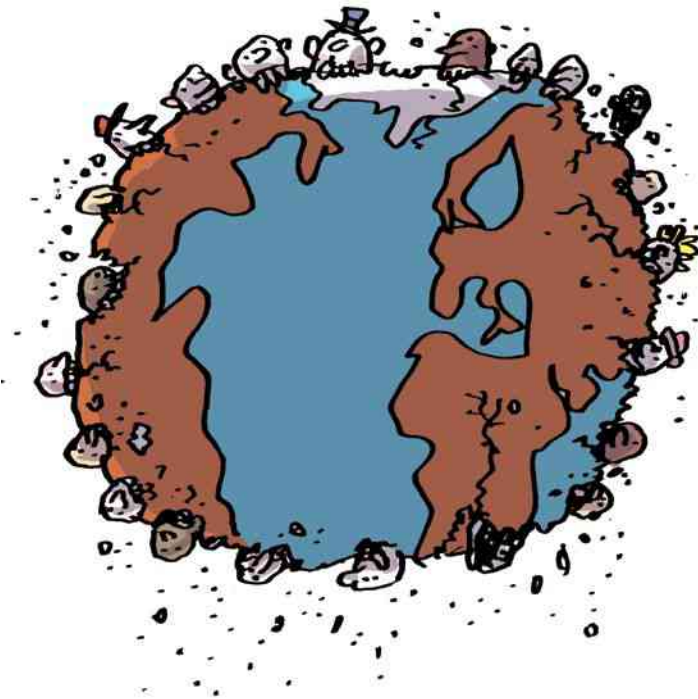
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Illustration by Pascal Lemaitre.



Towards 3 Degrees

Some call climate fluctuations “**global weirding**” rather than **global warming** because of mild winters and sudden summer hails. Call it what you want – scientists now concur that we are headed towards a gradual temperature increase of 3°C or more by the end of the 21st century.

The Intergovernmental Panel on Climate Change (IPCC) has repeatedly warned of melting glaciers, rising sea levels, floods for some regions, droughts and heat waves for others, which could be mitigated if carbon emissions peaked by 2015, but **predictions do not bode well**.

The World Bank announced that efforts to counter climate change are **more about adaptation now than mitigation**, and the IPCC special report from March 2012 seeks to address the question of “Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation”, suggesting that the worst is still to come.

In 2011, the United Nations announced that the world had passed the milestone of 7 billion inhabitants while the “bottom billion”

still live in poverty. With birth rates booming and adding 75 million to the global population each year, projections show that we will reach **8 billion by 2025**.

For the first time in history, more people live in cities than in rural areas, and many more are moving to urban centers to find what they hope will be a better, richer life. Horizontal slums and vertical skyscrapers are growing apace; **global demand for energy is rising exponentially**.

As an international communications exercise, the United Nations made 2012 the year of “**sustainable energy for all**”. This translates into raising awareness about the need to increase access to electricity mainly in developing countries in Africa and Asia.

The energy challenge is colossal for these continents where – like industrialized countries – the price to pay for the transition to renewables is still too expensive. For both, potential returns are too far off, which means most countries and companies are not investing enough.

The human quest for survival is damag-

ing the Earth, ultimately spelling our own demise. **With the end of easy oil in sight now**, Alberta, Canada, is literally scraping away swathes of earth to process tar sands into refined oil. The process is devastating for locals and for the boreal forests.

Equally expensive is the ‘cracking’ or ‘fracking’ process of injecting huge quantities of water into the Earth to extract shale gas. The United States is already hooked, and Europe is following quickly. The impact on nature is still unknown, but just because you cannot see gas does not make it clean.

Nuclear power is an even more controversial source of energy even though it emits zero carbon dioxide. Despite nuclear fallout risks, **China, India, and Turkey are building power plants**. Critics and proponents realize that in the near future nuclear will fill the gap in the slow transition to renewables.

Europe is a world leader in the development of renewables with an offshore wind potential on the North Sea that **surpasses its current dependence on Arabian oil**. As ever, the challenge for Europe is how to coordinate and harness this wind potential a lot faster and for a lot more people.

On the **global renewable energy market**, China leads the solar panel industry, and has the biggest wind farms as well as the largest hydropower dam. China sees that there is money in this burgeoning sector and with its massive population it has no choice but to move rapidly towards greater sustainability.

China is actually doing more than the United States to combat climate change. Meanwhile, in the Arab world trash is piling up along railways and streets. In industrialized countries, what trash we can expunge to space now orbits the Earth, making us look increasingly like a gray planet.

The more these issues are recognized, the better informed we will be to live more sustainable lives. For this to happen, governments need to give their citizens more economic incentives to use energy more efficiently, while also **opening opportunities** for the private sector to invest more readily.

Stuart Reigeluth
Founding Editor

“To understand our world, we must use a revolving globe and look at the earth from various vantage points.”

Ryszard Kapuscinski, *Another Day of Life*

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Cover photo by Alan Gignoux of tar sands mining operations at Fort McMurray in Alberta, Canada.



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EUROPE'S NORTH SEA Wind Potential

Writer: Maria Tvrdonova

Maria Tvrdonova worked in the energy sector in Slovakia and is now at EWEA in Brussels where she works on EU funding for research and development of renewable energy technologies.



The renewable energy potential from North Sea offshore winds surpasses Europe's current dependence on Arabian oil. Installing and connecting offshore windfarms with the European onshore grid would turn a major energy supply concern into a pan-European sustainable project. Maria Tvrdonova describes current projections and the challenges ahead.



Decarbonizing Europe's Energy Sources

Europe faces an energy supply challenge that can be turned into a major continental opportunity. The European Union (EU) has become a global leader in renewable energy technologies, but competition is steep from cheaper Asian products. Maintaining competitiveness, securing energy supplies, and combating climate change by integrating large-scale renewable energy into European grids are the primary objectives that the EU has set for 2020. The EU's "Roadmap for moving to a competitive low-carbon economy in 2050" goes further and explores routes to decarbonize Europe's energy future. One of the viable options for cutting carbon emissions forecasts a 75% energy share in gross final energy consumption and up to a 97% share of renewables in electricity consumption by 2050.

Wind energy will play an essential role. Today, wind provides 5.3% of European power but is capable of delivering 12% by 2020 and 50% of the EU's total electricity consumption by 2050. While onshore wind will remain dominant in the immediate future, in the mid- to long-term planning, offshore wind will play a decisive role in meeting European renewable energy objec-

tives. The potential for offshore development in the seas of Europe's north-western countries is vast. The European Energy Agency (EEA) estimates that the potential of offshore wind in 2020 could be close to 2,600 terawatt hours (TWh), which would equate to between 60-70% of Europe's annual electricity demand projected in 2020.

Compared to onshore wind, offshore farms are more difficult to construct and maintain, resulting in higher capital and operational costs, but they still offer a number of key advantages. Wind at sea is stronger and less variable than on land, resulting in higher production outputs, which brings down the cost per unit installed. Turbines can be larger at sea due to transportation facilitation by ship vessels; larger blades means the wind farms can harness stronger winds and generate more energy.

Offshore wind farms encounter fewer public challenges, less social resistance, than onshore farms do. "Not In My Backyard" (NIMBY) groups pose serious obstacles to deploying any kind of energy infrastructure onshore, which offshore parks are less likely to face, unless it interferes with other mari-

time interests. Major environmental organizations, such as WWF, Greenpeace and Birdlife support both onshore and offshore wind as the cleanest source of power. In the case of offshore, wind farms protect marine ecosystems and can create synergies by fostering aquaculture for example.

Offshore wind energy can play a key role in decarbonizing Europe's power sector while sustaining its dominance in wind technologies and innovation, leading to market growth and green job creation along the supply chain. The question now is how to bring electricity produced, in some cases as far as 200 kilometers offshore to the consumer in mainland Europe. Enter: "Supergrid".

Harnessing Offshore Winds

Europe's interconnected electricity system began in the 1950s. The "grid" includes 24 countries, but resembles more of a patchwork of national grids that were constructed and operated for large nuclear, coal, hydro and gas-fired plants. With the

current shifts in the energy paradigm, the outdated and ageing infrastructure is no longer able to serve emerging needs, such as integrating electricity networks into a pan-European "copper-plate" where a customer from Slovakia would be able to purchase electricity produced in Belgium, for instance. And there is nuclear decommissioning after Fukushima as well as the need to integrate larger shares of renewables, notably solar and wind.

The idea of building an interconnected grid that would link the North Sea offshore wind farms with solar in southern Europe, as well as the hydro reserves in Scandinavia and the Alps region, stretching over 5,000km was first introduced by the European Wind Energy Association (EWEA) and Mainstream Renewable Power. Over a dozen analytical studies led by prominent research institutes have assessed the possibilities of harnessing offshore wind and connecting the energy produced to the European electricity system. The projects proposed focus on the offshore wind farms in the North Sea, as well as on the potential of developing interconnectors beyond Europe in North Africa. While the latter is still under debate, the North Seas (North Sea, Baltic Sea, Irish Sea, and the English Channel) offshore Supergrid is in the political pipeline.

Today, wind provides 5.3% of European power but is capable of delivering 12% by 2020 and 50% of the EU's total electricity consumption by 2050.

A PAN-EUROPEAN COPPER-PLATE

Copper-plate refers to the idea that an internal European market in electricity and gas is enforced by EU legislation aiming at liberalizing the national markets and integrating them into a common pan-European market, where the electricity can flow freely and would be tradable everywhere. The term 'copper plate' is jargon used to describe the ideal situation where electricity would not be obstructed in its physical or economic flows and thus the interconnected European network would resemble a 'copper plate' – copper is a superconductor used in the electricity lines.



In 2010, Energy Ministers from 10 countries (Belgium, the Netherlands, Luxembourg, France, Germany, Ireland, UK, Norway, Sweden, and Denmark) signed a "Memorandum of Understanding" in which they agreed to develop a North Seas offshore grid that would integrate current and future offshore wind farms, known as the North Seas Countries Offshore Grid Initiative. The EU has nurtured the process by encouraging policies and co-funding wind parks and offshore wind technologies, notably through the European Economic Recovery Plan (EERP) as offshore wind and grid markets could create hundreds of thousands of jobs.

Demonstration projects through EERP are complemented by other financial subsidies, such as the EU's research and innovation framework program. Political will and industrial commitment are significant drivers of the process. In March 2010, numerous key stake-holders including manufacturers, utilities and investors joined forces and established an organization called "Friends of the Supergrid" based in Brussels. The objective is to provide strategic vision and advocacy to the European institutions to promote and create an actual European Supergrid. Despite wind farms being interconnected, as well as political support and industry interest, the Supergrid concept remains theoretical.

The capacity of the European power systems to absorb large amounts of offshore wind is determined by technical and practical constraints as well as by regulatory and economic schemes. Often used as an argument against wind energy, some claim that the variability of wind precludes its large-scale integration due to difficulties of grid operation. This is only partly true. Wind can be an unpredictable and variable source of energy, but the large scale interconnection of wind farms across the North Seas will ensure greater output stability. However, if a large production unit, such as nuclear or coal-fired plant stops operating unexpectedly, the grid balancing becomes much more difficult and costly.

European political commitment is crucial to overcome investment hesitancy in the private sector.



Footing the Bill

Overall costs of building and operating the offshore grid are major issues. Currently, the existing wind farms are linked by lone-standing cables that follow the shortest path to the coast, to limit the rising costs with each additional kilometer of submarine line. The Supergrid however envisages the interconnection of hubs in order to optimize the entire grid. For existing projects, it is very difficult to anticipate the future grid scheme and as a result most projects fall back to lone-standing cable connections, to prevent the risk of stranded costs.

A further expense is the technology used for submarine lines to connect wind farms located more than 50km from the shore, for which high-voltage direct current (HVDC) technology is more suitable than alternating current (AC) cables, traditionally used for onshore transmission, where electricity losses are much higher

and major inefficiencies occur over long distances. HVDC technologies are yet to be properly tested in marine conditions and substantial research and development is still needed in HVDC converters, multi-terminal operation solutions, circuit breakers and other technologies currently developed by only a handful of manufacturers. Another cost-determinant is the price of aluminium and copper, which are superconductors used for the cables. The prices are set on fluctuating global markets, creating a very unstable component to the grid's overall price.

Maintenance costs are also high due to the logistical difficulties in accessing the farms and because only a few companies offer services for offshore sites. During times of economic downturn raising the investments needed for the construction and integration of a wind farm, where the upfront costs can

be as much as a billion euros, is not an easy task. The EU and its Member States need to provide assurances to private investors. The research and development funding from the European Commission represents a “quality label” to leverage further investment. This has been done mainly through research framework program funding, EERP, infrastructure funding and, co-managed with the European Investment Bank, loans and equity participation.

Another crucial issue to be resolved is the question of costs and benefits sharing. An offshore grid would potentially benefit all European customers with electricity flowing within the interconnected European electricity grid; resulting in higher security of supply, while contributing to a low-carbon European economy. Apart from investors' overhead, the costs that are subject to energy regulators' approval are attributed to tariffs paid by electricity consumers. Should the costs be assumed by all EU consumers, EWEA estimates they will represent 1% of



The practical challenges associated with developing the Supergrid are not insurmountable.



EU consumers' electricity bills, but as the benefits are uneven and difficult to quantify, the issue of allocation of costs across Member States is a subject for discussion at all energy regulatory conferences all over Europe. Alberto Pototschnig from the Agency for the Cooperation of Energy Regulators (ACER) stated that "when infrastructure provides benefit for two or more jurisdictions there is a problem about how costs are allocated".

Political (Un)Certainty

The European Parliament and European Council are debating Commission proposals for financial packages and tools covered under the next budgetary period 2014-2020. Once approved, financial support will come primarily from a new "Infrastructure Package", which identifies strategic corridors in Europe where energy networks have to be strengthened to ensure secure, competitive and sustainable energy supply. The North Sea area is earmarked as a priority corridor. However, there are strong voices from the Council calling for cuts in the EU budget, including the Infrastructure Package.

If funding is cut radically coupled with the current hardship in the investment markets, Europe could miss its opportunity. What is absolutely crucial in getting over the investment hurdle is European political commitment which would give signals

to the industry that the investment flow is secure. A coordinated approach to a European Supergrid would decrease the overall capital costs: "First results showed that planning coordinated, integrated offshore grids allow reducing the amount of unutilized network, with capital costs saving of about 10%."*

Administrative Chaos

The long permit process by national authorities is a major obstacle for building offshore infrastructure. Projects have to undergo close scrutiny and are subject to approval from many different bodies, including environmental authorities, maritime spatial planning, regulators, as well as national and regional governments. Permission procedures are one of the most serious threats to creating a common grid in the North Sea. While constructing an energy production unit can take between 3-5 years, the permit procedure and final laying of cables (sub-sea, overhead and underground) may take up to 8 years. An unexpected delay may result in investors withdrawing their funds. The EU is taking steps to resolve this issue with the proposed Infrastructure Package including arrangements to decrease the permit procedures and to set up a one-stop-shop where consent for projects is granted in each country.

Who Constructs It?

The EU's planned 150 gigawatts (GW) installed offshore wind capacity by 2030 and the necessary grid system will require an enormous supply chain as well as a qualified labor force. The onshore bottlenecks need to be solved urgently. There is a lack of adequate harbor infrastructure and the vessels that lay the cables and transport the turbines are fully booked several years in advance. With the right incentives, the high demand for offshore services and products will increase enormously, creating economic growth and thousands of jobs, as is evident in several German harbor cities now.

* European Network of Transmission System Operators for Electricity (ENTSO-E) at a workshop, "Contribution of EU technology demonstration projects (EEPR/FP7), for the development of the offshore grid", Brussels, March 15-16, 2011).

Projects

Operational and planned grid projects have the potential to serve as the backbone for the European Supergrid because they either increase interconnecting capacity between countries or they are located strategically to optimize future interconnectivity. Of special relevance are projects that bring innovative technical solutions with the potential to be replicated, thus shortening the time for the interconnected North Sea offshore grid to become linked with the onshore grid.



The planned **East-West Interconnector** between Ireland and Wales will add 500 MW of interconnection between the two countries.

Completed in 2011, **BritNed** connects the UK and the Netherlands with an interconnector with a continuous electric capacity of 1,000 MW.

Scheduled to be operational by 2016, the **Cobra Cable** is a 700 MW HVDC interconnector between the Netherlands and Denmark.

The strategic partners **NorGer** and **NordLink** aim to interconnect Norway with Continental Europe, allowing the Norwegian hydro plants to serve as batteries for Europe at times when there is less sun and wind. Norway would benefit

from European electricity capacities during periods with less rainfall.

NorthConnect plans to build a **merchant line between Scotland and Norway**.

Contrary to the traditional way of connecting offshore wind power plants by using lone-standing lines, **Kriegers Flak project** is developing an innovative, cross-border solution based on the dual-purpose to increase capacity between countries, allowing for better energy trading.

In January 2010, a licence was granted for a wind farm in the **Dogger Bank** area. Apart from using its 9 GW capacity, this project can become a hub interconnecting surrounding countries due to its central location in the North Sea. Construction is planned to start in 2014.

Germany has been rapidly moving its energy production to offshore sites. Several German wind farm projects, **Bard I**, **Global Tech I**, **Nordsee Ost**, **Borkum West II**, are co-funded by the EERP, based on their innovative turbines and offshore structures. Similarly, the **Thornton Bank** in the Belgian North Sea is being supported on the basis of its innovativeness and replication potential.

An **offshore hub** on the planned HVDC link between the **Shetland Islands and Scotland** is another prioritised project with a multi-terminal platform for the connection of windfarms and marine energy generation.

Looking to 2050

No Supergrid Master Plan currently exists. If a bottom-up approach is embarked upon rather than top-down policy implementation, then interconnecting the wind farms and other sources of renewable energy would be driven largely by economic forces. The system would resemble independently-managed, although interconnected grids, operating at different voltage levels, depending on the technology available when they are built.

One can argue against overregulation and for market development, but in the case of a pan-European project of such significance, a top-down process may be best. This role should be taken by the European Commission which needs to react on several fronts in order to create a level-playing field by harmonizing regulatory frameworks, subsidize technological development, and ensure the leverage effect for private industry to participate as well.

The proposed visions of a European Supergrid draw on Europe's indigenous renewable energy potential located far from the demand of urban areas. It is commonly perceived that the Supergrid would bring many advantages to the entire European electricity system, on the level of sustainability, supply security, system reliability, market liquidity, industry and related technology development. The practical challenges associated with developing the Supergrid are not insurmountable.

Clear signals are needed for investors to generate solutions. The source is a unified political commitment by the EU and its Member States to encourage private sector investments, decrease costs, and allow for positive network externalities by increasing the number of (direct or indirect) Supergrid beneficiaries.

The EU has several instruments available to guide the development of the offshore grid. Synergies between these instruments are needed to achieve the most efficient results of linking technology research and development to the EU's infrastructure pri-

orities established in the proposed Energy Infrastructure Regulation.

A European Supergrid is a long-term project: the economic rentability is some four decades away. Energy demands and energy security makes the Supergrid the most ambitious energy endeavor of the 21st century for Europe. As described by Eddie O'Connor, CEO of Mainstream Renewable Power: "The Supergrid concept has been called 'visionary and revolutionary'. To us, it's just common sense." 

the most ambitious energy endeavor
of the 21st century for Europe.





Source: David Samyn

Johan Vande Lanotte

Belgian Minister of Economy and the North Sea

Andrew Canning interviews Johan Vande Lanotte for *Revolve* about the future of energy efficiency.

What are your responsibilities as Minister of the North Sea?

I am responsible for the marine environment, maritime transport and marine spatial planning (MSP). As Minister of Economy, I have other responsibilities in the North Sea such as sand exploitation and regulating the dumping of dredged material.

What are your priorities for the North Sea during this government?

A major issue is the spatial planning of activities at sea given the large amount of spatial claims in the Southern North Sea area. The Belgian part of the North Sea is in the midst of one of the busiest marine areas globally. I strongly believe in a sustainable use of this area and spatial claims have to be balanced against each other, against the ecosystem and against future use for next generations. Therefore, the ambition is to work out a marine spatial planning strategy in full transparency, with broad stakeholder involvement and a solid legal basis for a marine spatial plan.

Another very important priority is the development and further implementation of marine conservation measures. The shallow sand bank system is quite unique in the world and hosts a rich ecosystem. Some activities deteriorate this system and we have to think about how we can reduce excessive pressure. The previous government implemented a large "special area for conservation" at the border

with French waters (France designed a similar area joining the Belgian one). I am really looking forward to reaching some decent transnational measures within this ecologically-valuable area.

For the whole Belgian part of the North Sea the so-called "good environmental status" is my baseline. To reach this good environmental status, a marine strategy is being designed and measures will be taken in the special area for conservation as well

Europe should move towards a more autonomous, efficient and sustainable energy production

as outside that area. I aim to implement some measures that will not necessarily limit ongoing activities, but that will rather protect and advance marine biodiversity. I am very much in favor of multi-use areas and I will allow activities as long as we can be sure that the good environmental status is reached. I have decided to simplify the environmental procedures that are required before activities can be deployed. This procedure must be clear, efficient and with a low administrative burden – the good environmental status will also be the standard here.

How important is the North Sea Offshore Grid for Belgium for its energy requirements?

The national action plan on renewable energy dates from 2010 and states that Belgium will have 13% renewable energy consumption of its total energy consumption. To realize this, we will need to have more than 20% renewable electricity production – electricity is easier to make renewable than other energy types. To reach this ambition, wind mill electricity production is an important factor. Large scale windmill farms can be –and are currently-deployed at sea. I personally think that Europe should move towards a more autonomous, efficient and sustainable energy production; offshore electricity production will become very important in the North Sea. Belgium is enthusiastic about the North Sea Offshore Grid.

Are there any other developments in North Sea energy production to come in the next five years?

There are currently two windmill farms being built in the offshore energy area; in the coming years five more farms will be constructed. The State Secretary of Energy decides on concessions and licences to build, while the environmental impact assessment is my competence. Together with the State Secretary of Energy, we will calculate what the total amount of energy production for the offshore energy area will be. If there are clear signs that from 2020 onwards, more space for windmills will be needed, I will integrate this discussion and allocate an additional offshore energy zone in the marine spatial plan. The transparent procedure for MSP that I am currently working on will prove very useful as it includes ample consultation. ☺



Christian Kjaer,

CEO of the European Wind Energy Association



Businesses and politicians have been calling for binding renewable energy targets for 2030. How important are these targets to developing wind energy in Europe?

Binding renewable energy targets are the reason that wind energy has become the mainstream power source in Europe today, meeting 6.3 % of our electricity demand. The current 2020 renewables target, of 20%, has driven the industry. Now the problem is that after 2020, there is a policy vacuum, leading to investor uncertainty. That is why the European Wind Energy Association – and many others – are calling for a post-2020 energy policy, centered on a binding renewable energy target for 2030, in order to continue driving the wind energy industry. The European Renewable Energy Council (EREC) has suggested this be a goal of 45%, which would be a stepping stone to an electricity sector that needs to be completely decarbonized by 2050.

Natural gas and shale gas are seen by many states (notably Germany and Poland) as a transition fuel to a decarbonized economy. Is this view a hurdle to the development of wind energy?

Natural gas has a role as a transition fuel in the short-to-medium term because it produces considerably less CO₂ than other fossil fuels. Even so, EWEA has been calling for a cap to be put on the emissions of new power plants, which would help gas plants become more efficient.

The use of shale gas is highly contentious, and the jury is still out on its environmental impact. It is obtained by 'fracking', which North American researchers claim can

cause methane gas to leak into local water supplies. The process also uses over 600 toxic chemicals and vast quantities of water.

In the longer term, all fossil fuels – including gas – should be replaced by renewable energy. By 2050, the power sector in Europe could be 100% renewable, with 50% from wind energy. This would give us a zero-carbon power sector, which would allow us to meet our pledge to cut greenhouse gas emissions by 80-95% by 2050.

A major complaint against the wind industry is that turbines negatively affect the ecosystem where they are placed. How does EWEA view these statements?

All developers planning a wind farm – onshore and offshore – have to go through a rigorous environmental impact assessment to ensure the farm will not have adverse effects on the surrounding ecosystem.

Wind power does not involve the extraction, transportation and burning of fossil fuels. Wind farms produce no greenhouse gases, emit no pollutants, use very little water, generate no waste and contribute to fighting climate change.

Wind turbines have very little impact on birds and bats compared with other man-made obstacles such as buildings or traffic, and constitute a minor threat to wildlife. Major bird and wildlife protection organisations now support wind energy.

One of the major challenges for offshore wind is the creation of connections to bring energy to shore. How difficult is it to raise the required funds for such projects?

A European grid, including an offshore grid, is widely recognized as of key importance by EU decision-makers. In the recent EU

infrastructure package, €9.1 billion is proposed for priority energy infrastructure, although it is not yet clear how much will come to electricity.

Currently, financing such offshore grid connections depends on the country and has to be found by the offshore wind farm project developer or by the grid operator. EU funding for offshore wind projects (for example the €565 million from the European energy program for recovery), and private financing could cover the offshore connection, or not, depending on the country.

The EU-funded OffshoreGrid Project found last year that offshore grids could be substantially cheaper to build than expected. Building "hub connections" at sea instead of using cables to connect individual wind farms to land will result in investment costs that are 14 billion euros lower.

Concerning the goal to create a Europe-wide renewable energy market, how does EWEA work towards a harmonization of support schemes and legislation across states?

EU Member States' renewable energy support schemes work effectively because each one is adapted to its country. Right now, it would not make sense to force harmonization, which would inevitably create uncertainty and instability.

What is essential is that support schemes remain stable and are not subject to future or retroactive changes which would damage investor confidence.

In the longer term, as onshore wind becomes fully competitive with coal and gas – it is already cheaper than nuclear – Member States will want to review support schemes for all technologies (after all the majority of support goes to fossil fuels and nuclear – not renewables). 🌱

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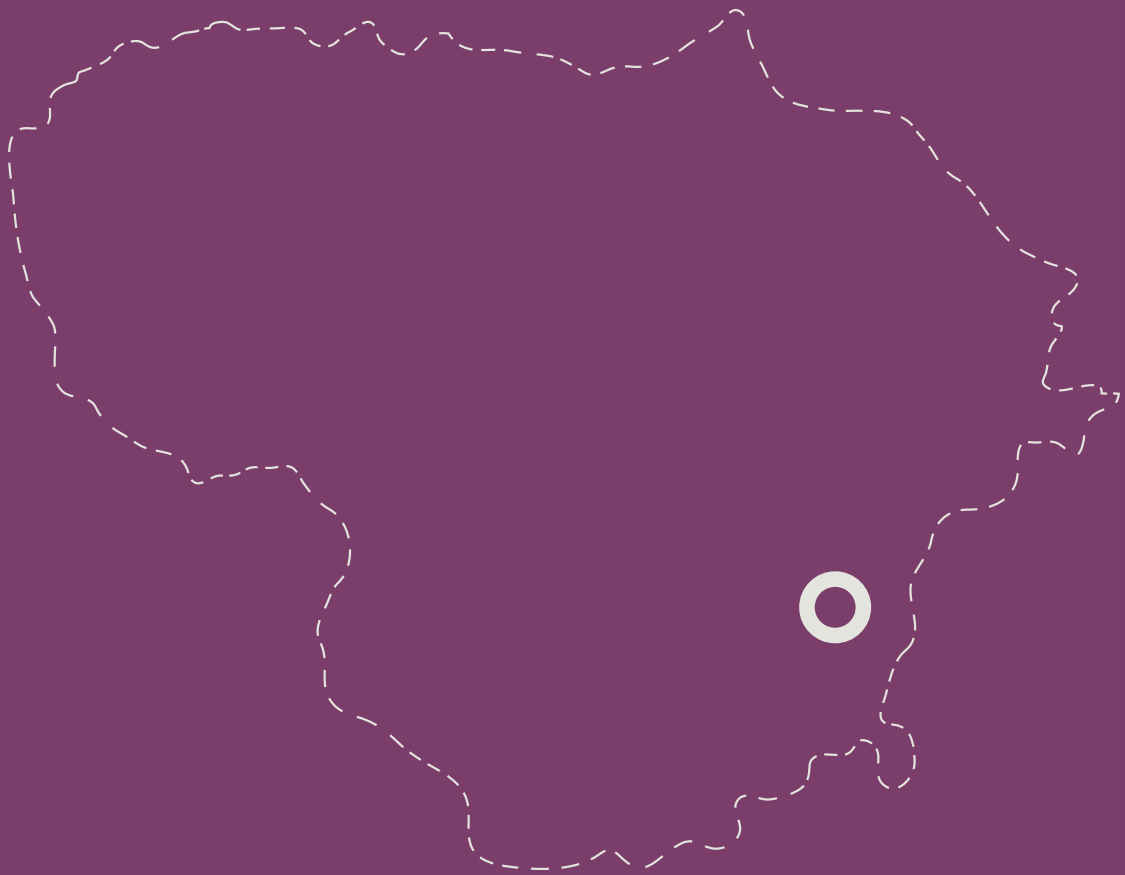
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Vilnius: AMONGST SACRED TREES

GREEN CITY



“One of the latest Green City Indexes made by Siemens revealed that Vilnius could be proud to have the cleanest air among European capitals.”

Arturas Zuokas, Mayor of Vilnius.



The river Neris running through the centre of Vilnius. Source: Alistair Young

The capital of Lithuania is not a big city - Vilnius has a population of 550,000 – but it enjoys some of the cleanest air of all urban agglomerations in Europe. Here's the secret to how Vilnius is literally one of the greenest European cities.

Writer: Raul Cazan

Raul Cazan is editor-in-chief of *2Celsius Network* and has worked as an environmental journalist for over 10 years.

Despite low levels of local industry, urban traffic is relatively dense and new office buildings – the false images of “development” – increasingly occupy more vertical and horizontal space. How does Vilnius have such low levels of CO₂, CO, and NOx in its air?

To use a ‘green’ cliché - trees are the answer. Local government has introduced various alternative policies, but behind these hides a certain pagan tradition of tree-hugging which is at the very core of the Lithuanian capital's clean air.

Baltic Forest Myths

A fairy tale with the most references to ancient Baltic mythology revolves, fascinatingly, around trees. The Queen of Serpents, Eglė, spiritualizes and transforms humans into trees. It is not of great importance here how the narrative goes, but it is significant that as a punishment for betrayal Eglė turns

her children and herself into trees. She turns her sons into strong trees - oak, ash and birch – and her daughter into a poplar. Eglė herself is transformed into a spruce.

Together with such myths, Lithuania is historically famous for its forests. All first-known written documents talk about Lithuania as a land of woodlands and swamps. This image prevailed until the 16th century and was again revived in the time of Romanticism. Lithuanians themselves believed that “the forest is the place where one can feel safe, where gods live”, as political scientist Jolanta Bielskiene from the Vilnius based think-tank DEMOS, Institute of Critical Thought, explains.

Lithuanians are intertwined with historic pagan rituals and beliefs that were built around the image of Tree of Life: roots go to the under-

world; the trunk is our common world; and the top leafy branches are where Gods and souls of ancestors dwell. From the earliest historical records, forests had a status of sacred places in Lithuania and served as a powerful medium for talking to Gods. Lithuanian historians assert that there were many sacred forests where ordinary people were not allowed; they were places of ritual and sacred oaths where only priests and priestesses were able to enter.

People believed that trees could feel and that they lead a carnal life. Kristina Sadauskiene, editor-in-chief at the environmental magazine *Ozonas*, points out that Lithuanians still have the custom of planting an oak-tree for a newborn son and a lime tree for a daughter. Furthermore, Lithuanians believed that trees hosted the souls of the dead and again, as a spiritual remnant, during funerals people shed small fir branches and kindle on the road or place them on graves. These traditions live on in modern-day Lithuania and are the key to Vilnius's clean air.



Sculpture “Eglė the Queen of Serpents” in Palanga, Lithuania. Source: Wikipedia / Grace Kelly

Urban Environmental Policies

It is important to link the clean air with some of the environmental policies of Vilnius' mayor, Arturas Zuokas. He is a pro-business, neo-liberal and controversial politician, apparently preoccupied with urban ecology or at least with good public relations for embryonic green initiatives. It is therefore surprising that the clean air in the city is not fully determined by urban environmental policies. The mayor managed to convince us of this via an online interview: he has got nothing to do with air quality's clean numbers in the Lithuanian capital.

Vilnius may not have an 'Environmental Master Plan', but the principles of city development are clear in other relevant documents, such as the General Plan until 2015 and Vilnius City Strategic Plan for years 2012-2020. They include principles of sustainable

development, preservation of green areas and healthy environment creation. If Vilnius is a green city, it has clear objectives to save the best it has, says Mayor Zuokas.

For Eastern European capitals, air pollution is caused largely by urban traffic and a lack of green areas. The Vilnius municipality however is always thinking of ways to solve traffic problems. "We are investigating most modern and environmentally friendly ideas to implement into our public transport in the City Center as well as across the city," claims Zuokas.

"Talking about air pollution, one of the latest Green City Indexes made by Siemens revealed that Vilnius could be proud to have the cleanest air among European capitals," adds the mayor. Schemes that will help reduce traffic and air pollution in the city are

also visible, such as the electric bike renting system in the City Center, which Vilnius was the first city in Europe to implement, and the building of new bypass roads.

Fundamentally, the air depends on a lot of green areas. Vingis Park (Vingio parkas), the largest green space in Vilnius is an actual secular forest that dates back some centuries. Excluding the amphitheater and some playful venues, the 162 hectares of the park is a genuine forest ecosystem. Zuokas plans to "preserve, develop and manage" the green spaces in Vilnius, as well as expand them. "In the near future we will renovate one of the oldest parks of the city – Sereikiskiu parkas, that is situated in the very heart of Vilnius – in the Old Town near the Gediminas Castle" Zuokas adds.

Arturas Zuokas, Mayor of Vilnius destroying his own car to demonstrate parking regulations.





View from the top of Gediminas hill. Source: Alistair Young

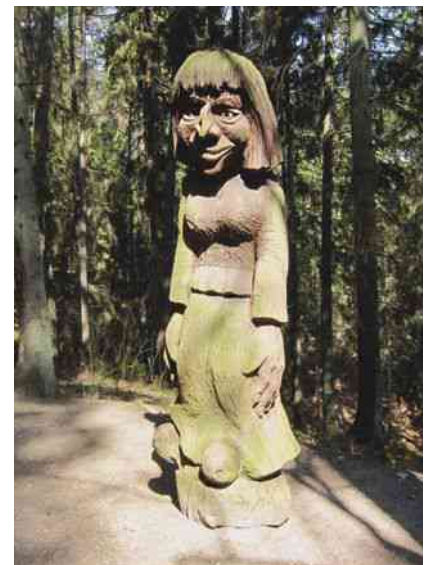
Lithuania's Nature Culture

Incredible green belts around the city and all over Lithuania provide a holistic approach on how urban ecology is supported from the outside. Why are Lithuanians not chopping down their trees in an age when forests are ravaged? Does it have to do with environmental awareness or is the environment simply integral to Lithuania?

Forests are a defining dimension of Lithuanian landscape – urban or rural, natural or cultural. Sadauskiene says: “All our greenery is tightly rooted into our consciousness through songs and stories. Nature is alive in all our literature. Even contemporary writers sometimes have

difficulties trying to escape it [...] there is ‘moss as a soft cover’ and ‘tree by the gate where mother waits’, there is ‘tree on the hill’ and ‘forest where our brothers are hiding’ and eventually ‘sleeping’.”

Even during Soviet rule, trees were involved in the organized resistance. Partisans named themselves “miško broliai” (forest brothers) as their hidaways were amongst the trees. Bielskiene describes the forest as a provider of warmth and a place of survival for Lithuanians, but also for culture. “Lithuanian art is still full of motives of forest and trees, especially in local sculpture”.



Hill of Witches, Neringa, Lithuania.
Source: Berto Garcia

"All our greenery is tightly rooted into our consciousness through songs and stories."

Sadauskiene, Editor-in-Chief, *Ozonas*



Panoramic view of Vilnius Old Town. Source: Alistair Young

Growing More Forests

Almost 33% of Lithuania is covered in forests; this is an increase from 31% during the Soviet times. Now, landowners are given financial incentives to plant trees on their land from the EU, in areas where fertility rate is less than 30%. “Quite a lot of Lithuanians use this incentive happily – the EU pays for the costs of the trees, the planting process, and finances 5 years of expert care of the growing young forest,” explains Jokūbas Margenis, an experi-

enced and dedicated forest engineer, who has been working in forestry for 50 years.

These EU subsidies have resulted in farm land becoming forest land, with some farmers abandoning farming activities and turning to growing forests instead. A concern for Bielskiene is that “there are large compensations for growing oak, most of them start planting only oak. However, the biggest problem now is the loss of ash trees”.

The forests are not necessarily centuries old, but planting is. Margenis explains how many of the forests were destroyed during World War II and the Soviet era, when deforestation was allowed. After the war, young forests flourished and now they are better protected. If endangered species are found, for example, a so-called “forest’s core residence” is established and absolutely no forestry activity is allowed in that area.

“all the green in town or around is good, but we cannot just follow our daily lifestyle hoping that those trees will compensate for all the harm we do...”

Sadauskiene, Editor-in-Chief, *Ozonas*

Size Matters

Lithuania is a small country and as Sadauskiene warns “size matters”. Consequently, Vilnius is small compared to other capitals of Europe. It is commonly believed that in comparison, size allowed Vilnius to jump to the top green rankings for cleanest air. This raises a question as to whether Vilnius’s green policy can be transplanted to other cities across the continent. “Yes, one could say clean air numbers are reached because of the 33% of forests that cover Lithuania, but also, Lithuania has almost no industry,” concludes Margenis.

Just like all other countries across Europe, Sadauskiene highlights how people in

Lithuania choose to use cars over public transport. Except for in Vilnius, there are no public cycling schemes in Lithuania’s towns or campaign’s to improve public transport. She believes that the reduced size of the country and of its capital is the main driver of clean air: “all the green in town or around is good, but we cannot just follow our daily lifestyle hoping that those trees will compensate for all the harm we do...”

All Lithuanian forests, state-owned or private, are in really very good shape. They are among the finest in Europe and they contribute substantially to the national

budget through taxes. According to the Lithuanian Directorate General of State Forests, the value of Lithuanian forests has grown consistently. However, despite different challenges and considerations, clean air, a fantastic landscape, improved public health, and an innate respect for a vivid treasure surpass dull data related to urban ecology in Vilnius or any other Lithuanian town. This cultural approach to residing amongst forests and urban ecology merits more praise and emulation.

Take a walk in Vingis Park at dusk. 🌳



ALBERTA'S TAR SANDS

Writer: Jenny Christensson

Photographer: Alan Gignoux

Alan Gignoux has been working as a professional reportage photographer since 2000 and prior to that as a documentary researcher and journalist. In the past he has explored the effects of displacement on individual communities in different parts of the world, including the Middle East, North Africa and Canada. More recently, he has concentrated on environmental questions, such as industrial pollution in the Russian Urals, the effects of urban development on the Chesapeake Bay and, currently, the environmental damage caused by the booming tar sands industry in Alberta, Canada.

Jenny Christensson is a freelance curator, specialising in photography. She has worked with Gignoux for six years, researching projects, preparing photography catalogues and books, curating exhibitions and writing texts.

In one of the only places left in the world where private companies can own oil reserves, the exploitation of tar sands in Alberta is causing extensive environmental damage, threatening the local population and wildlife beyond repair. Photojournalist, Alan Gignoux, take us on a tour of the destruction being wreaked on the boreal forests of Canada.





Tar sands mining operations, Fort McMurray

Canada has the third largest oil reserves in the world of which 97% are in the Alberta tar sands (also referred to as oil sands). Unlike traditional oil reserves, tar sands – composed of clay, sand, water and bitumen – cannot be pumped from the ground. Instead, shallower deposits are mined using strip mining or open pit techniques, while in situ methods are more energy-intensive and used on deposits too deep for open-pit mining. According to international energy expert Jeff Rubin, “about 80% of the resource is more than 230 feet [70 metres] below the surface.” In both cases, the bitumen extracted must undergo an upgrading or ‘cracking’ process before transport via an extensive system of pipelines for refining and export. This is “much more costly and energy intensive than cracking light sweet crude [...] if you want to produce a single barrel of synthetic oil from a load of tar sand, you are going to have to burn 1,400 cubic feet of natural gas first.”

The increase in the price of oil since the 2004 economic crisis, combined with the development of more cost-effective recovery methods, has seen the rate of expansion of production facilities in the region increase dramatically. According to the Government of Alberta, production in 2010 stood at 1.6 million barrels per day (bbl/d) and is expected to more

than double to 3.5 million bbl/d by 2020. Although investment plummeted initially in 2009 in response to the recent recession, it was well on the rise again by 2011. As of November 2011, there were more than 100 active tar sands projects in Alberta, of which six are mining projects and the remainder are all local recovery facilities.

According to the Government of Alberta, production in 2010 stood at 1.6 million barrels per day (bbl/d) and is expected to more than double to 3.5 million bbl/d by 2020.

A tailings pond containing water contaminated during bitumen extraction, Fort McMurray.



Environmental Degradation and Dangers

Setting aside the economic viability of tar sands extraction, the industry severely damages the environment. Both the tar sands mining and local industrial plant processes need to fell trees in the boreal forest, one of the world's big carbon-storage banks. On top of this, the processes employed in extracting and upgrading a barrel of tar sands generates between three and five times more greenhouse gas emissions than extracting a barrel from an average oil well. Not only has Canada failed to meet the target set by Kyoto of reducing carbon emissions to 6% below 1990 levels, it has instead seen emissions increase over 17% between 1990 and 2009; by 2015 the Alberta tar sands are expected to emit more greenhouse gases than the nation of Denmark.



Extraction operations also consume copious quantities of water, which decreases the surface water flow, negatively impacting the stream habitat for fish and other species. Water contaminated by chemical waste after use is stored in tailings ponds, which currently span 50km², making them sufficiently extensive to be visible from space. There are concerns that seepage from the toxic tailing ponds may be polluting the water system fed by the Athabasca River, the principal water source for the industry. Rubin claims that "the production of a single barrel of oil pollutes 250 gallons (946 liters) of fresh water and emits over 220 pounds (100 kilos) of carbon dioxide into the atmosphere. Now multiply that by the over 1 million barrels per day that

already comes from the region and you get a sense of the environmental challenge Alberta faces. And now think of almost quadrupling production, as is planned."

Air pollution is another cause for alarm. Tar sand processes create temporary and localized emissions of particulate matter, sulphur dioxide, carbon monoxide and nitrous oxide. In addition, localized emissions of hazardous air pollutants, such as benzene, toluene, ethylbenzene, xylene and formaldehyde, pose health risks to project employees and nearby residents. Operations will likely have long-term regional impacts on air quality from volatile organic carbon emissions, sulphur and carbon dioxide.

Canada's boreal forest.



Roland Woodward on reclaimed land near Gregoire Lake Provincial Park.





Alphonse Ominayak purchasing clean water for domestic use, Peace River.



A small wooden house marks the grave of a stillborn child – one of many, Little Buffalo Lake, Peace River.

Buffalo Lake in the Peace River region. She described recent changes in the natural environment that have affected their traditional lifestyle. For example, the Nation used to rely on hunting moose for food and furs for trading until the number of animals started to diminish. They continue to eat moose, but recently she has noticed changes in the appearance of the meat and has been disturbed to discover what she described as “yellow pellets” under the skin of the animals. She also expressed concern about wild mint, traditionally used to make tea and also for medicinal purposes to soothe coughs and colds – today “the medication is just another form of chemical.”

Ominayak is particularly worried about the effect of pollution on the health of her community, explaining: “People have gotten really sick. People have died... A four-month-old baby died of stomach injuries because of drinking the tap water:

Upgrading operations, Fort McMurray



The First Nations: Local Victims

The tar sands industry is located in three remote regions of the province: Peace River, Cold Lake and Athabasca, which together cover an area of 54,000 square miles (140,000 km²), more than the total land area of England and Wales. Before the arrival of migrant workers serving the tar sands industry, the area was mostly populated by First Nations, Canada’s indigenous people, who still live north of the industrial developments on reserves and, in some rare cases, on land never ceded to the Canadian government. The First Nations are the group of people most immediately affected by the environmental impact of

the tar sands production as their traditional lifestyles are threatened by the pollution and depletion of natural resources.

Photojournalist, Alan Gignoux, visited members of the Cree Nation living in areas downstream from the Athabasca tar sands, as part of an investigative project to explore perspectives from both sides about the controversial industry.

Gignoux accompanied Donna Ominayak of the Woodland Cree First Nation, which has about one thousand members, on a tour of the community lands near Little

that's how polluted our lake has become." She showed Gignoux the local graveyard, where the custom is to use small wooden houses to mark graves; for children, the houses are coloured to indicate the sex of the deceased – pink for girls, blue for boys; the height of the house indicates the age of the child and still born children are marked by a house without walls "because the child never got to see the earth." She pointed out a number of recent still born and infant graves.

Alphonse Ominayak, Donna's husband, is a Councillor for the Lubicon Cree. He reiterated her concerns stating that "the quality of water is beyond bad. It's not drinkable, it's not potable water. It is not healthy to wash with." He explained that drinking water is trucked in from Cadotte Lake and community members are given a key and required to collect and pay for water using a metering system.

Gignoux also spoke to Roland Woodward of the Lubicon Cree, who lives on a reserve near Gregoire Lake Provincial Park, not far from Fort McMurray at the heart of the industrial development. A tract of land in his area was recently damaged by a "blow-out" at a SAGD operation (an extraction method), which resulted in a spill of crude covering an area of 1,000 acres. The company behind the operation moved the facility and reclaimed the land by planting jack pine, which has not fared well, in part Woodward believes,

because aspen or spruce are more suited to the area; in fact, he concluded, "Nothing really grows there, but some grass..." Woodward also commented on air and water pollution in the region, saying: "The people in Fort McKay..." [on the western shore of the Athabasca River, 54km north of Fort McMurray] "...can smell is carbons in the air – gas – they call it: 'the smell of money.' They can't eat the fish; they can't eat the animals; they can't eat the berries, because they don't know what's coming out of the sky."

"People have gotten really sick. People have died... A four-month-old baby died of stomach injuries because of drinking the tap water: that's how polluted our lake has become."

Donna Ominayak, Woodland Cree First Nation



Pessimistic Opposition

The Lubicon Cree are opposing the issuing of oil extraction and processing licences through legal channels, based on their right to the land that is referred to as the Treaty 8 area. This area is governed by a treaty from 1899 in which the Cree granted the white Canadian developers access to the land to the depth of one hand, during the Yukon Gold Rush; extraction operations, particularly *in situ* processes, grotesquely exceed the depth of one hand now. Although they have yet to be successful in blocking development, Woodward believes that the legal paper trail they are building up will increase their chances of success in the future. Woodward is pragmatic in his attitude to future development: “I guess we’re not going to stop all the development because we need the resources, but what we want to try and do is control some of it. We don’t need 15-20 Syncrudes up here over the next four or five years. We can space them out over twenty years.”

Local opposition to the tar sands is not confined to the First Nations. Gignoux spoke to potato farmer Wayne Groot, whose property lies near Edmonton, south of the tar sands industrial area. Groot is concerned about petrochemical company plans to build ‘upgraders’ on land near his farm – upgraders treat the heavy crude to become similar to oil, thereby preparing it for refining. He admits that he has been offered money to sell, but he is reluctant: “We farm some very unique soils here. We have irrigation infrastructure, there’s a wonderful microclimate around Edmonton and there are very rich soils... We can’t move anywhere else and have what we have here.”

Groot has little faith in the consultation process. In his view, “it’s a given they are going to get what they want.” He is resigned to the fact that the money generated by the industry will take precedence: “One little potato farmer who employs a few people and feeds a few people, it’s insignificant, really.”

Nevertheless, he does believe that advocacy is important and that it can achieve positive results. Pressure from environmentalists has resulted in technical innovations, which help to decrease environmental damage. Confirming that construction of four more upgraders in his area has been granted, he advocates slowing development until technology has improved and more has been done to assess the long-term environmental impact of the industry, warning: “Everyone thinks: ‘Let the good times roll,’ and they don’t realise it’s going to come to a stop.”

In 2010,
Alberta
exported
1.4 million
bbl/d of crude
oil to the
United States,
which amounts
to 15% of U.S.
crude
imports or
7% of
total U.S.
demand.

Exponential Growth for Big Business

In 2010, Alberta exported 1.4 million bbl/d of crude oil to the United States, amounting to 15% of U.S. crude imports or 7% of its total demand. Despite pressure from environmentalists on the U.S. government to cease imports of tar sands crude, U.S. concerns over energy security combined

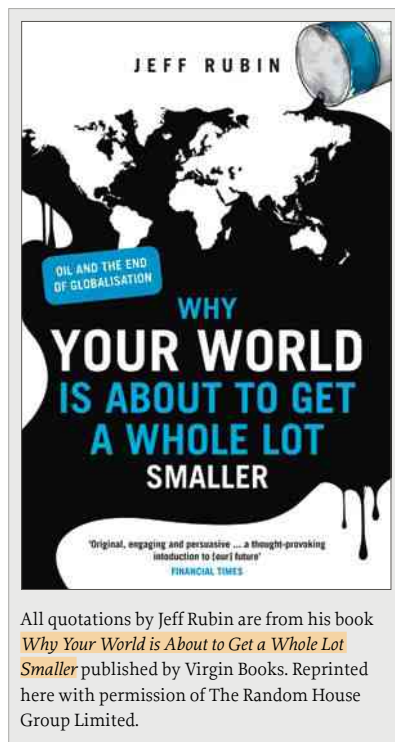
with continued domestic demand for crude oil imports are likely to drive decision-making at the executive level. Although President Obama did not succumb to Republican pressure in January 2012 to approve the Keystone XL pipeline extension project, this is likely to be a temporary victory for the project’s opponents as TransCanada, the company planning to build the pipeline, will be permitted to re-apply for permission to proceed. The Keystone extension project would see the construction of a nearly 1,700 miles (2,740 km) of pipeline from Alberta across the North American heartland to refineries on the coast of Texas.

On the supply side, the major international oil companies are experiencing increasing difficulties in accessing alternative reserves. In 1979, they controlled around 70% of global oil reserves, a figure that has dropped below 10%. Access to new sources is very restricted with only 21% of oil reserves available for private sector investment. In this context, the Canadian tar sands, which have proven oil reserves of 170.8 billion barrels, represent a tempting opportunity to make up for shortfalls of other reserves. Canada is also “one of the few remaining places in the world where private companies can own oil and develop oil resources.”

There is also little incentive for the governments of Alberta and Canada to curb expansion. In the fiscal year 2010/11, the Alberta government collected more than \$3.7 billion in royalties from tar sands projects. According to the Canadian Association of Petroleum Producers (CAPP), new tar sands development is expected to contribute over \$2.1 trillion dollars to the Canadian economy over the next 25 years – about \$84 billion per year. Employment in Canada as a result of new tar sands investments is expected to grow from 75,000 jobs in 2010 to 905,000 jobs in 2035. Is the writing on the wall for the boreal forests of Alberta?

Rubin affirms that “whether Alberta would ever sanction the massive desecration of its northern forests implied by the [International Energy Agency] IEA’s future production targets is certainly open for

debate.” The Canadian and Albertan governments and the CAPP have understood that they have a significant public relations challenge to address, both at home and internationally. A 2010 CAPP survey of 2,600 people living in Montreal, Ottawa, Vancouver and Toronto clearly indicates that Canadians want to see environmental improvements from the tar sands industry with 74% agreeing that “the best goal is to develop the oil sands with an effort to limit environmental impacts.” This is the professed strategy of the CAPP, which publishes a list of “Guiding Principles” regarding tar sands development, with the preface: “Canada’s oil sands industry will provide a secure source of energy, reduce its impact on the environment and provide economic benefits to society, while developing this globally significant resource.” While the guidelines are laudable, they are worth little without compliance and they are, moreover, unachievable without improvements in current technology. ☺



All quotations by Jeff Rubin are from his book *Why Your World is About to Get a Whole Lot Smaller* published by Virgin Books. Reprinted here with permission of The Random House Group Limited.

Gignoux will return to Alberta this June to investigate the so-called ‘greening’ of the tar sands: what technological advances have been made and how are these likely to reduce the environmental impact of the tar sands industry? Or will the producers’ claims amount to mere ‘green-washing’?

Look out for his next multimedia report and view more photos at www.revolve-magazine.com.

To hear the interviews described in this article and learn more about Gignoux’s investigation of the tar sands industry and his other projects, visit www.gignouxphotos.com.

Canada’s boreal forest.



EXPLOITING THE HEART OF AFRICA

Writer: Kerry O'Donoghue

Photographer: Jure Erzen

Kerry O'Donoghue holds a Masters in Comparative Ethnic Conflict, with a focus on peacekeeping and civilian protection in the DRC from Queens University, Belfast. She has worked with the Institute of Security Studies and the European Commission. Her research interests include Somalia, private security and human security.

Jure Erzen is foreign correspondent at the Slovenian newspaper DELO. These photographs are part of the *Revolve's* E-book *21st Century Conflicts, Remnants of War*. To order a copy, visit: www.revolve-magazine.com.

King Leopold II of Belgium is famous for having ravaged Zaire for its rubber and copper. Now, the Democratic Republic of Congo is still being exploited for its gold and other natural resources, including coltan that is found in your laptop or cell phone. Militias subsist off the lucrative profits of the mining most often done by children. In a lawless land where rape is prevalent, private security companies have become increasingly present, while UN peace-keepers observe.

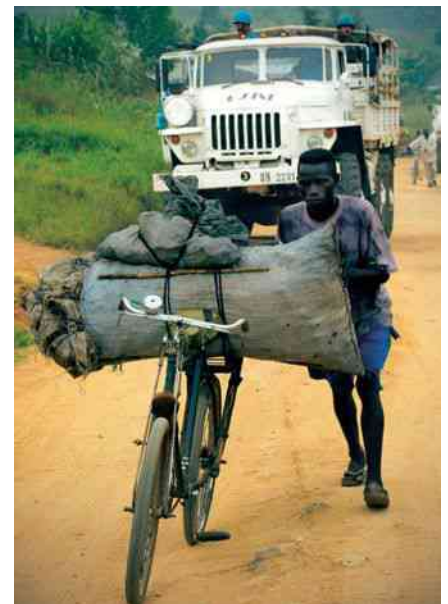
The Democratic Republic of the Congo (DRC) should be the richest country in Africa, with a potential wealth of €18 trillion, yet its people remain the poorest in the world and continue to die from cheaply curable conditions of malnutrition, diarrhoea and malaria. While democracy is making small steps forward, insecurity prevails, and respect for human rights barely registers, with the country gaining the title: 'rape capital of the world.'

Seemingly far removed from this context is the world we inhabit of mobile phones, laptops, and game consoles, for which the

global demand is growing for newer and better technology. While these two worlds seem incongruous, nearly every electronic consumer product we purchase or covet uses a derivative of one of four minerals: columbite-tantalite, cassiterite, wolframite and gold. The DRC is rich in all four.

The growth in demand for such products, and our increasingly throw-away culture has coincided with a greater period of stability in the DRC, and as transient as that may be, the country has become a very attractive prospect for business and investment, especially for





Left: Civil war in DRC is the bloodiest conflict after the WWII in which more than six million people died and millions more were displaced. Ituri, north-eastern DRC, 2003

Above: 15 years after the start of the “African World War” where eleven countries and numerous interested parties were involved, the conflict is still going on. The UN has not helped. Ituri, north-eastern DRC, 2003

mining and extraction companies. While such investment should bring growth and development, there are fears of the resource curse: the paradox of a rich country actually being very poor, as the age-old problem persists of the wealth benefitting the few and leaving the country with little benefits to the DRC.

Rich reserves of natural resources are blamed for harming economic growth, democracy and human rights, and going one step further they are accused of fueling conflict. Events in the DRC suggest that its resources have been its downfall. The country is recovering from a brutal conflict that left over 5 million people dead, and is often cited as an example of an intractable conflict, not least because it is supported by some of the largest mineral reserves in the world. Although the conflict officially ended in 2003, thousands of people are dying every month from disease and malnutrition, and mass displacement continues because of the sporadic violence. The country is struggling to find its feet on the road to recovery and the government has yet to secure full control.



Top left: The UN mission in DRC was unsuccessful in stopping the massacres. UN troops were also involved in rapes and trafficking. Bunia, 2003.

Top right: "I was protecting my fellow tribesmen and just followed the rules. I was a soldier." Bunia, 2003.

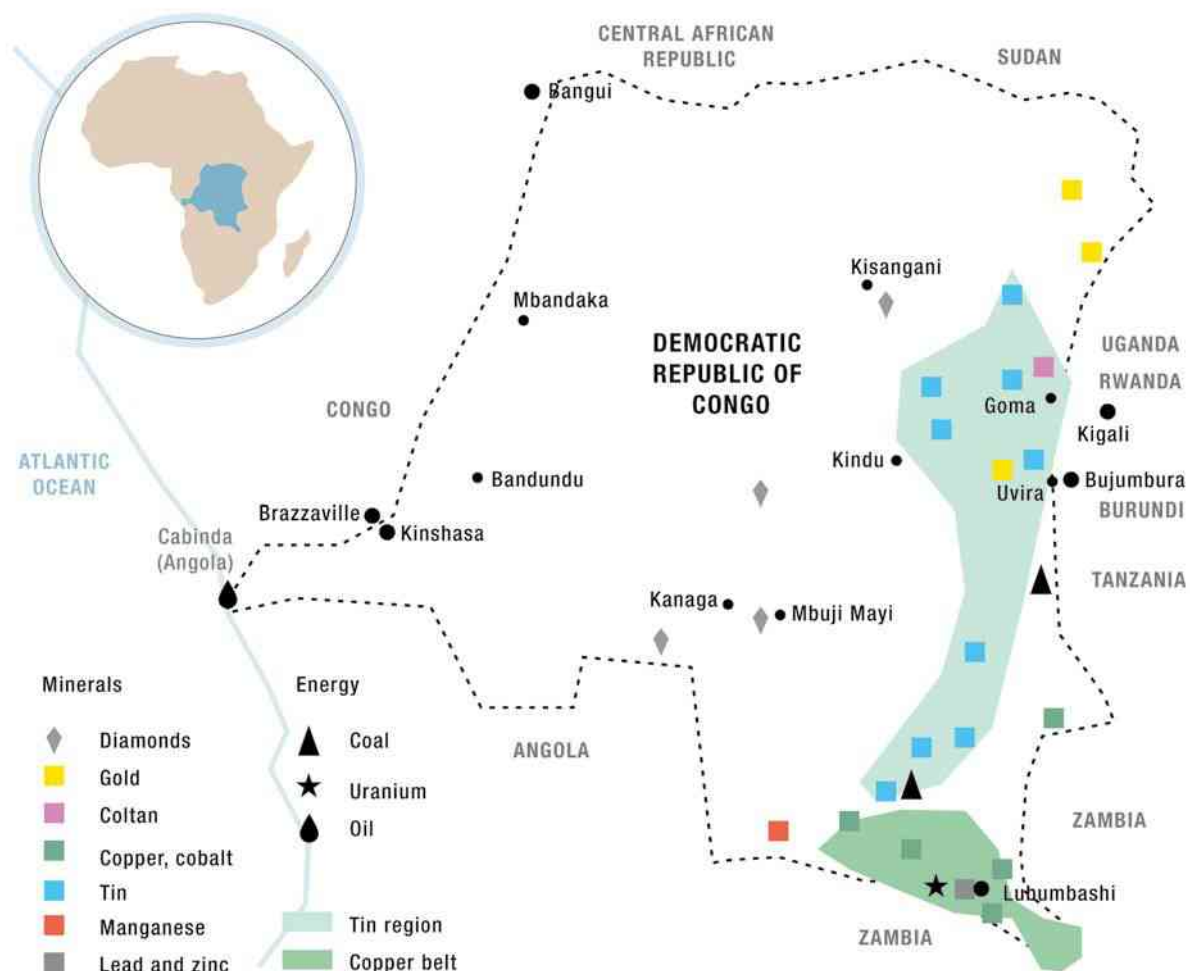
Left: Former child soldiers during karate practice. Some local and international NGOs are trying to "re-integrate" child soldiers into society. Bunia, 2003.

The resources that have been endowed to the DRC have the potential to consolidate the country in sustainable peace and development, or to continue ripping it apart. Since the end of the conflict, most of the fighting has been and continues to be concentrated in the East of the country, the Ituri Region, North and South Kivu, and Katanga.

The history of the DRC is one marred by violence and instability. From the Belgian colonial period to Mobutu through to Kabila, the story is one of insecurity and exploitation of its people, politics, and natural resources. While the 2003 peace accords officially ended the conflict, the violence that began in 1998 continued and the various militia groups, meddling neighbors, weak UN peace-keeping, and lack of international political will, coupled with the sheer size and geography of the country have not helped bring about a more sustainable peace.

The conflict and the continuing low-level violence and insecurity has ethnic dimensions that have their origins in both the

pre-colonial, colonial and independent history of the DRC, when like much of the African continent politics developed along regional and ethnic lines. However, the violence that continues is as much about control of the abundant natural resources concentrated in the East of the country, as it is about political gains. This is evident in the players of the game who include government officials and security forces, the neighboring countries, particularly Rwanda and Uganda, internal militias and now a growing international presence, who all share a desire to gain from the natural richness of the DRC.



Militias continue to plague this area and government forces have failed to gain control. At least 3,000 people have fled the eastern regions this year after renewed fighting in North Kivu. The persistence of violence in these areas coincides with the incidence of resources. The south-eastern and eastern parts of the DRC are rich in the big four:

Columbite-tantalite:

is refined to tantalum which is used in mobile phones, computers, games consoles, camcorders, and turbines.

Cassiterite:

a source of the tin used in coffee cans and circuit boards.

Wolframite:

used to produce tungsten for light bulbs and machine tools.

Gold:

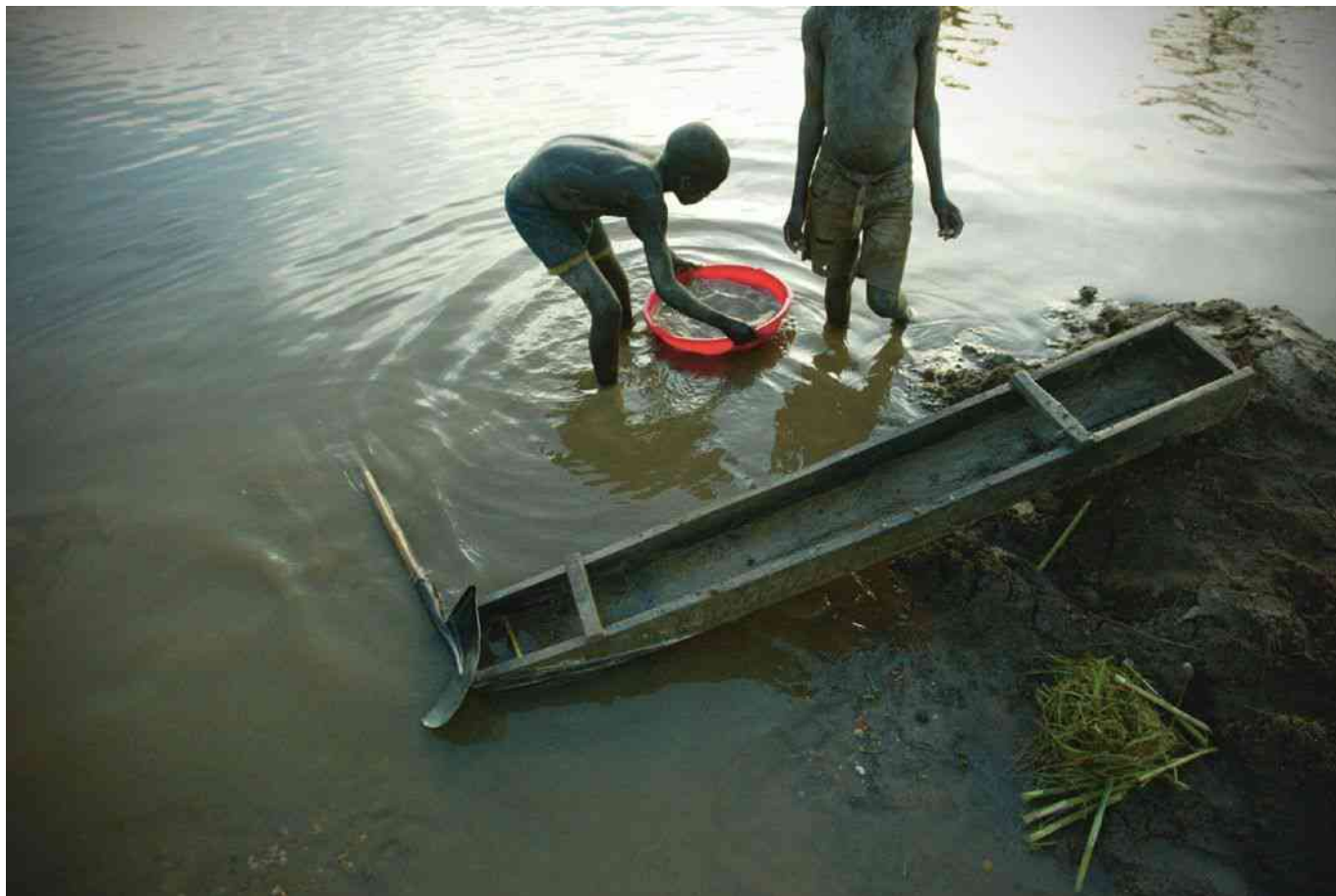
used as an electronic conductor and in jewellery.

The DRC is also rich in copper, cobalt and diamonds and many of the world's biggest mining companies, including Traxys, OM Group, Freeport McMoran, Lundin Mining Corporation, Kemet Corporation, AngloGold Ashanti, Anvil Mining, Katanga Mining and Mutanda operate in the DRC, often through or alongside local partner companies in complex, almost impenetrable webs.

Columbite-tantalite, known more commonly as coltan, has drawn the most international attention recently. The DRC is home to at least 64%, although some estimates put it at 80%, of the world's coltan reserves. Coltan has become vital to our modern-day life and demands for mobile phones, laptops and games consoles have made this a valuable mineral. Coltan is concentrated in North Kivu and is extracted by artisanal miners, whose survival relies upon the illegal extraction of the mineral, which both directly and indirectly funds rebel militias, who control much of this area.

The coltan is extracted by hand, and transported long distances on foot through insecure areas. While coltan holds value to us, the miners are paid a pittance for their effort and risk. This coltan is then transported to larger towns and sold on to further middle men who arrange its sale and transportation from the country. It then winds up in our markets to be used in the production of electronic goods for our consumption.

Miners, who are often children, are subject to poor labor conditions and human rights violations, and much of the revenue is making its way to the rebel groups to fund and maintain the violence, or is benefitting the neighboring countries of Rwanda, Uganda and Burundi. There is also the environmental impact, including water contamination, air pollution, and radioactive contamination, all of which will have long-term effects on the land and the people.



In an effort to rectify the inadequate response in the past to the prolonged violence and conflict in the DRC, there has been some international movement, not least of which is the United States' Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, which includes a specific provision in section 1502 on the problem of minerals originating in the DRC. In a bid to try and cut the financing of militias operating in the DRC, who often control and profit from mineral revenue, the provision requires all publicly-traded companies whose products contain minerals commonly found in Central Africa to report to shareholders and the Security and Exchange Commission if their mineral supply comes from the DRC.

While there is general agreement on the goal of increased accountability and transparency in the supply chain, there is a raging debate by electronic companies, mining companies and international non-governmental organizations as to its effect

when it enters into force this year. Will it actually help end the conflict or will it just stunt what little development there is? There is also concern as to how it will be implemented and enforced. The problem with coltan is it is hard to trace its origin, and with the complex supply chain and numerous middle-men it is unclear how companies will report.

Such a measure, while admirable to an extent, takes too simplistic a view as it is only focused on one aspect of the exploitation of minerals in the DRC, ignoring the wider human rights and security issues, and the unsustainable attitude to technology and the environment. Evidence also suggests that cutting one financial source will not stop rebel militias, who will further diversify their funding to benefit from the illicit trade in timber and charcoal.

If natural resources are to be a source of positive development and transformation, strong domestic governance is needed.

Therefore, measures to combat corruption and strengthen domestic regulation of the resource sector are necessary to complement a greater liability for foreign involvement in the trade of minerals. Companies have a corporate social responsibility that should and must go beyond lip-service. Better due diligence, combined with strong reporting mechanisms will allow for a greater supply chain transparency.

Such measures are echoed by the Organisation for Economic Cooperation and Development (OECD) that produced guidelines on supply chain transparency that were endorsed at the International Conference on the Great Lakes Region by several African countries. The DRC government also issued a directive in September 2011 requiring companies operating in the DRC to conform to the OECD and UN due diligence standards. In Europe, an EU Trade and Development Communication in 2012 also spoke of a renewed commitment for company supply chain transparency.



Left page: The price of gold is rapidly growing. Most workers are underage and essentially slaves. Ituri, north-eastern DRC, 2003.

Top: During the violent clash between Hema and Lendu tribes in the spring and summer 2003 more than 50,000 people were killed. The European Union sent troops to stop the fighting. Clashes stopped but resumed just days after the majority of French and Belgian soldiers left. Bunia, 2003.

Bottom: Goldmines are stretched across this region full of natural resources which are, in the words of Belgian soldiers, a curse for the local population. Ituri, north-eastern DRC, 2003.

Such international measures are pioneering a path through a difficult situation posed by both the environment on the ground and the international political and financial environment. The protection of people requires a respect for people that privileges their security. Current mining

operations do not do this. Our demand for electronics is not going to abate anytime in the near future therefore measures to do it right are needed that respect the politics, security and environment of the country. Regulatory initiatives can go some way to ensure that the large, fertile and complex

environment of the DRC can be allowed to prosper for the good of its people and the international community more widely. Nevertheless, there is only so much that professionalizing and regulating the mining industry can do in resolving the conflict and improving human rights.



PMSCs in the DRC

Private military and security companies (PMSCs) operate across the globe, and in the past two decades their presence has been particularly evident in armed conflict and post-conflict situations, with their roles in Iraq and Afghanistan gaining a lot of negative attention. Their role is also flourishing on the African continent with much less exposure, and is a trend that looks set to grow, particularly in countries like the DRC where insecurity is prevalent.

Despite failing to gain full stability and security post-conflict, the DRC has an untapped wealth that makes it an attractive prospect for many international companies, with most foreign direct interest and investment aimed at the extraction industry. Consequently, there is a growing private security industry providing a range of services to governments, businesses and NGOs operating in the DRC to counter the security risks posed by the rebel militias and armed groups.

The major players in the PMSC industry are British, United States and South African based companies that provide services ranging from risk analysis, intelligence, and training of security forces, to armed protection, and logistical and operational support. Most PMSCs operate within a web of contractual layers, with services in the original contract often subcontracted out again to other companies. Personnel, particularly ex-military, are recruited from various countries, with the potential of high earnings as a major incentive.

PMSCs operate in various activities in the DRC, including protection within the extraction industry; which has always been a central business of PMSCs, protection of embassies, and training of government security forces, and as such are hired by private business and governments. The usual players are there, including MPRI and DynCorp, Pathfinder Corporation, PSI, AECOM, PAE, DSL, ArmorGroup and G4S.

The range of services offered by PMSCs makes it hard to distinguish between security and military companies, and in a post-conflict setting like the DRC, particularly eastern DRC where various armed

groups exist, it can be hard to distinguish between offensive and defensive activity, and combatant or civilian. As multi-functional, transnational companies straddling a range of legal structures, PMSCs operate in somewhat of a grey legal zone. Their lack of transparency in services, contracting, and company structure poses many legal challenges. It also provides the scope to commit human rights abuses, or to be accused of abuses, as they often operate with limited oversight, making accountability difficult.

The increasing expansion of PMSCs in recent decades has not been matched with the same legal framework. National legislation is difficult in a country with as weak governance as the DRC, and existing legal frameworks of the 1977 Organisation of African Unity Convention for the Elimination of Mercenarism in Africa, Protocol I of the Geneva Convention and the UN International Convention Against the Recruitment, Use, Financing and Training of Mercenaries

provide some legal basis, but their focus on mercenaries excludes PMSCs.

International reaction has resulted in a draft convention by the UN Working Group on Mercenaries; the Montreux Document – a joint initiative of the Swiss government and the International Committee of the Red Cross signed by seventeen states; and the International Code of Conduct for Private Security Service Providers (ICOC), which has emerged from the industry itself.

However, such legal frameworks fail to account for the complexity of the environment in the DRC and the activity of PMSC presence. It is unclear how such legal developments will evolve, especially when political will is seriously limited, implementation is difficult, and sufficient enforcement is lacking. This is a concern when PMSC presence has the potential to commit human rights abuses with impunity and the ability to affect the security context without any efficient oversight. 

Opposite page: Two thirds of the DRC population live on \$1 per day. The health and schooling systems are nearly non-existent. Rape in the east of the country has risen and the mortality rate is growing. Bunia, 2003:

Below: Child soldiers, some as young as ten years old, are being treated and sheltered in local Caritas offices. Most of them do not want to go back to the front. Bunia, 2003.



DRC Facts

Capital: Kinshasa

Independence: 30 June 1960; originally colonised in 1885 by Belgium

Population: 71 million (9 million live in the capital) (2011)

GDP: \$15,3 billion (2010)

GDP per capita: \$210 (2011)

Coltan: sells on the international market for around \$120/kg

Number of International Mining Companies: 25 (2011)

Exports: \$8,5 billion (2010)

Mining: 12% of GDP (2010)

Life expectancy: 51,3 years (2008)

Internally Displaced People: 1,54 million (1,11 million of which are in North and South Kivu)

Refugees: 153,180

Conflict Deaths: 5.4 million

Rape: 40 women per day

12% of women in the DRC have been raped at least once (this does not include the children and men who are raped)

Number infected with HIV: 1,2 million

Malaria is the leading cause of death in DRC, killing approximately 300,000 children under the age of five every year. In six provinces (half of the country), the number of people treated for malaria in MSF projects has risen by 250 percent since 2009. (Médecins Sans Frontières, April 25, 2012)

Sources : DRC Genocide Awareness ; UNOCHA ; CIA ; UNHCR



GREECE:

At Austerity's End?



The glory of Greek philosophy and poetry is as distant a dream as Homer's *Odyssey* and *Iliad*, but the elections in Greece prove that popular representation may still be able to counter unprecedented austerity measures and help avoid a failed state within Europe, if it's not too late, writes Boštjan Videmšek from Athens.

Writer: Boštjan Videmšek

Photographer: Uros Hocevar

Illustration: Pascal Lemaitre

Boštjan Videmšek is an award-winning foreign correspondent for the Slovenian newspaper *DELO* and editor-at-large at *Revolve*.

Uros Hocevar is a foreign correspondent at the Slovenian newspaper *DELO*.

Pascal Lemaitre has contributed to *The New Yorker*, *New York Times*, *Wall Street Journal*, and has illustrated many children's books, including four by Toni Morrison. He teaches at La Cambre in Brussels: www.pascallemaitre.com

Wednesday, April 4, 2012. 9:00 am. 77-year-old, Dimitris Christoulas, yells in the middle of Syntagma Square – the emotional centre of the Greek protests against the government's ineptitude to deal with the crisis. The old man screams towards the parliament, denouncing the fact that his debt will now have to be paid off by his children and grandchildren. Then he leans against a tree and shoots himself in the head.

This desperate Greek pensioner carries heavy symbolism. His suicide evokes the spirit of the Czech patriot Jan Palach, 21, who on January 16, 1969, set himself on fire in protest of the Soviet occupation of Czechoslovakia, which is also strongly evocative of the self-immolation of Mohammed al-Bouazizi, the Tunisian grocer who triggered off the Arab protests.

"We are the first victim of the financial world war. He had been occupied by the European markets and international financial institutions that are out to dismantle what is left of the welfare state and turn us all into slaves. What you can see today is only the beginning of a major upheaval. They are not only taking away our way of life, they are robbing us of our dignity," said 60-year-old businessman named Yannis Michalopoulos inside his furniture shop beneath the Acropolis, one hour after ... suicide.

Mr. Michalopoulos went on off on a diatribe about the demise of civilization, the lack of hope for the younger generations, and the suffering of both legal and illegal immigrants. In his opinion, the crisis has gone on for far too long to still be called a crisis. Big business was consistently and very successfully enacting the "shock doctrine" only it no longer needed to confine itself to exporting it to places like Iraq, Afghanistan or Chile.

Welcome to the Third World

Greece is being transformed into a classical third-world country. In March 2012, the unemployment among the young reached fifty percent. The welfare state is vanishing at a shocking pace. In the last months, the European monetary institutions made the Greek politicians cut pensions by 200 euros on average. The minimum monthly wage fell from 800 to 568 euros. Some 15,000 public-sector employees are bound to lose their jobs in 2012. The state is shrinking on every level – the health and education sectors are the ones taking the most beating.

The private sector is even worse. No one is paying attention to the dutiful bleatings of the once-powerful unions anymore. Owners and managers have embraced the crisis as a tailor-made alibi to cut all sorts of costs. The streets of Athens are filled with beggars and the new homeless. A year ago, many were living in suburban comfort. Now, Greece is turning into a German protectorate and a guinea pig for the 'modern economy', a doctrine stitched from the worst parts of U.S. neo-liberalism and Chinese capital-communism.

A third of the unemployed among the young have a university degree. In Greece, only those with health insurance can get the social assistance – and since most of the young have only held temporary jobs without benefits, welfare checks are a lavish dream. No wonder the especially gifted are leaving the country – much like under the military dictatorship in the 1960s and 1970s. Once the cradle of democracy, now 85 percent of the Greek students abroad have no plans to return to their homeland.

Even unemployment offices are being shut down. This is not because – like the governmental institutions – they have run out of money, but rather because they simply have nothing to offer job-seekers, not even good advice.

The same goes for humanitarian organizations. George Protopapas, the head of the NGO called SOS Children's Villages which aims to help abandoned children, claims that humanitarian organizations are now providing as much as a half of the social services that should be provided by the state. Then again, most of these organizations are also about the shut down due to looming bankruptcy.

The same also goes for about half of all Greek privately-owned companies, so it is little wonder that tax revenues are dropping dramatically and countless workers are being fired. All of the above makes an incipient social bomb which is bound to go off.

Greece is still one of the biggest European importer of weapons. According to the International Peace Research Institute (SIPRI) from Stockholm, Greece has been the EU's number one importer of weapons between 2007 and 2011. It has also, coincidentally, been the German military industry's best customer. Last year, in spite of the crisis, the Greek government bought 13 percent of Germany's and 10 percent of France's entire weapon exports in 2011.

Not surprisingly, the streets of Athens are seeing the intensification of police violence. The ones getting the worst repression are refugees and immigrants. In an increasingly xenophobic Greece, both are demonstrably worse off than elsewhere in the European Union. In Greece, most are worse off than back home, where they were not targeted by organized extremist gangs.

Many of these gangs operate within the framework of the Golden Dawn movement, which entered the parliament with 21 seats during general elections on May 6 with almost 7% of the vote. The members of the movement have been known to greet each other with the Nazi salute. Their emblem is also reminiscent in part of the German swastika.

In April, the Greek authorities (under direct orders from Brussels and with European money) initiated the construction of 30 new detention centers. Their purpose is to welcome and then ship back all illegal immigrants, most of whom are currently jobless and living on the increasingly dangerous streets of major cities.

Greece's unemployment rate was recorded in January 2012 at 21.7 percent, compared to 14.7 percent in January 2011, which makes their increase over the year the largest in the EU27.

Source: Eurostat



Hell(as)

Omonia Square lies a kilometer away from key tourist attractions and turns into a savage theater of survival at night. The narrow streets are filled with junkies in their final stages – half-naked walking corpses shooting their doses into their necks or thighs. Stray dogs and prostitutes stroll among them, some of the latter are clearly underage. Homeless beggars sleep in front of the 50 cent shops peddling pathetic merchandise.

As many as 25 immigrants live in single decrepit apartments. Many dwellings are up for sale, but no one is buying. The walls are covered with posters declaring the supremacy of the white race and exhorting the Greek population to reclaim their land.

Next to them: propaganda of the Greek communist party (KKE), which never really distanced itself from the Soviet school of socialism and whose younger members can often be seen wearing Stalin T-shirts.

»This is a furious fight for survival. The police are chasing immigrants. The neo-Nazis are beating them up. The situation is deteriorating. The financial crisis is the best conditions for the flourishing of extremist movements inspired by all kinds of fascism. Immigrants are guilty of everything. They have to prove their innocence, but they have no rights. Here in Athens, I'm seeing images that I only got to see in warzones« said Dr. Nikitas Kanakis, head of the Greek branch of the *Doctors of the World*, who was based in Rwanda, Afghanistan and Iraq.

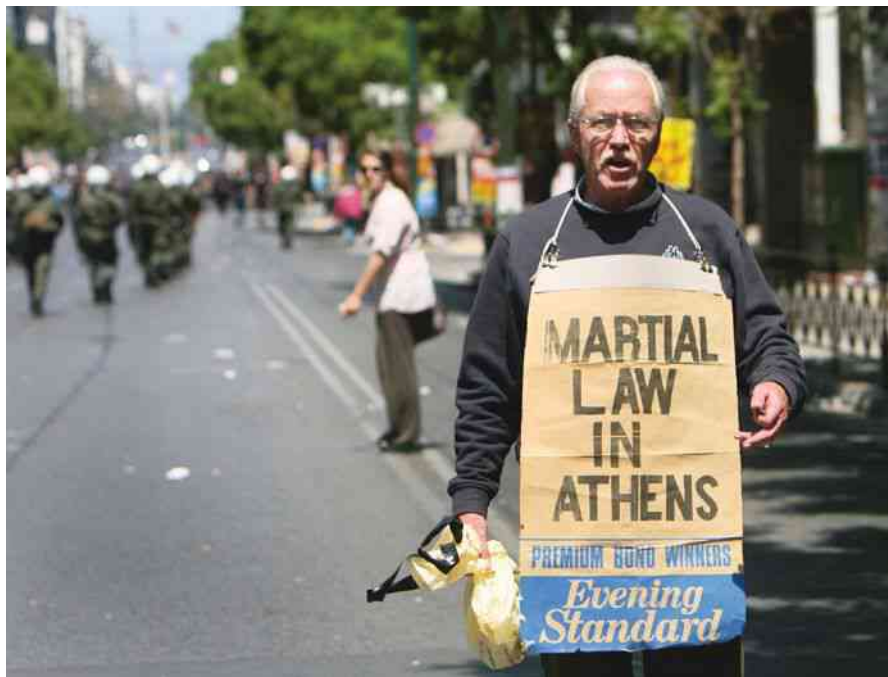
Protests that Change Nothing

The peaceful and dignified protest commemorating the 77-year-old suicide started in near perfect silence, but quickly deteriorated into what is now a typical scene in the streets of Athens.

Members of special police units, taunting protesters with insolence and impunity, were hit by stones and sporadic Molotov cocktails. The wind brought a cloud of tear-gas that had been fired by the policemen in front of the Greek parliament before the

Demonstrators clashing with police in front of the parliament during a march against Greece's austerity measures.





Protests against martial law in Athens on May Day.

demonstration had even begun. People of all ages and social standings were crying, sneezing and cursing.

The demonstrations in front of the parliament have been going on for almost four years and nothing has changed. Less and less people turn up for the protests. Hundreds of thousands are forced to devote their energies to the most basic survival.

"It's getting worse every day. They're slowly wearing us down. We have no other option than to stay on the streets and keep fighting for our rights. At this stage, we really don't have that much to lose. We've become a German colony and a prisoner of the international monetary institutions. Our country is being run by foreign banks. Even our prime minister is a banker," said Bill

Police prevent the entry of protesters into the Greek Parliament in Athens.



Papadopoulos, a protester from the medical staff employed in the private sector.

Bill is working as a nurse at a private clinic, but he had not been paid for the last five months. Many of his colleagues are doing even worse. Some of them had not received their salaries for up to thirteen months:

“This strike was organized to force our employers into renewing the contract with our union. Most employers have made a cartel pact with EU blessing to turn us into wage-slaves. They took away our traveling expenses and lunch compensations. They have cut all salaries to the minimum wage, but that doesn't really matter since they stopped paying us! Our savings are gone. Our parents help us. We cannot hold out for much longer.”

When the medical staff went on strike, so did the archeologists. Greece has almost completely stopped its excavations and has essentially cut ties with its glorious past. In front of the Greek national bank, a crowd of exhausted pensioners protests. They repeated that a fellow pensioner had committed suicide in their name, but many claimed it was murder committed by the politicians and various monetary predators. One of the messages left by the mourners on the now ominous tree in the middle of the Syntagma Square reads: “This wasn't suicide. This was murder!”



Occupation 2.0

“In the space of two years,” was the estimation of Alexis Cipra: “after a painful cycle of failure of the stabilization programs, we have been led to the point where our country is so looted that it is facing complete bankruptcy. In practice, this means lost lives, no dignity and no future.”

Cipra, 38, is the president of the SYRZIA party – a sort of coalition of left-leaning political movements. A young politician is convinced that on the pretext of the debt crisis, a brutal experiment is being conducted. In his opinion, 'big capital' and the key EU institutions are testing a society's capacity to function without salaries, without social justice, without public wealth.

“If this experiment is successful, they will try to force this project onto the whole of Europe. But they can already see the Greek people are not going to keep their cool for much longer. The parties that consented to this project are sinking. Society is in turmoil. The plan is to strip Greece of all its productive resources and public wealth. The plan is for the 'indigenous' people

to start working for miserable wages and without any laws to protect them,” explained Cipra.

He had no doubts about the crisis' origins: “It is definitely a plan cooked up by the international capital, but it has been wholeheartedly embraced by our national capitalists as well. Luckily, it looks like they failed. The crisis of a country which is responsible for 2% of the Eurozone's GDP is now threatening to topple the entire European edifice. Big business' greed has exceeded all limits and has actually taken on auto-destructive dimensions. The people realized this very fast, but it seems that the capitalists will be the last to get it. The only hope is the resistance that comes from society. Either markets or people will prevail.”

The leader of Greek leftists claims that jumping out of the Eurozone is not the solution. First of all, that would only benefit those who have already accumulated wealth. Also, by doing this, the Greek people would puss away and transform themselves into enemies of people who are today their allies. Cipra claims that “we need to overturn the balance of power, to put an end to the neo-liberal dogma and open a new road for a democratic and welfare-minded Europe.”

Hunger

From the early hours of the morning, a long line of tired and humiliated people are winding towards Sappho Street, where the Doctors of the World organization is handing out parcels of food and medicine. Both a majority of Greeks and immigrants are waiting for their meals while policemen in bullet-proof vests are pacing up and down the street.

There is something profoundly wrong with this picture.

In March 2012, the German philosopher Hans Magnus Enzensberger said that in Europe, only anorexic girls are going hungry. Enzensberger's arrogance not only neglected the hundreds of thousands of immigrants; he also forgot about the sort

of lines that can be witnessed on Sappho Street. In the Greek capital, there are at least a dozen such public kitchens.

One out of eleven residents of Athens now goes to these soup kitchens. In 2011, most of those standing in such lines were immigrants. Today, the data provided by the Médecins Sans Frontières (MSF) shows that at least 70 percent of those queuing are Greeks. No wonder a wall near the city center bears the slogan: “Do not underestimate hunger!”

The kitchens are ill-equipped to keep up with the growing needs of people who recently crossed the poverty line. The same goes for the so-called 'solidarity clinics', where kind-hearted doctors offer free services and care for the poor without insurance. A staggering one-third of Greece is living under the official poverty threshold. According to countless predictions, one out of every two Greek families will be poor in about a year.

Does your country have a chance? Author and poet Anastassis Vistonitis, one of Greece's most reputable writers, replied: “well, we used to have tremendous growth and countless foreign investors. We were the stars, the center of the world. Money used to be so very cheap. We bought cars and apartments. We launched new compa-

Government Deficit:

-9.1% of GDP or – €19.565 billion

Greece's Government Debt:

165.3% of GDP or €355.617 billion

Government Revenue: 40.9% of GDP

Government Expenditure: 50.1% of GDP

All figures are accurate as of the end 2011. **Source:** Eurostat.

nies. No one saved their money. It was such great fun. Happy days, right? We got the Euro, the Olympic Games – we grew so fast. And then the hammer fell down. Overnight.”

“At first, we couldn't believe it. Then we gradually began to sober up. The first wave of cuts went into effect, then the second and the third. The international financial institutions backed us into a corner. When the first representatives of the International Monetary Fund arrived to Athens, I knew we were in deep shit. Wherever those guys go, they bring only penury and destruction. The Greeks are a proud people. Our history is a succession of ups and downs. That's what makes me optimistic.”

I first met Vistonitis in June 2004, two months before the beginning of the Olympic Games. He was the head of the task force charged with drafting the proposal for the Greek candidacy. Those were modern Greece's most heady days. The renowned Spanish architect Santiago Caltrava grinned while overseeing the finishing touches on the new futuristic Olympic stadium. The Greek economy was growing by six to seven percent per year. Unemployment was at a record low. Commerce was booming. And the Greek national football team won the European Championship. Athens was a starburst of joy, living their ancient myths.

Organic Rot

Greece is now rotting while being kept technically alive. "We are not the only ones to blame for the situation we are now facing. Almost the entire world is in debt. We are far from being the worst case, so I find it a great injustice that we are the only ones paying the price. A number of other European countries are sure to follow. Ireland, Portugal, Spain, even France. When those major players start taking hits as well, all of Europe will be shaken to its foundations."

"Our politicians have been blindly following Brussels and Berlin. Europe should be grateful to us for accepting its rules, instead of humiliating and insulting us! We could have called China for help. The Chinese wouldn't hesitate for a minute! Forging an alliance with China is our great strategic weapon that we can use at any time," explained Vistonitis, who feels that the entire Western world is in crisis.

"It simply can't go on this way. We'll all be forced to make some sacrifices, and that is how it should be, but the European elites want to turn us into slaves working for two hundred euros. They want to turn us into Bulgaria or Romania. We are a Mediterra-

nean country which has always been fairly self-sufficient. We have plenty of food, water and sea. Now, through our Cyprus connection, we have plenty of natural gas as well."

Thus spoke Vistonitis the writer in Monastiraki Square in the heart of Athens. His country, he said, was being demolished, and its people were highly strung-out. "If they keep pushing us toward poverty and despair, then we'll take the matter into our own hands. We will see if that means getting out of the European Union and the Eurozone. But I get the strong feeling that the people will no longer stand for being extorted in this manner. If Europe decides we are to perish, it is sure to perish along with us." 🌀

5,000 calls to
Athens suicide hotline in 2011,
double the 2010 figure.
25% increase in homelessness
over the past 3 years

(April 5, 2012, BBC)





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VIEWS



Pakistani militants are held in a makeshift prison after being captured for illegally entering Afghanistan. The Afghan authorities later released them on a Ramadan amnesty. December 2001.

In the Light of Darkness

KATE BROOKS

A Photographer's Journey After 9/11



General Khatol Muhammadzai, Afghanistan's first female parachutist, was the highest-ranking woman in Afghanistan's air force at the time the Taliban forced her to stay at home with a severance pay of \$13 a month.



A title reminiscent of Conrad's *Heart of Darkness* and Faulkner's *Light of August*, U.S. photojournalist Kate Brooks (b. 1977) takes us to the brutal frontlines of our contemporary wars. After September 11, 2001, she moved from Russia to Pakistan to cover the launch of the War on Terror. In 2003, she covered the invasion of Iraq and the beginning of the insurgency for *Time*.

Kate Brooks went on to Afghanistan, Lebanon, Syria, Turkey, Libya, and has worked with *The New York Times*, *Newsweek*, *The New Yorker*, *The Atlantic* and *Smithsonian*. Her first book, *In the Light of Darkness* is a beautiful testimonial of the realities of war and confirms that "every photojournalist contributes to the collective memory of human consciousness."

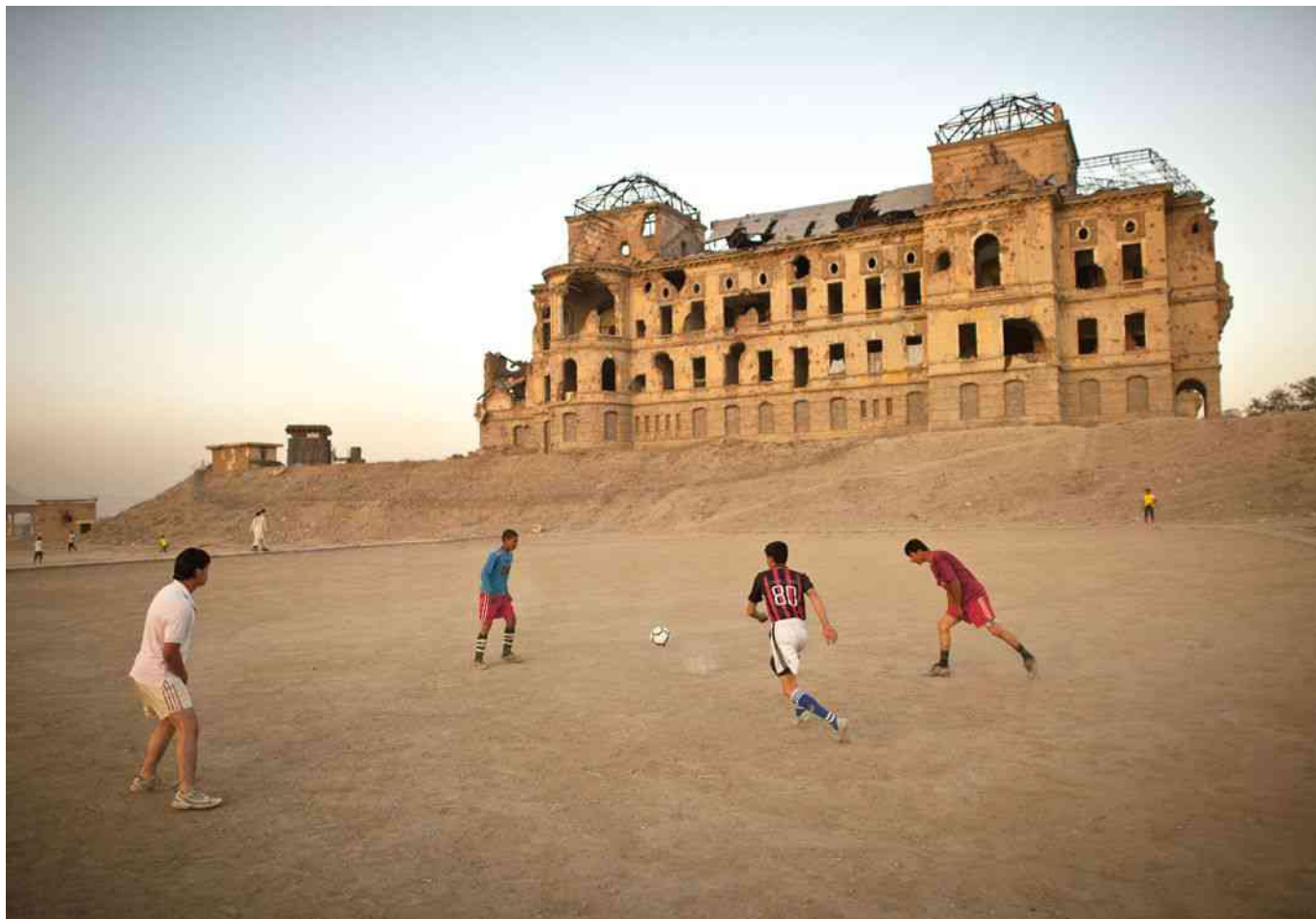
More information at: www.katebrooks.com

To order copies: www.inthelightofdarkness.com



A child walks through the wreckage left behind after Israeli air strikes on south Beirut.

“ I threw my blood- and oil-stained *shalwar* in the bin and stood in the shower for what seemed an eternity, trying to wash the day off my body. The next day the pants reappeared neatly folded on my bed. The housekeeper had retrieved them from the garbage and scrubbed out the stains, as if they were scars on my soul, in what felt like an unspoken healing ritual.”



Afghans play football outside the ruins of Darulaman Palace (Abode of Peace), built by King Amanullah Khan in the 1920s and later destroyed in the Afghan-Soviet and civil wars.



Women dance on a bar top competing for the title of sexiest woman at a club party in Beirut.



An Afghan woman in Nangahar province harvests opium in a poppy field.



The nomadic Kuchi people seek refuge in the ruins of Darulaman Palace (Abode of Peace) in Kabul after violent ethnic disputes with the Hazaras.





Afghan women prepare backstage to perform Shakespeare in Kabul for the first time since 1979.

“ The first time I visited Beirut, I knew I could live there before I had even arrived at my friend’s house from the airport. The touch of balmy air on my skin, with a hint of a sea breeze, and the beat-up Mercedes taxis: it all seemed kind of perfect to me. Strangers I met in the streets smiled warmly, saying “[you are] most welcome.” The Lebanese were charming, partied as though every day was their last, and the way they put Arabic endings on French words was both endearing and ridiculous. At that point, in 2003, the only signs of sectarian violence that I could see were the buildings pock-marked by bullets from over a decade earlier and abandoned French-mandate buildings inhabited by ghosts of the civil war’s past.”



A wounded anti-Mubarak demonstrator lies on the ground in Tahrir Square.



Anti-Mubarak demonstrators gather in Tahrir Square for Friday prayers.

“ Dream: I am taken hostage in a Palestinian camp. I fall in love with a family member of my captors; he keeps me alive while I am in captivity. I escape and am running through the streets. My surroundings are familiar but I am lost. I have a house with a pool but the water is infested with insects, reptiles and sharks. Still I am asked by someone unfamiliar to me if I want to swim, in my own pool, as if I could.”



An estimated 135 people were killed in a car bombing at the Tomb of Imam Ali in Najaf. The attack targeted a prominent Shi'ite cleric and occurred as the faithful were leaving after Friday prayers.



Lebanese soldiers gather at the site of an Israeli air strike on a densely populated neighborhood of Beirut. Forty-one people were killed. Throughout the 2006 War the Lebanese military were instructed not to fight in an effort to avoid a country-to-country conflict.





After fighting broke out between extremist group Fatah al Islam and the Lebanese army in May 2007, the Lebanese military carried out an offensive that lasted for nearly four months. A man watches the the shelling of Naher al Bared camp from his rooftop. The majority of the 30,000 Palestinian refugees who live in the Palestinian refugee camp were forced to flee to another refugee.

“ I don’t believe a single photograph is ever worth dying for, but the total of what we produce in our lifetimes justifies that risk. If we don’t get close enough to see, there is no way to tell the story for those who can’t see at all.

Given the chance, I would do this journey all over again. I can only say that though because I am still alive.”

Faisal Goes West

A Sudanese Film



Faisal Goes West, a Sudanese feature film set in Texas, explores themes of migration and cultural identity and asks whether conceptions of “the foreigner” and “the other” are changing in the era of globalization. *Revolve* speaks to the film’s director Bentley Brown.

Produced on a shoestring by an international, the new independent feature film *Faisal Goes West* tells the story of the 19-year-old Faisal and his family who move from the Sudanese capital Khartoum to the Texas countryside in search of a better life. As they settle into their new environment, they are not only confronted with the economic crisis in the United States, but also face a series of cultural and linguistic barriers. When Faisal also loses the family car, circumstances force him to get a job as a manual laborer on a chicken farm.

“There is some irony here,” says the film’s director Bentley Brown, “because there is a stereotype that all Sudanese live in rural areas and should therefore be comfortable on a farm, but in the case of Faisal it is the opposite: this is an educated young city boy from Khartoum who suddenly finds himself on a Texas chicken farm where he is totally out of place, and he has to go through a series of coming-of-age episodes to gain ground and establish himself in his new community.”

Brown, a North American who grew up in rural Chad, wrote the film’s script while working in Sudan as a political monitor between 2009 and 2011. He says he consciously steered clear of political themes. “The script is loosely based on real stories of people I know, but it is fiction, which is important, because media

coverage of Sudan generally focuses only on war, famine and genocide. It is very rare for the Sudanese to be shown as humans, especially the northern Sudanese who have been vilified due to the massive international movements against their government, the allegations of genocide in Darfur and the recent bombings in the Nuba Mountains. It is very rare to find a positive story about any aspect of northern Sudanese life. That is the beauty of this story.”

The film was produced on a \$15,000 budget, which the team managed to raise in just 30 days through the crowd-funding site kickstarter.com. “Our Kickstarter campaign included a short video clip of me promoting the film in Sudanese Arabic, which is very close to the Arabic I grew up speaking in Chad. Before we knew it, it went viral with over 200,000 hits. People started reposting it with comments like ‘This foreigner is speaking Sudanese Arabic!’”

The film’s main actor Rami Dawood got to

know about the film through Kickstarter. He is a Sudanese-born musician who grew up in Egypt and then moved to the United States. He contacted me saying he would like to contribute music to the film, but when I got to know him better I suggested he should try out for the role of main character, and he got it!”

Brown previously worked on several other short movies and a feature-length film. His previous film, *Le Pèlerin de Camp Nou*, which he co-directed with his childhood friend Abaker Chene Massar, is set in Chad and tackles the topic of drug abuse. The film received critical acclaim at international film festivals in the United States, Canada and Europe and won the award for Best Digital Feature and the Vues d’Afrique festival in Montreal in 2009. *Faisal Goes West* featured at the short film corner of the 2012 Cannes Film Festival.

A tale of migration, love, strength

From the award-winning producer of
Le Pèlerin de Camp Nou

www.faisalgoeswest.com

The Walls of Tripoli



The downfall of Qaddafi saw an effervescence of street art against his long dictatorship. The uncensored testimonies on the walls of Tripoli reveal deep frustrations.

Writer: Juan Garrigues

Photographer: Theo Stamatiadis

Juan Garrigues is a Research Fellow at the Barcelona Centre for International Affairs (CIDOB) and a freelance journalist. His writing is currently focused on Libya and Afghanistan.

Theo Stamatiadis is a full-time lawyer and part-time photographer. A Greek based in Barcelona, he can travel great distances to take a picture.



Tripoli is a mosaic of colors. Green, red and black flags flutter on every corner of Libya's capital. After 42 years of Muammar Qaddafi's brutal regime, Libyans are rejoining the public arena. Confronted with the freedom to raise their heads without fear of being detained by the infamous mukhabarat (secret services) or denounced by a neighbour, Libyans quickly took over the streets... and painted them.

Nobody can say when or who started it. The graffiti fever across Libya is shrouded in mystery, much like the Libyan revolution. Just as the incessant chant of "Allahu Akbar" from the mosque's loud speakers were to lift the evil spell left by Qaddafi, for many Libyans the quick spread of graffiti seems to have come from other realms.

But the graffiti were made by common Libyans, mostly young adults celebrating their new liberty by filling their city walls with images and texts. Their graffiti represent a real graphic testimony, unfiltered and uncensored, of the myriad feelings that have invaded the minds of most Libyans after their bloody revolution.

The graffiti depict revulsion for Qaddafi and the goals of the revolution, but also some of the challenges with which Libya is now confronted. Indeed this new chapter in Libya's history starts full of both

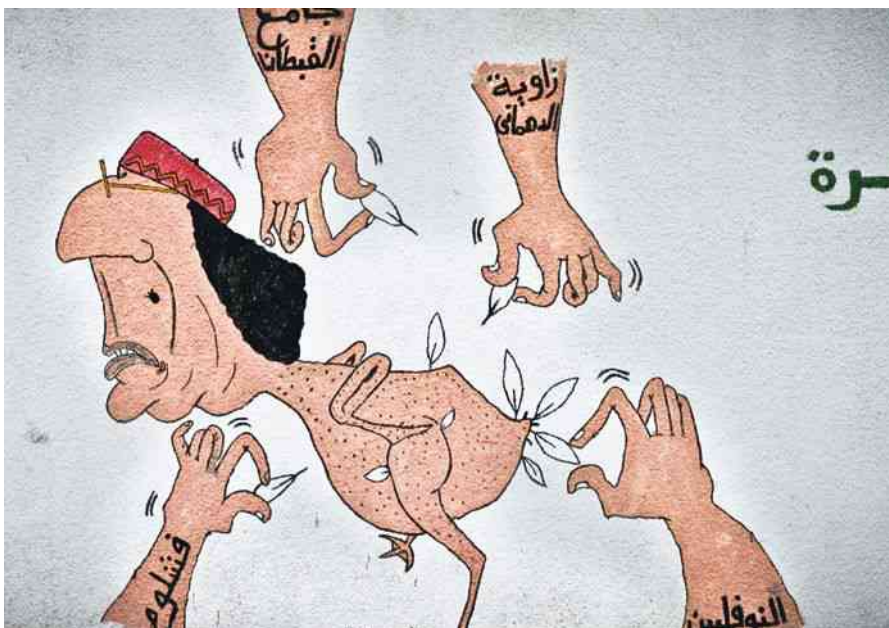
optimism and uncertainty. As one young Libyan woman put it, Libya is now experiencing a deep and long “collective sigh”.

Mohammed Haghegh, or ‘Mo’ as his friends call him, is 28 and studies engineering at the University of Tripoli. He participated in the first protests calling for a ceasefire for the civilians of Benghazi and for months, he travelled to Tunisia to help transport clandestine pamphlets and CDs inciting the revolution. When he is not attending class at university, he works as a fixer for some of the remaining foreign journalists in the city.

He is proud of Tripoli’s revolution graffiti. He knows where the best ones are in every

neighbourhood and he keeps photos of his favourites on his mobile phone. For Mohammed, street art represents the potential that Qaddafi repressed for so long. “That tyrant always wanted to be the protagonist. TV presenters were not even allowed to name the players of our football team. But now everyone will see that we are capable of in the arts, in sports, in everything.”

Like many other Libyans, this young man does not name Qaddafi by his actual name. The fact that Qaddafi called himself the “guide of the revolution” and the “father of the nation” causes such contempt and anger that young men and women do not want to hear his name.



They prefer to call him contemptuously Bushafshufa or “Afro hair”.

However, in many of the Qaddafi graffiti what stands out most is not his curls but rather he being depicted as a rat. This emanates from the televised speech on February 22, 2011, when Qaddafi vowed that he would search and kill anyone against his rule from “house to house, street to street”, adding: “I am Libya and those protesting are rats.” A musical interpretation of his speech emerged, called Zenga, Zenga (street to street), that was a big hit on social media sites. When Qaddafi was found eight months later in a sewer in the suburbs of his native town, Sirte,

everybody enjoyed the irony that the ruler who called his citizens rats ended up in a sewer wounded and defenceless like a rat.

One graffiti shows a foot stepping on a rat with Qaddafi’s head trying to escape. The text reads: “Qaddafi, rat of rats of Africa”, paraphrasing another ostentatious title self-proclaimed by Qaddafi: “king of kings of Africa.” Other graffiti represent Qaddafi, or his son Saif al-Islam (now detained by the new government) hanging from the Star of David, alluding to the popular and unverified theory that Qaddafi’s mother was Jewish.

When the rebels killed Qaddafi at gunpoint, many foreigners claimed: “these guys





are just as bad as Qaddafi.” Mohammed rejects this reaction by explaining that the months of suffering caused by Qaddafi and his lack of respect towards Libyans was so extreme that it is understandable that some young Libyan could not resist the temptation of vengeance.

In the *Country of Men* (2007) by the Libyan writer Hisham Matar, portrays a sad image of Qaddafi's Libya: “a country full of men with sunken cheeks and pants with urine stains.” On route to the University of Tripoli, Mohammed Haghegh, describes how every April 7, he and his classmates had to attend an assembly where a large screen showed Qaddafi giving a speech reminding the students of their predecessors' uprising in 1976.

Since 1976, the university became known as University al-Fateh (the Conqueror) and every April 7 students were arrested and executed on suspicion of being opposed to the regime. Just as Libyans have recovered the black-green-red flag that existed

during the 20 years between independence from Italy and Qaddafi's coup d'état in 1969, so the university has regained its original name.

While students have now returned to university, at the end of 2011, buildings were still closed. At the entrance of the university, a young guard was half asleep with an old Kalashnikov resting on his knees. Once inside, the halls were clean and the air was fresh. There was no vandalism or trash. Classrooms waited patiently with their desks and chairs perfectly aligned. There were no signs of a revolution having taken place; the students could have been on vacation.

Volunteer students maintained the campus during the revolution. Even in the faculty of medicine, built in the 1960s by British architects and now converted into an epicentre of revolution graffiti, there is a certain order to the artwork.

Overall, the graffiti reveals the inclusive nature of the revolts of February 17 –



Benghazi's "day of wrath" – within the context of the pan-Arab protests in 2011. The pillars of the courtyard illustrate farmers, students, carpenters etc. that joined the revolution. There is also a large image of a woman, which includes the flags of Tunisia and Egypt.

Many other graffiti refer to the struggle against colonialism and Libya's national hero, Omar al-Mukhtar. Known as the "Lion of the Desert" (the title of a film played by Anthony Quinn in 1979), al-Mukhtar was hung by the Italians after 20 years of leading the armed resistance. His famous cry: "we will not surrender: we will not or

we will die" was again heard all along the Libyan coast over the past year.

Only a few months after Qaddafi's demise, a debate has erupted over the future of Libya's revolution graffiti. Some Libyans consider the street art to be part of the past and want to move on. Most preoccupying for them are the walls that depict the role of a specific city or a particular armed militia in the revolution.

On two murals, for example, numerous hands are stabbing Qaddafi, represented as a chicken or rat. Each hand bears the name of a Tripoli neighbourhood. Another

graffiti proclaims Fashlun, a neighbourhood in western Tripoli, as the "spark of the revolution". In another, a skull with two knives is the symbol of a militia. Other graffiti depict militias from the cities of Misrata and Zawiya.

In the last stage of the conflict, Mohamed joined the militia Gil Hurriya (Generation Liberty), a militia of his mother's native city, Misrata, from which over 100-armed groups emanated.

The young man proudly shows his soldier identity card and once a week he travels the 130 kilometres between Tripoli and



Misrata to patrol the neighbourhood his militia holds. City militias, like in Benghazi (where the revolts started), Misrata (the front line of the battles for months), or Zintan (that played a decisive role in the final fall of the regime) now demand special recognition for their part in the revolution. Although the National Transitional Council is trying to integrate the militia members into the new armed forces of Libya, most of them don't want to give up their weapons until their security is guaranteed.

Over the last months, numerous violent incidents have occurred between militias, revealing an imminent threat to the coun-

try's security. Despite this challenge and many others confronting the new state, Libyans are confident – just like their graffiti – that the sacrifices they have made during the revolution will bring them together and help them surpass the differences that now exist between different groups.

When asked about the dangers ahead for Libya, Mohammed looks at the foreigner in front of him in incredulity and recites another slogan from the revolution: "you are a free Libyan. Raise your head." 🌀

To view the full photo essay, visit:
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Under The Holy Tree (1&2), Photo-montage & Illustration, 95x65 cm. 2011.

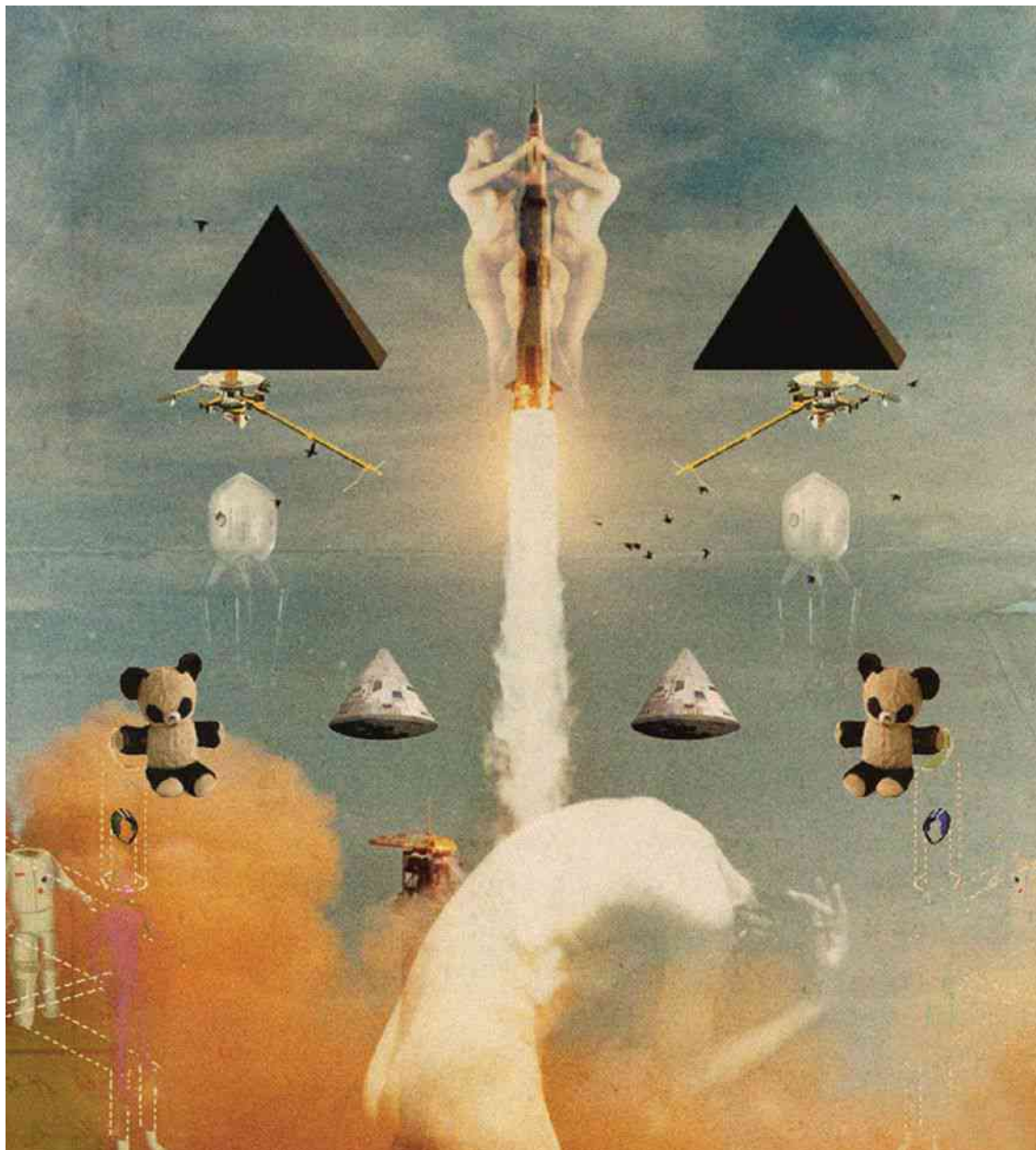
MARIA KASSAB

Lebanese Illustrator

Writer: Farah Aridi

Maria sits on a chair facing me, her eyes glittering, her voice subdued but charming, sipping her drink and talking about art – our favorite subject. She stops every once and a while, as if sharing a secret, posing for a shot, pausing for a question that would be uttered simultaneously.

The former Espace SD Dagher, now the Beirut Art Center, hosted Maria's first collective exposition in 2006. The war theme, that which never gets old within the Lebanese context, was fresh and startling following the July 2006 War on Lebanon. In May 2011, Maria had her first solo for one month, a collage, her favorite technique, at the Joanna Saikaly Gallery in Gemmayzeh, East Beirut. A few months



Celeste, Photo-montage, 24x26 cm. 2011.

later, Maria participated in a collective of painting and illustration.

Maria is an advocate and a fan of the Dada movement, a lover of Soviet Designs, and has been obsessed lately with collages (photo-montages), in addition to the fine arts of deconstruction and construction of themes, ideals, and idols. Her art is an amalgam of the fantastic, the realist, the surreal, and the emotional to produce the finesse of the aesthetic. The motifs linger between the political, the social, the sensual, the personal, the public, the sexual, and the environmental. A mixture of beautiful eccentricity and humility complements the hidden or not- so-hidden message behind Maria's expression.

Photo-montage collage is the technique most employed and cherished by Maria. She finds appealing the act of collecting the old and the new, the vintage and the contemporary of images and photographs and combining them in one unity to create a story or a message. Her collages are mostly a reworking of vintage photographs and pieces. She claims, "they are forgotten stories and when I rework them, I recreate them." Not only does she recreate what has been dismissed or relegated to one corner of forgetfulness or the other, but she is also breathing into them a life of their own, in a new setting, context, and time-frame. Maria believes each piece to be an emotional outburst, always trig-

gered by a certain happening or incident.

Music plays a very important role in Maria's work; it is an ever-present source of inspiration, so is politics. Her collages vary between morbidity, escapism, imprisonment, dramaticism, and magic realism. She employs, sometimes combines, light, gold

in 'search
of the Divine,
between
brackets.'



Pauline, Photo-montage, 120x160 cm. 2009.

and space in her work, as if her pieces are in “search of the Divine, between brackets.” Richness is how she chooses to explain what she means by that phrase, when she toys with binaries, deconstructs them, then reconstructs them once more while subverting their initial social roles.

“I alleviate my characters” – where the poor, the oppressed, the silent are given voice – “there are some characters I use, who in reality are deconstructed” – such as idols, political figures, macho men... After four years of professional artistic experience, Maria discovered the joy of juxtaposing the unrelated, regardless of logic and reason. “I like the idea of dis-formation, disfiguration, of taking things further”, she says.

Another vibrant and exuberant theme employed by Maria is sexual elevation. She translates sexual curiosity, sometimes tainted by animalism, through sexual apocalyptic. The characters and themes she employs to serve this purpose are bold and shocking. Mystic figures, such as birds, as well as personified animals, such as a gorilla, signifying the violent male, are two such examples. To give ground to her motif, Maria parallels violence with sexuality by using the canon as a phallic symbol in one of her illustrations as she de-personifies and animalizes the figure by replacing his human head with that of a panda. Not only does she de-personify him, but she also ridicules his masculinity and chauvinism.

While un-reigning her imagination, Maria gives things their proper names. Nature is a *leitmotif* of much import in Maria's work, specifically birds, leaves or trees. She believes to have a certain artistic and aesthetic connection with birds, in specific, and the animal in general. “It is not pessimistic,” she comments, “rather an understanding, a connection, a comfort.” She adds, “I love nature and I love to incorporate different elements that do not usually go together.” She titles one piece *Under the Holy Tree* because for Maria nature has the ability to give and destroy at the same time, which she believes to be of a divine and holy quality.

Just like an emotional outburst engulfs all our senses and sensations, burdens us with overlapping and simultaneous images, illustrations, feelings, and thoughts, Maria's artwork translates them into images. Her latest *Noir Mercure* is a self-portrait, multi-layered, over-written, and tainted by figures, forms, and narratives. The well-known heavy texture of *Mercury* is black and dense. Maria describes it as employed “as if you poured oil on me to taint and cover me.” Her *Noir Mercure*, according to Maria, can signify an Arab woman oppressed by her veil, or a sexual game, or even a purely political oil spill.

Maria believes that there is a form of renaissance in contemporary Lebanese art. There are lots of young Lebanese artists, experimenting. She believes contemporary artists are itching to create, though most good art remains underground. Maria acknowledges a “fear” that is still an inherent quality in most good Lebanese artists and a bout of patriarchal limitations that are hindering a true profound artistic revolution. However, she believes that, there is a lot of underground art in Lebanon, beautiful but unheard of that is now coming to the surface.”

FICTION

AUGUST 2015 PROJECT

Chapter 1

Writer: Mazen Zahreddine

Photographer: George Haddad





Re-introducing story-telling in Beirut, Lebanese author is sketching chapters that he recites in public cafes. Each session is recorded, transcribed and edited. Here's the first chapter of the August 2015 project - some other chapters are completed, others are underway.

A young man, me, a charming man by most accounts, was stuck in Beirut, it was August 2015, and he was 19 on his passport, 25 in his growth, and 33 in his life span. A city of 5s Beirut, 5s going, 5s coming, blocks of brown, a city that eats its babies, I looked to my left and then to my right and ran like, and because, my life depended on it. Ratatatata... Pitung! Ting! Fuckin' hell... Having turned and hid behind a wall, the young man, who is me, stayed there for a few seconds and then joggyjoggyjoggied towards a cabana with Cigaras Wa Kou7oul written on a sign above it. He went in.

Flop, flop, flop, flop, flop, the ceiling fan was saying. A rotten orange hue with greenish crust on the sides. A very fat man sitting behind his desk engulfed the chair that I only guess is beneath him so much he engulfed it fully, or else the guy is a levitating Buddha of some sort. But I heard a creeeeek when he moved. Yes, there is a chair there somewhere. I take a breath, sting of rotting lemon in my lung. The blistering heat. The walls were sweating. Flop, flop, flop, flop but it's no use. Our tired almost pumping veins can be seen from across the street. No longer blue. Flop, flop, flop, flop is just my way

to assert my presence in this room, said the fan. And then added: Flop.

Fatman stared at me. More with one eye than the other.

"Shu baddak?" He spoke like road-kill flipping a final flip on rough gravel.

"Croz Lucky Strike." I whispered in contrast in that whispery contrast only I can deliver.

He looked at me like I started speaking with tongues. Which I was. But with just one. Mine. Hmmm, he doesn't understand me. Let me look at you, you fuckin stinkin' son of mountain peasant folk, I recognize your language. You're lucky (which is coincidentally my brand of cigarettes as well), yes you are lucky for I speak monkey shithead too.

"Croz Looky" I rectified.

"Eh ma fi Croz"

"Addesh fi?"

"Wa7ad, Tnen, Tlete..."

Packs of cigarettes were thrown at me one at a time. His sweat was rolling down his face and then spread like the Nile once they reached his white flannel shirt. The walls (bouboub) pulsed a little. I admit it startled me. I kept looking at it in case it does that again.

"Tes3a."

"Addesh?"

"45 000."

I hesitated. He just stared at me. The situation was too dangerous for scum like that not to take advantage. A distant Ratatatata... A distant "Kess emmak ya akhoul sharmouta-aaaa, aaaaaakh..." I looked into the beyond with an opened mouth. In all objectivity, and most importantly, unintentionally, I looked gorgeous. Fat Man licked his lips, his fly was open because his fat was free spirited and could not be contained, and he relocated his massive mash of flesh that was once, tripling bygones ago, his genitalia. I stole a glance and you couldn't spot the penis from the stew.

My sweaty hands went with a thrust inside my tight pockets and the walls pulsed and started to ooze. I got several bills out, some of them sticking on my fingers. I took out a 50. Threw it at him. I thrust my hand again, with bills vanishing. And the walls moaned a bassy constant whirr of what I can only describe as pleasure. And I felt a little violated. My asshole tightened just in case and I honestly wanted this to be done as fast as possible.

He threw me the bills one bill at a time.

"Wa7ad, Tnen..."

I heard ratatata previously and my mind was on that still. So I opened a button, leaned on his desk, I showed some glistening grey skin, and I moaned:

"Eumph... Shob."

"Khamse." He looked at me, red flashed in his eyes, and green drool with what looked like little black chunks of stones hanged from his lips.

"Leik? Wenel annas?"

Fat Man farted with his mouth to convey ignorance and his whole face looked like an ass choking on a turd.

"Khalle el khamse ma3ak... Bas bi shara-fak." I pleaded and then added with a wink "Elle."

His fat hand dropped on the bills like a tongue. And the ones that did not stick, he grabbed them with his minimally-revolving thick tentacles. And then he said, in a straight forwardness that can only be commendable:

"Farjine ayarak la shouf."

"Farj..."

"Ayarak, ayarak." He repeated impatiently.

So that's how it's gonna be. I took a breath. I looked at the exit, and at the desk separating us. I calculated the risk and it was null. Fatman probably needed the help of a team of surgeons to separate his ass from his chair. The legs of his chair probably started growing hair by now. He needed a crane to get him on his feet, and a bulldozer to take him out of his shop. I could dance around him for a good ten minutes, prancing, before he catches me to rape me, by then he would be too tired to fuck and would just sleep on my shoulder, drooling on my chest. If you were starving on an icy mountain and that guy happens to be there, you can eat him for a year. And don't tell me it's disgusting. He's not more disgusting than a cow. A big smelly ugly cow. So I was like, what the hell, and I unbuttoned and let my pants hang to my knees. I have no idea why I became suddenly playful and I actually said Tataaaa as I pulled down my boxers. Fatman became all red, and to each his own really, I'm not here to criticize but Fatman had a peculiar way for coming off. His fat body would retract on itself like a ball, squeezing whatever remains of his dick between the countless layers of fat, apply-



ing pressure that can only be witnessed at an industrial scale. At first I was all dangly doo but I admit I got hard when I saw him worked up like that. It's always nice to be liked. And it came right in time, the moment I got erected Fatman *Boom* blew within himself. The whole room just trembled as he did with several cans falling off the shelves. He groaned, dripped from all over, then his little hands and little legs retracted, and he looked like a breathless overweight spider who has just finished sucking the juice out of a piece of my soul.

"Fi wa7ad fow2 Bank Audi, eddem 3al mafra2. Bineyet al shaykha dorgham, 3al rabe3. Bas bidallo m2aryan bel nhar. Ma



ta3mel sot la 7adit el mafra2 w ba3den rkod.” I placed my dick back into my pants the way you pack a Chinese vase in a box. I stroked it, it snuggled in, and went to sleep. And I went out. A whiff of light blue air, it almost feels as if this did not happen. And it did not happen if I wanted to. Maybe it didn’t, who knows, I’m crazy. “I told you it would be an adventure.” Said Gloria.

The young man went out of the shop and the silence was like glass. Doing a Ting and dozens of ghosts of Tings going off all over the place. The wait for something horrible was like putting two tons of bricks in your

belly. I looked, and I saw the Bank Audi sign. This should be Shaykha Dorgham. Okay. Silence. Go you fucker! Tap tap tap tap tap tap, woosh woosh, the young man is running like crazy. The buildings are fleeting nines, and they all scream “we can see you, we can see youuuuuu”, and the colors are out of breath, a tiiiiiiiiiiiiiiii in my ears. My bag flappity flopped behind me and it screamed at one point: I am leaving, I have dreams! but the Young Man, who was dressed really nicely by the way, a suit, and who is also me, clenched his fingers tightly and the bag said: Eugh!

If the young man were a car, and he weren’t,

he would have made liiiiiiii, so he didn’t, and he hid behind a wall filled with holes. “Kess Emm el Eslem” was scribbled behind him. Which did not bode well because Ashrafieh is a Muslim neighborhood. Such writings on the wall means there are still some Christian pockets of resistance fighting for it. His footsteps were resonating still. Tap... tap... Too loud, bemoaned the young man, as the sound made eights all across the neighborhood. Our young man eventually reached the fuckin’ apartment, and we’re only saying fuckin’ because fuckin’ hell, it took almost an hour. Ashrafieh is like a gruyere cheese. It’s a wonder how the Shiites were able to take over. It did take a while though, four weeks,

if it weren't for the easiness of genocide it would have taken longer. The Shiites did quite a number on the Christians. We now have a Chatilla burden of our own. We upgraded our CV from political assassinations to genocide. And they both boil down to the same frame of mind, the only difference is where you are in the pyramid. And those who were assassinating when they were downstairs will eventually genocide when they reach the top.

And no genocide was ever complete. So you still have a few Christians here and there. So yeah. What? What I think of this? Of genocide? It's not good I guess. Oh the Christians! Well, I have no opinion

on the Christians, this is not how I classify people, so I don't know. Some of them are shit, some of them are not. Now do they have common traits? You mean the cliché that Christians are all the same, listening to their one leader, allowing no originality and a general disdain for art. Well, yes of course, but it's not because of their Christianity rather than the fact that they were subjected to the same dire circumstances. So yeah. Sunnis also, there's a bunch of those left. All of them, hidden in basements making explosive Kajo. No I'm kidding, just making regular explosives. No, I'm kidding, but some factions did resort to blowing shit up. The Kajo Eaters they are called on TV.

There's also a Druze old man waiting to die in a cell, I hear they will exhibit him at the Natural Museum once he croaks. Should be fun to see a Druze dude. I remember they dressed funny. With special pants to accommodate those gigantic balls. There is no other explanation for the sherwal, massive gigantic dangly balls. One has to wonder how on earth did they lose the war with such aberrations of nature?

In any case, I look at the torn piece of paper that was given to me and it says "Behind the Khomeini poster." Simple enough. What's the name of the building? 'The one behind the Khomeini poster' was how it was known



in the area. I thought there would be one. But the whole place was filled with Khomeini posters. And when I would ask, they would tell me it's behind the Khomeini poster, and I would tell them: come on, there's Khomeini posters everywhere, at which point they would almost unanimously answer that oh I'll know. Eventually I got there. And yes, it was technically behind a Khomeini poster. And yes, I should've known. What a motherfucker that one was. Hiding the whole fuckin' building. He was frowning and pointing at something in the distance with such terrifying intent. I wouldn't want to be that guy he's pointing at. Living in that building will ensure it's not me. I'm behind him now.

I rang the interphone and waited. An electronic crackle, then fuckin' feedback for two or three seconds. Then a squeaky voice that chafes your genitals.

"Meen?"

"El mesta2jer. 7kina 3al telephone."

The little man clicks something, I push the gate and go up the stairs.

When I reached the second floor, there was a young woman leaning on the wall and smoking a cigarette. She looked down upon me when I was coming up, and looked straight at me when I was at her level. She had dirty light brown hair, and the mascara on her eyes was either applied terribly or she was crying just a moment ago. I looked at her and she kept looking at me unsmilingly, so I lowered my eyes. But she did not relent. And I could feel her eyes piercing my back as I walked up to the third floor. I turned my back for just a moment to steal one more glance, because she was wearing a low cut blouse, and with altitude on my side I could probably see her breasts better. And I did, they were small and well formed with half a hand of space between them, enough space to accommodate a cross I did not see when I was at eye-level with her, but her eyes burned through me as I was staring at her breasts or her cross, well it's not every day you see a Christian, and as soon as I saw those staring up at me I quickened my pace and she vanished from view.

I reached the seventh and I was out of breath, two more floors to go. I slid down the wall and started panting like a dog. I took out a cigarette and started thinking about the second floor girl. She's one of us. I

could feel it and I never miss. She was more miserable than anyone I have ever seen but looked better than most. She looked even more or less normal. She put a lot of work in her disguise. And I know she knew. I will see her again. I had no doubt. I extinguished the cigarette carefully half way through and then slid the extinguished half back into my pack. I took a deep breath and I went up the two additional stairs. I see the door now, so I knocked, and as I knocked the door of an apartment opened to my right, an old woman stuck her head out, frowned at me, and closed the door, and as she closed hers, Estez Fakhri opened his.

Estez Fakhri beckoned me in, I waited for him to go in but he didn't bulge, so I squeezed in inside and he stayed locked at the threshold of his door, he threw a suspicious glance outside both left and right and then went inside the house like a rabbit jumping in a hole. He greeted me with a smile I only guessed was there because of crow feet around his eyes, his mouth was completely shut sealed by a healthy thick travesty of a moustache. He actually had a little dead animal under his nose feigning moustacheness. And he was not just short but silly short. He also talked like a very weak moulinex. And when he laughed, and he laughed heartily considering he was faking it, it sounded like a hyena chuckling through the last throes of syphilis. He was a dirty little man and had a perfectly round beer belly. And dressed like it's the fuckin' 70's, with an opened shirt and an Imam Ali sword pendant. He reminded me of a livid disco ball on a pike. Yeah, an impaled disco ball. With a moustache.

All he wanted was money anyway and the conversation was short. He beckoned me to follow him. We went down the stairs and as we were I immediately noticed something that you might have noticed as well. My psychosis was abating. There was something about this building. Don't go thinking it was a haven for the Lost. It wasn't much of a motel really, it was a building of crappy apartments small enough to be motel rooms. And it was oooooold. Fuck, it was old. And the woods creaked. And the smell of humidity could kill a bird mid-flight. And it was dark and damp like a dungeon with wallpaper. So I can't say the building put me at ease but



rather sucked the psychosis out for a while. I could not see numbers anywhere, and the colors were no longer alive. The Khomeini building is a black hole of insanity or I'm tripping that I'm sane. How boring. Don't get me wrong. Boring is great. I could hear nothing but a duet of steps going down the stairs, no extensions of eights, no flashes of one, no rocking, nothing. Even Blonde girl. I could swear she looked like a nine but that was it. She looked like a nine, she just wasn't one. And if you don't think that was a big deal well you would be in the wrong my friend, the distinction between those two is the difference between sanity and insanity. Everything looks like something, but it's not it. The insane knows it's it. Schlunk! He opens my room and bounces down as fast as he could. I look at him go. I can't blame him. No one likes to see disappointment.

I went in and the first thing that struck me was that my windows were hidden by the Khomeini I saw outside. An immense sense of despair overwhelmed me. I threw my bags, and as I did I looked at the apartment which was the shittiest apartment I have ever been into. And I have been in some unbelievably shitty apartments. But this one takes the cake, and eats it, then shits it on your face.

I walked towards the window, opened it with a struggle and I stuck my head out while pushing the poster with my two hands. I look around. It's fucking huge. I have no idea where I'm at in his face. It's too thick to tell. I went to the kitchen and looked in the drawers and got a knife, I came back to the window and started cutting a little hole. It would be neat if it were at mouth level. I could stick out like a tongue. Imagine me coming out of Khomeini's mouth. Haha. I'm sure the population will find that funny. And will applaud. With fervor. Everyone likes a comedian. Especially Shiites.

Cut, cut, cut, cut, cut and as I was cutting I calculated that since I'm on the 4th I should be somewhere around his beard. I took away a little piece of fabric and threw it somewhere in the room. I stuck my head out and I really couldn't tell. The sun was burning hot and the whole poster was glistening like shining metal. So I went back and placed my briefcase on

the table. Three legs and a half. A paper underneath won't do. You'd need a full set of encyclopedias.

I close my eyes. And I see nothing.

It doesn't make sense. I thought I would only see that once I'm dead.

I opened my briefcase and got everything out. Let's see. A pair of glasses, Huysmans' A Rebours and a book about fundamentalism written by an ex nun, a stack of paper, nine packs of Lucky Strike, two black pens, binoculars, my pills in case this turns out to be a really bad idea.

And a gun.

A something something. I don't know what it is. I know it's loaded. So I basically click and Boom, I kill someone. That's all I really need to know. And I don't think I will load it ever again. I'm very much scared of it as it is and I don't think I will use it even if my life depended on it. So six chances to kill someone is well beyond my wildest expectations. Or eight. I have no idea how many bullets there are in this thing and I don't want to open it lest I don't know how to put it back again. It could be 33 for all I can tell, which is coincidentally also my age. Which is also the age of Christ when he died, and any two threes spell infinity, right?

It is night now, and the nights in Achrafieh are horrible. Azan after Azan, a reminder of who's boss, and it's not Allah. It's the Muslims. We never got the opinion of Allah over this shit. So yeah, Azan after Azan and to be absolutely honest, I'd rather have a million azan rather than the voices in my head. Except for Gloria and Mama, I wish one can choose the voices or happen to be in a state where you only have good voices. Man, imagine that. And in case you're wondering, I still see nothing. And hear nothing. From inside, I mean.

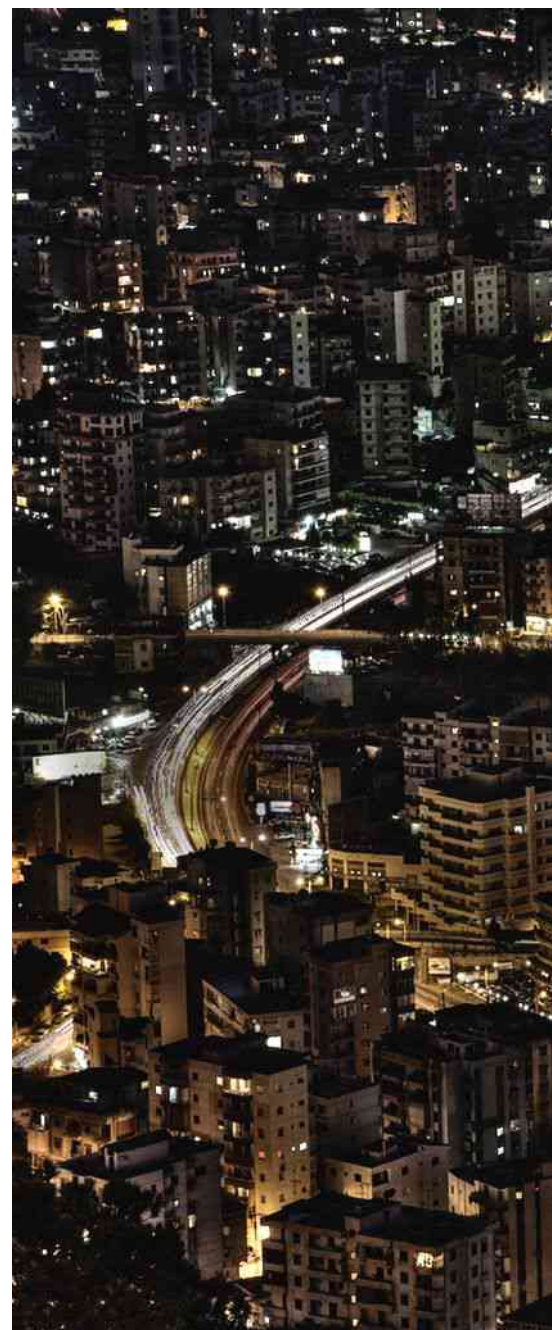
Either I'm cured or that there nothing but sixes here. Oh!

What?

Sixes?

Wait a fuckin' second. Clink clink. I hear my keys fall.

I got up to look for them and I swear, I fuckin' swear, I searched for them for no less than 10 minutes in a room so small it made me fly into a rage. I finally went to the kitchen, seething with anger, I opened the fridge and then closed it. At that time I was really



willing to try anything. I stepped out of the kitchen and the door of the fridge opened. I looked back. And it just stood there, opened, taunting me to come up with an explanation. I came back and closed it slowly. I stayed next to it while staring at it to see if it will do it again. Don't get me wrong, I see way worse all day long and for the most of my life. But this felt real. I mean everything is real, but this was isolated somehow, I don't know. And as I was staring at the fridge, I looked and I saw my keys on the top of it. And the only explanation I could come up with which I believe is very convincing is that the sound I heard previously was not my keys, and that I put my keys on top of



the fridge at some point and I forgot. So I stretch my hand and I accidentally pushed my keys behind the fridge. Something sunk in my stomach. With eyes vacant, I just walked away, consoling myself with the fact that even though it's gonna be a fuckin' hassle to get them back at least I know where the fuckers are.

I came back to the bedroom/living room and I heard a rumbling, and a general feeling of malaise. And then it was so cold. And I'll have to tell you this my friends, the heat kills me, and it was August, my psychosis acts out most violently in summer, a breeze, a gust of cold, silences the fire in me. Both

Gloria and Mama are wintry voices, in the heat of this hell-hole a cold grip or embrace is everything I could ever wish for. But this was different.

It was a blue pointy cold. One that reaches your bones without touching your skin. A cold that takes fun at corroding the very bodies of your soldiers while leaving your high and mighty wall be. There was something very fuckin' wrong here.

I turn around to reach for the blanket of my bed when I see a little girl with long black hair sitting on the bed, staring at me, looking displeased, and especially vindictive over something I must have done.

I... I... I remember I took a step back. "Meen ente?" I screamed and she just vanished ☹

To read the interview by Farah Aridi with the author about his reciting and writing of the chapters of this work in progress and the process of re-introducing the tradition of story-telling, visit:
www.revolve-magazine.com

All images are from Haddad's Cedar Grove series of Beirut city.





Maarten Vanden Eynde's *Plastic Reef* (2008-2012) is a sculpture made from melted plastic debris collected from several of the five world ocean gyres. An ocean gyre is a system of rotating ocean currents, predominantly caused by significant wind movements. In 2008, the artist discovered that there was a “floating landfill”, about the size of the United States, made up of these elements, swirling in the Pacific Ocean. He decided to visit this location and other gyres to collect material for his work, several hundreds of kilos of this floating waste, which he then transported to his studio and melted down to create *Plastic Reef*.

The Plastic Reef Project

Part II of II

Writer: Katerina Gregos

COLLECTING PLASTIC IN THE OCEAN GYRES

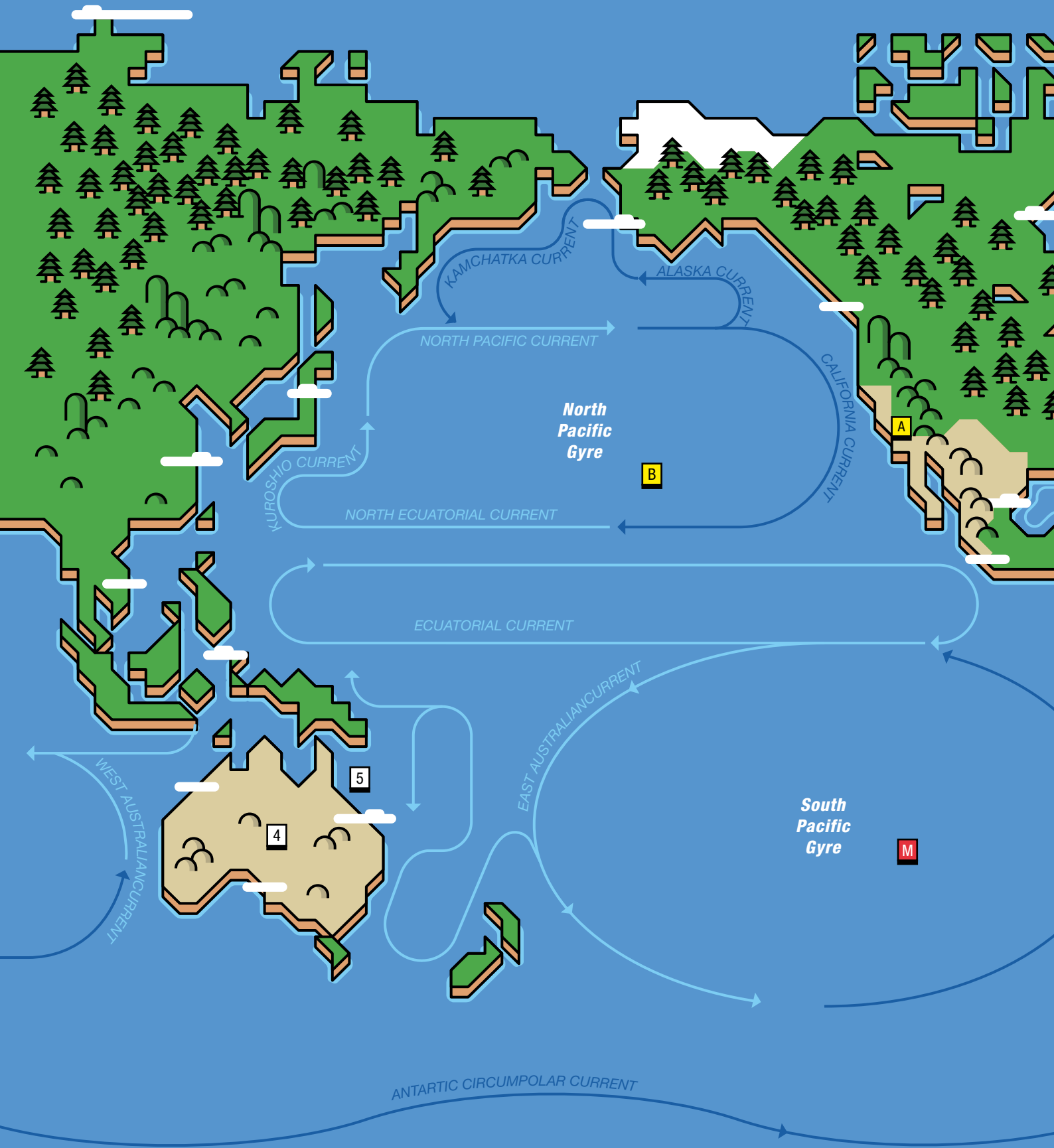
2009: SOUTH PACIFIC GYRE

- A** 6th Jan: Los Angeles, US
- B** 16th Feb: Hawaiian Islands, US

2010: NORTH ATLANTIC GYRE

- C** 26th Jan: Arrive at Bermuda, begin sail across Atlantic
- 28th Jan: Bermuda, 100 kilos of plastic in
- 28th Jan: Leave Bermuda
- D** 1st Feb: The closer to North Atlantic Gyre the plastic you begin to see
- E** 3rd Feb: Approaching centre of Sargasso Sea

Cold water current
Warm water current



TIC GYRE

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- F** 9th Feb: Centre of the North Atlantic Gyre
- G** 11th Feb: Arrive on land in the Azores
- 14th Feb: Go to Faial, Azores, to collect plastic.
- 16th Feb: Azores. Visit island land fill

2011: SOUTH ATLANTIC GYRE

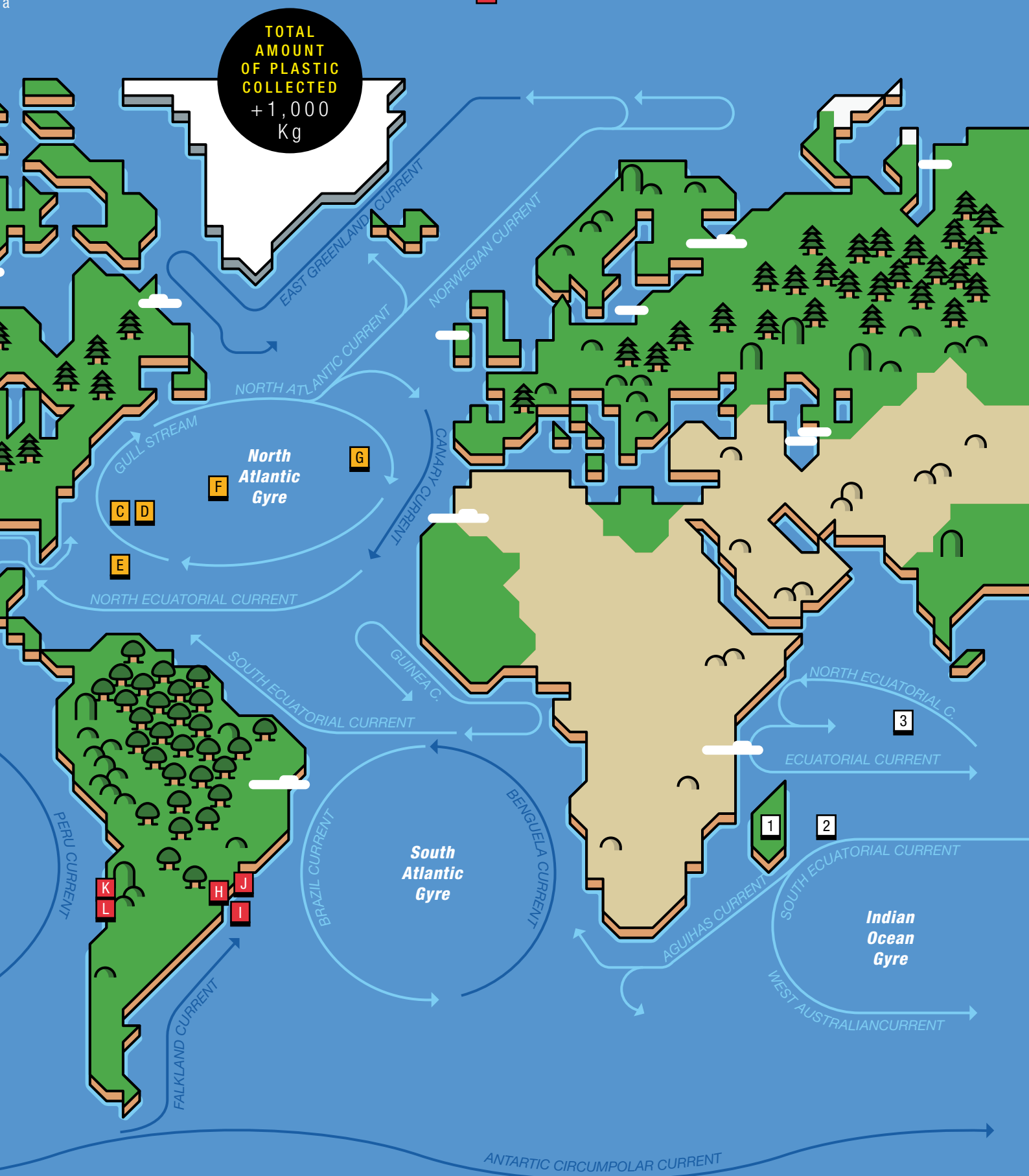
- H** 18th Dec: Uruguay
- I** 19th Dec: Isla de Gorriti (located in front of Punta del Este), collected 4 bags of plastic
- J** 20th Dec: La Paloma
- K** 21st Dec: Vina Del Mar, Chile (close to the capital Santiago)
- L** 23rd Dec: Mirasol
- M** 25th-28th Dec: Easter Island

SUMMER 2012

- 1** Madagascar
- 2** Mauritius
- 3** Maldives

WINTER 2012/13

- 4** Australia
- 5** Great Barrier Reef as final stop.





"Plastic Reef", Sculpture



Maarten fishing for plastic

The sculpture is a comment on the problem of plastic pollution in the oceans as well as a reference to disappearing coral reefs around the world. As the artist's trips progressed so did the growth of the reef, which has now reached a size of 5 x 4 m². The project aims to raise awareness about the effects of plastic pollution and its toxic properties.

Plastic is one of the slowest degrading materials and thus poisons the ocean's food chain and causes a wide variety of diseases due to its chemicals. Plastic is also involved in a vicious cycle of production: significant plastic recycling is undertaken in China, which 'imports' plastic garbage from the west, transforming it into cheap goods and selling it back. The striking formal sculptural qualities of the work which recall the beautiful, colorful distinct sponge or cabbage-like abstract forms of natural coral reefs are at odds with the work's material origins, an accumulation of waste. The work thus both seduces us but also serves as an ominous reminder of the consequences of the widespread use of what will be the longest lasting physical remnant of modern human 'civilization'.

www.maartenvandeneinde.com
www.plasticreef.com

"Virgin Plastic"

"Virgin plastic" is a problem around the world. There is no beach and no area in the oceans which is free of these resin pellets – small granules generally in the shape of a cylinder or a disk with a few millimeter diameter. These plastic particles are industrial raw material transported to manufacturing sites where "user plastics" are made by re-melting and molding them into final products. Resin pellets can be unintentionally released into the environment, both during manufacturing and transport. Made from crude oil, the pellets work as magnets on oil-based 'persistent organic pollutants' (POPs), like CFKs, PCBs

and DDTs that are dumped in the oceans. They store the pollutants and become chemical mini bombs, which fish take for food and inevitably end up on our plate. Japanese scientists are linking the recent rise in diabetes, heart disease, breast cancer, thyroid disorders, ADHD, infertility, erectile dysfunction, early-onset menstruation and obesity to the ingestion of Bisphenol A (the most common chemical in plastics) and other POPs by eating fish that have eaten plastics.



MANIFESTA 9

The European Biennial of Contemporary Art June 2 – September 30, 2012 Genk, Limburg, Belgium

www.manifesta9.org

Initiators:

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Sylvain Willenz

INDUSTRIAL DESIGNER



What does industrial design mean to you?

Industrial design involves different degrees of working with clients to create products that people can use. It's about innovating within the industry, creating ideas for materials, furniture, lighting, and the production processes in all sorts of domains. Design is found in all sectors of society from household and office items to healthcare and IT. Anything man-made has been designed.

I work on all sorts of products and objects, including: high volume production of items such as external hard drives or lighting made from plastics; medium volume items, resulting in blown glass lighting and involving skilled craftsmen and producers; and a very limited series of process-based experimental designs for galleries. I endeavor to produce new, inspiring and pertinent ideas.

I am involved in the whole chain of the product life – from the idea to its development to when it is on the shop shelf. To design is a form of business, and that's what interests me as well. I like being creative and I like to work with companies that want new impulse and we define the goals and how we should achieve these by means of my creative input.

What are the main challenges you face today?

One of the biggest challenges is to elaborate ideas and solutions with our clients for products, which are not defined by the cheap and ultra competitive market and industry. The key is all about quality and innovation. The things we come up with must be sufficiently different to really stand out, yet classic enough to stand the test of time and remain appealing. This is a hard exercise as the client and I must understand each other and see how we can make the product a success. It's about expressing the rationality behind a company's vision and developing a solution that will be innovative, feasible, economically sound, and that may create more jobs thanks to its success. Local manufacturing is also a challenge, but is something we always take into account from the very start of our design process.

Another challenge is to change preconceptions about design which is not just about crazy colors and funky shapes. Design is about lateral thinking. The subtlest intervention and formal decisions can create positive impacts, both for the client, the manufacturer or the end-user. My Torch Light for Established & Sons (UK) is a very successful product because it is simple and timeless in its design, and because it uses a very industrial technology which we've adapted very easily to produce these lamps for a more domestic use. The manufacturing was optimized and its logistics are non-complicated. The material has never been used for a lighting application and that's what brought that surprising and appealing plus. There is logic that works for the producer and the end-user.

Have you felt yourself going 'green' in your designs?

I think the term "green design" is misused to convey things that are often not as green as people would like to think. I believe in the longevity and durability of products. You

might as well produce something once, buy it once and keep it forever. I think my Torch Light is very "green" in that sense. It was perhaps not made in the most environmentally friendly way but it will never need to be recycled or replaced.

What culture inspires you most?

I find the Japanese culture very inspiring. In Japan, a great amount of attention is given to the products they use and the details that go into the product design. You can find the most beautiful, specifically targeted products for children, for example, or for elders with disabilities. You find the same level of attention in Scandinavia with the care that goes into the crafts of wood products, for example, in children's furniture. Scandinavia and Japan, although very different, have a very refined sense of object culture and an inspiring approach to product longevity.

What else inspires you?

Objects and how they are produced. Old and task-specific items. Object culture in general. Taking my camera and going to flea markets and jumble sales are very inspiring. Travelling and bringing myself out of my usual contexts is also important to me. I like cartoons and drawings that have qualities to implement in my work. Although conceived in a very professional context, I like my designs to have character, a certain simplicity, and perhaps a little something that will make you smile.

My Homerun Chair for the Japanese company Karimoku New Standard (JP) is a pure and elegant design, yet it has a subtle character with legs reminiscent of baseball bats. Baseball is Japan's national sport. At first we weren't sure if the proposal would make sense to the company, yet it turned out that their factory actually produces baseball bats and so they were enthusiast about our design. This is an example of how we managed to connect creativity, ideas and the working context. 🌀



Homerun. © Takumi Ota



Profile. © Stattmann Neue Moebel



Profile. © Stattmann Neue Moebel



Torch/Bunch. © Established & Sons



Print. © SWDS



Lock. © Julien Renault



Candy. © Nicola Zocchi

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XXS Mobile Drive. © Julien Renault

Visit : www.sylvainwillenz.com

Wilderness

Julia Hyde's work is driven by a deep interest in line. Using graphite on paper, she enjoys the flexibility of mark making, from creating detailed and highly controlled rendering to generating gestural, organic lines. The ideal of human control and technique is challenged by an outburst of natural impulse.

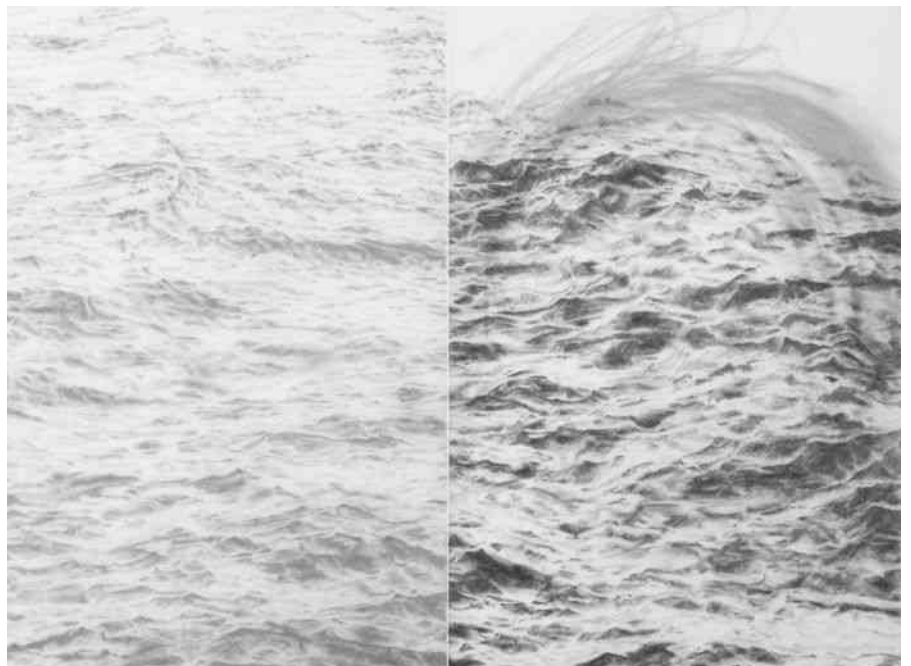
In her drawings of water, she explores how this spectrum of line making collides within a work. The ephemeral movements of the sea are captured with a highly detailed drawing technique, contrasted with hectic and intervening scribbles. In both movements, that of the water and of the mind, there is an underlying unpredictability.

“the wilderness is not a landscape you visit; it is all around you, wherever you are. we persuade ourselves that our taming of the world is profound, we lay water mains & sewers and read thousand year old books, we drive our autobahns through solid rock, we huddle together in caves lit by the incandescence of television screens. we do everything we can to be safe, and still the planet spins, the winds roar, the great ice caps creak & heave, the continental plates shudder & bring cities crashing to the ground, the viruses infect us and the oceans toy with us, lapping against the edges of our precarious land. we are in the midst of wilderness, even curled up with our lovers in bed.”

Paul Shephard, *The Cultivated Wilderness, or, What is Landscape?* Graham Foundation/MIT, 1997



Atlantic2, graphite on paper and translucent paper, 14 x 18 cm, 2011.



Atlantic1, graphite on translucent paper, 26 x 51 cm, 2011. (Above and right)





Graphite on paper, 16 x 20 cm, 2011

Somewhat reminiscent of old black and white photographs or postcards of the coast, her small controlled drawings depict, not the holiday ideal we once sent home, but another more untamed reality. They instill nostalgia for currently disappearing and changing landscapes. ☼



Graphite on paper, 16 x 25 cm, 2011



Graphite on paper, 13 x 18 cm, 2011

Julia Hyde (b. 1979, Los Angeles), lives and works in Belgium and is a MFA candidate at the Transart Institute (New York & Berlin).

To contact the artist and for more information on her work visit juliahyde.blogspot.com or email her at juliarhyde@gmail.com.

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