



PROVA DE PROFICIÊNCIA EM LÍNGUA INGLESA – TURMA 2012

Parte 1: LEITURA E INTERPRETAÇÃO DE TEXTO

INSTRUÇÕES: Nesta parte, você vai ler um texto que é seguido de algumas questões. Estas podem ser no formato de múltipla escolha ou discursivas a serem respondidas em português. Em suas respostas, use somente informações contidas no texto.

Text 1: Parasitic Petropolis

Phase I of The Petropolis of Tomorrow (Conducted at Rice University, Spring 2012) project examined how these newest findings in the Santos Basin are challenging the notion of land-based urbanism associated with oil production. Several offshore cities are emerging off the coast of Brazil to harvest oil, primarily in response to greater distances — existing out of
5 the feasible logistical range of helicopter transport — of newer discoveries. These ‘floating frontier towns’ (often termed Floating Production Storage & Offloading vessels, or FPSO)² are hundreds of kilometers offshore, floating approximately a mile over the sea floor. New ‘island hubs’ are being investigated to bridge distances and allow for efficient movement of people as well as storage of materials. These hubs would allow workers to be transported by
10 boat to land, and connected to various rigs via helicopters.

Yet, simultaneously, the oil industry equips these distant frontiers from the coast, producing a new type of company town in service of distant resources. We could call these towns Parasitic Petropolises. Land-based urbanism for refining, processing, supply, and distribution has created a series of logistical nodes along the Brazilian coast. Macaé, located
15 180 kilometers northeast of Rio de Janeiro along the coast, serves as a major land-based control center for the offshore petroleum industry. Referred to as Cidade do Petroleo (City of Petroleum), Macaé could be termed a Petropolis, or a city developed from the logistics of resource extraction. ‘Booming’ growth, a characteristic of most Petropolises, is easily witnessed in Macaé, which boasts a six hundred percent growth rate over the past ten years. In
20 the last decades, more than four thousand companies have established offices in Macaé. This “black gold” rush accounts for 85% of the oil and 47% of the natural gas output in Brazil.³ While once a quiet fishing village, Macaé now features a city gate in the form of an oil drill several hundred feet tall — a monument to their new prosperity. Macaé is an exaggerated

microcosm of the social and economic imbalances in Brazil, essentially creating two cities.

25 While on one hand, many reports claim Macaé to be one of the best cities to live in Brazil, other reports speak to various socio-economic issues. These issues — also referred to as the “oil curse” — include the growth of violent slums, injured workers (with little to no compensation) and increasing widows, and a loss of lifestyle for local fisherman.

30 Macaé is not a traditional company town, wherein a single company organized the planning, architecture, and services for both the industry and workers. Instead Macaé is a city that has attracted several businesses of a like-type without the onus on individual companies to provide basic infrastructures to employees. Despite agreements that create provisions for the community through four percent of the oil profits, citizens are weary that any money is trickling through the system. With a lack of jobs, several youth are joining gangs within the city.⁴ “There are two cities here,” remarks Danilo Funke, president of the *Commission for Human Rights in Macaé*. “On one side there’s a very rich city with a good quality of life. On the other side you have total poverty. It’s all driven by oil. If the money from the royalties of the oil was used well it would be a blessing... There’s a saying in town. The last man hanged in Brazil was in Macaé 100 years ago. He said that the city would be cursed from then on.”⁵

40 Beyond the social and economic issues in Macaé, there has also been a lack of public infrastructural investment. For instance, Nova Holanda, a neighborhood in Macaé only has one standpipe, forcing makeshift water systems.⁶ Other infrastructural projects that are urgently required include the duplication of the highway Macaé-Rio das Ostras, including the stretch that runs through downtown Macaé, extension of water pipeline network and sewage
45 from the city to provide infrastructure for the population, companies and investors, the construction of the port of Sao Joao da Barra, with implementation of rail transport of oil and ore, and the completion of Light Rail Vehicle (VLT), which will allow faster transportation of workers and people at the Macaé region.⁷ The public investment in infrastructure has been slow, and typically receives more attention when it serves the oil industry.

50 The story of Macaé is not atypical for new Petropolises. In fact, we could use history to project Macaé’s fate — its boom will likely be followed by a “bust” cycle in association with dwindling oil supplies. This new model of “companies in a town” rather than “company town” questions the models for urbanism related to resource extraction.

accumulating in the plumbing system, until I get any water up there the leaves.
25 This is really bad news for the plant because it's like having aneurysm in a human blood vessel.”

Disponível em: <<http://www.petropia.org/projects/project-oil-endpires/>>. Acesso em: 22 de fev. de 2013.

QUESTÃO 1- Qual é o objetivo do projeto *Petropolis of Tomorrow*? (1,0)

QUESTÃO 2- O que o autor do texto afirma ser uma "Petropolis"? (1,0)

Text 2: Air bubbles threatening forests

Trees need water to flow through them as much as humans need blood, and a new study published online last week in the journal *Nature* presents bleak findings on the risks to forests from record-breaking spells of drought. For the study, an international team of 24 plant scientists, led by Brendan Choat, Ph.D., of the University of Western Sydney in Australia and Steven Jansen, Ph.D., of Ulm University in Germany, compiled data from 226 forest species at 81 sites worldwide. They found that around 70% of the forest species operate with only a narrow margin of safety when it comes to their water supply, and "therefore potentially face long-term reductions in productivity and survival if temperature and aridity increase as predicted for many regions across the globe." Based on this data, nearly all types of forests, regardless of their current rainfall environment, will be equally vulnerable in the event of a drought.

"It would only take a small shift in terms of the moisture environment, the temperature...to push these plants across the threshold," Choat said. "These findings provide insight into why drought-induced forest decline is occurring not only in arid regions, but also in wet forests not normally considered at drought risk."

What actually kills a drought-stressed tree is a condition known as "hydraulic failure." Trees suck water up from the ground all the way to their leaves, through a bundle of channels in a part of the trunk called the xylem. In a commentary of the *Nature* study, Bettina Engelbrecht of the University of Bayreuth, in Germany, described this process as "much like sucking water through a straw." But when a drought dries out the soil, a tree has to suck harder through this "straw" to find water. And that can prove to be harmful, as sucking harder increases the risk of drawing air bubbles into the tree's plumbing.

Choat explains: "As drought stress increases, you have more and more gas accumulating in the plumbing system, until they can't get any water up into the leaves. This is really bad news for the plant because this is like having an embolism in a human blood vessel."

Like a human embolism, the formation of gas bubbles within a tree blocks the flow of the necessary fluid and nutrients needed in order to survive. Should drought and hydraulic failure persist, the tree will suffer from thirst and starvation and eventually die.

30 Engelbrecht reiterates that “even a minor increase in drought intensity will induce levels of xylem embolism that will impair growth and lead to tree death.”

Scientists are now keeping an eye on whether the world’s trees will somehow find a way to rapidly adapt to rising strikes of drought. One hopeful theory suggests young trees growing under drought stress could shift their framework in ways that would limit their
35 risk, but whether they have the genetic capacity to do this, or to do it quickly enough to keep up with the high-speed climate shifts projected for the coming decades, remains to be seen.

“Basically, this tells us that we should keep climate change in check as much as possible,” Engelbrecht added. “The ramifications of this scenario are diverse and, in many
40 respects, dire: forest mortality will be accompanied by changes in species composition, changes in ecosystem function and losses of services and biodiversity.”

Disponível em: <<http://www.emagazine.com/daily-news/air-bubbles-threatening-forests>>. Acesso em: 22 de fev. de 2013

QUESTÃO 3- A estrutura assinalada na passagem “*Trees need water to flow through them as much as humans need blood*” (linha 1) tem o objetivo de estabelecer: (1,0)

- a) um contraste
- b) uma comparação
- c) uma concessão
- d) uma causa
- e) uma finalidade

QUESTÃO 4- O pronome assinalado na passagem “*but whether they have the genetic capacity to do this*” (linha 35) refere-se a: (1,0)

- a) “scientists”
- b) “world’s trees”
- c) “strikes”
- d) “ways”
- e) “young trees”

PARTE 2: TRADUÇÃO DE PARÁGRAFOS

INSTRUÇÕES: Nesta parte, você deverá traduzir para a língua portuguesa os parágrafos assinalados conforme os números das questões. Siga as seguintes orientações:

- Observe a adequação lexical. A busca pela palavra correspondente de uma língua para outra deve estar de acordo com o sentido da frase e articulada com o sentido geral do texto.
- Verifique as marcas de tempo e voz verbal.
- Utilize as normas do padrão gramatical culto em língua portuguesa.
- Não acrescente frases no texto.

QUESTÃO 5- Traduza para o português o parágrafo sublinhado no texto 1 .

(Valor – 3,0)

QUESTÃO 6- Traduza para o português o parágrafo sublinhado no texto 2.

(Valor – 3,0)