



Are the Present Environmental Narratives an Efficient Trigger for Environmental Actions?

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ARE THE PRESENT ENVIRONMENTAL NARRATIVES AN EFFICIENT TRIGGER FOR ENVIRONMENTAL ACTIONS?

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Abstract. This is a tough and original question to which we will try to find an answer in the full article, based on our scientific and didactic experience. We do, however, believe this article will only prompt partially complete results due to the fact that the “environmental narratives” issue is extremely complex and extensive. Environmental narratives most often target promoting and informing, but when they originate in academia, these environmental stories become “real scientific narratives”. Regardless of the “origin/sender”, “recipient” and form of environmental narratives, we believe that the authenticity of the environmental stories’ message, coupled with supporting scientific explanations presented in a public-friendly manner, can ensure the success of these “eco-chronicles” as “eco-action triggers”. Over the past 13 years, at the beginning of every academic year, the first Environmental Pollution course at the Geography Faculty of the University of Bucharest is dedicated to a free and open discussion – open environmental narratives – about the motivation behind choosing this particular specialization, what sparked the interest and concern for the environment, as well as the students’ love for nature. The results of these open environmental narratives presented by students, which are eco-action triggers for their colleagues, will be analysed and addressed by this article in order to answer the question in the title. In December 2011, a team from the Geography Faculty of the University of Bucharest, made up of 13 BA, MA and PhD students coordinated by Assoc. Prof. Dr. Valentina-Mariana Mănoiu, decided to create an online environmental magazine. The Greenly Magazine articles, analysed as environmental narratives that generate environmental and eco-behaviour-oriented actions, will also be approached in detail in the article, thus complementing the method set employed for achieving the purpose of the study.

Keywords: environmental narratives, environmental actions, Greenly Magazine, social media, academia

Introduction

While this is not an easy question to answer, we will try to do so by using our scientific and didactic experience, which is complemented by the coordination know-how and insight

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acquired from managing the Greenly Magazine online environmental journal, a unique online publication in Romania.

In terms of expected outcome, we believe this article will prompt partially complete results, due to the fact that the “environmental narratives” issue is extremely complex and extensive.

Although, over the past few decades, interest in environmental problems has grown in many countries, this was not due to direct personal experiences. Today, television and various publications provide vast amounts of information on environmental matters, but the interest in these issues only peaks during certain crisis situations, such as accidents, and given the fact that their interest is not profound, people only concern themselves with these issues for short periods of time.

Considering all the above, under what circumstances can “environmental narratives” or “environmental stories” be an efficient trigger for public and government environmental actions?

Although environmental narratives usually target information promotion and dissemination, when they originate in academia, they turn into “real scientific narratives”. In a time when social media is a true power in numerous countries around the world, environmental narratives “spread” by means of various channels such as blogs, Facebook and Twitter pages etc.

No matter what forms the “origin/sender”, “recipient” and environmental narratives take, we believe that authenticity, complemented by the appropriate scientific explanations presented in a public-friendly manner, can make these “eco-chronicles” effective “eco-action triggers”.

1. What are environmental narratives and how do they lead to effective environmental actions?

What are, in fact, environmental narratives? The “stories” people tell about their lives which relate to the environment, to their surroundings (Ryan J.C., 2012). Some of the most famous such stories are the ones told by Aldo Leopold in “A Sand County Almanac”, which combines first-person narrative prose and scientific explanations (Leopold A., 1966).

In order for environmental narratives to generate environmental actions, they must include scientific information from fields such as ecology, geography, biology, geology etc.

An environmental narrative can also be defined as an “oral history” of the environment which takes shape based on the narrator’s experiences, observations and scientific background, as well as on his or her level of attachment to that specific environment. The environmental narratives’ argumentative and conviction strength mainly resides in rhetoric rather than logic (Ryan J.C., 2012).

Environmental narratives, like the ones explaining the decline of the karibu reindeer (*Rangifer tarandus caribou*) in south-eastern British Columbia, are highly useful for reaching a better understanding of the strong social involvement of the local stakeholders, as well as of the way they relate to nature (Bixler R.P., 2013). In this case, environmental narratives highlight the general constraints of the narrators’ learning process, but also the tendency to classify nature in static categories, thus simplifying its complexity and eliminating the feedback which characterizes and is, in fact, part of the socio-ecological systems. Environmental narratives are modelled by social ideologies and are used to legitimize certain economic activities, by altering scientific results, and to highlight the experiences of stakeholders interested in forest exploitation. This means the narrators’ standpoint plays an essential role in issues related to the narrative structure. The groups interested in forest exploitation, similarly to tourism industry professionals, have narratives built around their

own ideologies and experiences. These narratives are correlated with direct personal experiences, and have no connection to science. These personal experiences, connected in a pattern which in the end develops into a certain ideological structure, substantiate narratives as sound ecologic facts for stakeholder groups. Understanding local narratives (are they real or not?) is decisive for future local actions and for species conservation and landscape management strategies. Sometimes, local narratives follow the stakeholder groups' political and economic interests. As a consequence, the narratives are "validated", thus gaining reliability and strength, when they are analysed in the right context (Bixler R.P., 2013).

Environmental narratives show scenarios on what will happen if...events take place just as they are described. Their objective is to make the audience believe what they hear and (re)act.

In Kabale, Uganda, environmental narratives repeatedly tackled the fact that overpopulation had generated a strong pressure on land, by deforestation, overgrazing, faulty soil cultivation techniques, soil degradation, reduced soil fertility and erosion (Carswell G., 2003). These environmental narratives had a strong impact which materialized in projects coordinated by the government, local administrations and NGOs, on soil and natural resource conservation, forest protection and the development of sustainable agriculture.

But which are the factors that ensure the success of environmental narratives? According to Flynn A. (2008), they follow a certain literary pattern in order to eventually build solid narratives, and from the combined elements of this literary pattern arises the ability to shape and influence the readers' actions.

The use of narratives for transmitting to the society certain points of view has reached the spotlight in the academic world (Dawson D., 2005). To academia, it has become clear that environmental narratives promote 9 virtues: humbleness, respect, caution, judgement, patience, enthusiasm, perseverance, accurate description and moderation. We must respect the environment because we need the resources it provides in order to ensure our survival, and their destruction can lead to our destruction, but we must also respect it because the forces of nature are stronger than mankind. They are simply beyond our control. Humbleness is necessary in order to understand that we are only elements of highly complex and powerful environmental systems. And this complexity implies caution when we act in a natural setting, as well as a sound judgement when we are unsure of the consequences our actions can have on the environment. Moderation is highly important for our actions in natural settings, but also, more generally, for our lifestyles. Patience is fundamental for observing nature, but also for learning about the environment, as these processes take time. Enthusiasm, perseverance and the ability to describe accurately what we observe are essential for making sure that we learn from our nature experiences (Dawson D., 2005).

When environmental narratives target the general public, such as the ones used for various pollution reduction campaigns (e.g. reducing the pollution generated by aircrafts), the language register must be simple and clear, easily understandable, it basically has to be...the public's language style. On the other hand, when these narratives target stakeholders (aviation companies, aircraft manufacturers etc.), the language register used for the same pollution reduction campaign will change and the message will focus on the advantages stakeholders will have if they pay more attention to environmental issues, the positive effects on the environment, more efficient technologies in terms of fuel consumption and associated costs, harmonious relationships with communities and clients etc. (Dawson D., 2005).

Environmental narratives can influence future research generations in environmental science and, implicitly, the way studies will be conducted in this field and the solutions which will be brought forward in order to mitigate the anthropogenic impact on the environment (Forsyth T., 2008).

In Rio San Juan, Nicaragua, environmental narratives show a real testimony of a battle for resources (Nygren A., 2000), especially for forests, led by governmental and NGO structures, which claim they are the only ones with the necessary scientific know-how and expertise to manage the environment, and the local population, which believes that natural resources should constitute the basis for local production and ensuring the locals' subsistence, instead of being protected and declared world heritage, as proposed by the authorities and NGOs. Presently, in this area, numerous development strategies for buffer areas are mostly based on increasing state authority and interventionist development policies, and to a lesser extent on involving locals in the resource conservation management and looking for alternative strategies for ensuring their subsistence (Nygren A., 2000).

Sometimes, environmental narratives are part of the large-scale context in which power relations appear, develop and stabilize (Alatout S., 2006). Such is the case of Palestine and Israel. The main differences between Palestinian and Israeli environmental narratives reflect divergent concepts of power relations in the two communities. By looking into the different styles of environmental narratives along national borders, especially in areas with long-term political conflicts, the different concepts, views and experiences on power can be explained. While most Palestinian environmental narratives are based on a perception of sovereign-territorial power, the Israeli ones can be described as a perspective of bio-power. These perceptions of power lead to forms of resistance centred on property rights and sovereignty issues in Palestine, and on quality of life issues in Israel. Thus, a schism in environmental narratives appears between the two territories. Israelis focus on an immediate improvement of quality of life in their environmental narratives about a common environment (Alatout S., 2006).

As Palestinians and Israelis "share" the same environment, they can all benefit if its quality is improved. Palestinians, however, focus on the fact that this quality of the environment and life is closely related to ownership rights and sovereignty. The Palestinians' environmental narratives show that improving the quality of life is a disguise or camouflage which will eventually result in improving the Israelis' lives, while at the same time strengthening Israel's control on Palestinian territories (Alatout S., 2006).

Another analysis of Israeli and Palestinian environmental narratives describes them to be "nationalist managerial environmental narratives" in Israel, and "nationalist environmental justice narratives" in Palestinian territories. This classification reflects, once more, the issues the two populations are facing (Schoenfeld S., 2005).

Future studies will have to reanalyse and reconsider the nature of this type of bio-territorial power, which acts on territory and population simultaneously. The relationship between people and their geophysical environments is of paramount importance for understanding our world. Reconceptualising bio-territorial power could result in the emergence of a new and much needed vocabulary and of a new research field.

While environmental narratives also provide the setting for taking action, this can become problematic if not carefully managed. For instance, In Kenya, India and China, environmental narratives take a stand against pastoralism, which is considered to be an old and irrational way of life, found in fragile and unproductive ecosystems, which generates a series of inconveniences for those who choose not to live this way (Shanahan M., 2012). Environmental narratives argue in favour of replacing pastoralism with something else, which would be erroneous. Specialists are working on changing these environmental narratives so that they focus on the benefits of pastoralism which include but are not limited to a contribution to a development that can withstand climate change. These new environmental narratives will help those in charge of drafting environmental and development policies.

When resources are not sufficient (water, meadows etc), mobility is what saves the day...as well as lives. Science will never be as convincing as authentic environmental narratives. And these environmental narratives must change the misconception of policymakers on pastoralism (Shanahan M., 2012).

Environmental narratives have the potential to contribute to ecosystem restoration in areas recently affected by agricultural activities, such as rural landscapes in Australia (Robertson M. et al, 2000). These environmental narratives contain environmental information, observations and know-how collected over long periods of time. They can bring an essential contribution to ecosystem restoration. Ecological restoration in fragmented agricultural landscapes in Australia is as much a cultural process as it is biophysical. A deep understanding and respect for the landscapes' cultural attributes are necessary, as they include the locals' creeds, values and perceptions with regard to their environment. For instance, the sense of loss felt for certain components or characteristics of a landscape. Recent activities in Australia show the important role of environmental narratives in the ecological restoration of degraded landscapes by integrating biophysical and cultural aspects (Robertson M. et al, 2000).

2. Environmental narratives – collective instrument for raising awareness on the importance of the environment in the academic milieu.

With regard to environmental narratives in Romanian academia, it has been 13 years since we started getting to know our students in a less conventional way at the beginning of every academic year, in an effort to find out more about those who would be attending the classes planned by the Environmental Geography department of the Geography Faculty, University of Bucharest (Manoiu V.M., Azzedine M., 2015).

Therefore, the first Environmental Pollution course consists in an open discussion on the students' reasons for choosing this particular specialization – we try to identify the elements that sparked their interest in environmental issues and, more generally, in nature (Manoiu V.M., Azzedine M., 2015). The results prompted by the students' environmental narratives, which are in fact eco-action triggers for their colleagues, will be analysed in this paper.

Having reviewed the responses we received from hundreds of students (the Environmental Geography department registers between 80 and 100 new students each year) over the past 13 years, we found there are several major factors that help people start appreciating nature and become passionate about figuring out ways to solve nature-related problems (Manoiu V.M., Azzedine M., 2015). These factors' influence can mainly be noticed during childhood and adolescence, with significantly lower levels in adulthood.

Here are the most important factors:

A. Positive emotional childhood experiences in the outdoors. In other words, childhood years spent in nature, in exceptionally beautiful places, can result in a teenager and, later on, in an adult who is more likely to get actively involved in tackling environmental issues. Most of the students taking on environmental studies come from rural areas or small towns, places where pollution is not a problem and where nature plays an essential role in their lives. Many of them have been hiking since childhood, learning to respect nature and to pay attention to the important life lessons it provides. The communion between nature and child helps form a responsible adult, passionate about the environment. The environmental narratives collected from these students/teenagers constitute an encouragement for the childhood years to be spent in nature, which can help shape adults who are willing to make an effort to improve the quality of the environment.

B. Health problems caused by a polluted urban environment, cured with the help of natural products.

Many of the students who arrive in Bucharest deal with various health problems, especially respiratory conditions, which are caused by the high local pollutant concentrations. These problems are diminished or even disappear as soon as the young people return home, where nature's "prescriptions" heal them instantly. These environmental narratives represent a warning sign with regard to the high atmospheric pollution in the Romanian capital.

C. A strong character, marked by a concern for social justice, ethics and respect for life in all its forms.

Some of our Environmental Geography students have been actively involved in environmental NGOs since their freshman year or even as far back as high-school, as they are outraged by the effects of modern society on the environment and people's health, on living conditions in countries where resources are exploited barbarously, on animals and so on. Some of the students are vegetarians or even vegans who look for ways to reduce their environmental footprint. The experiences presented in these environmental narratives trigger in their colleagues' conscience the desire to act the way they do and to become themselves role models for others.

D. Deep psychological experiences of spiritual nature.

Nowadays, people get nervous and anxious whenever they have to talk about their spiritual experiences (Manoiu V.M., Azzedine M., 2015). The famous Romanian religion historian, writer and philosopher Mircea Eliade (1907-1986) said that once someone has a mystical or spiritual experience, that person's life is forever changed and one of the frequently occurring consequences is becoming aware of nature's spiritual dimension (Eliade M., 1991).

Many nature defenders have had such mystical experiences, which are often associated with visiting a special outdoor location. James Swan (Swan A.J., 1993) mentions Stapp (the first director of the UNESCO Environmental Education Office, William Stapp) and Pinchot [Gifford Pinchot (1865-1946), Head of the Forestry Administration under President Theodore Roosevelt (1858-1919)], but we can complement these examples with the students' testimonials, as they have understood the beauty and complexity of nature in the light of their outdoor adventures, which cannot be easily put into words, but which are authentic and original environmental narratives that can change people's lives and the environment.

In their work, Abraham Maslow (American psychologist, 1908-1970) and Carl Jung (Swiss psychologist and psychiatrist, 1875-1961) have shown that mind and nature form a "whole" deep within all human beings. When mind and nature are "isomorphic", only then can we truly grasp the concept of belonging to a large family which includes stars, rivers, mountains, forests, flowers, birds, mammals, fish, reptiles and so on, with us, them and everything in between interconnected through deep unions (Leopold A., 1966).

3. Environmental narratives in Greenly Magazine

As there were no Romanian online environmental journals, a team of geographers of the University of Bucharest, made up of 13 BA, MA and PhD students coordinated by Assoc. Prof. Dr. Valentina-Mariana Mănoiu, decided to create such a platform in December 2011 (Manoiu V.M., 2013, 2014). The Greenly Magazine articles, analyzed as environmental narratives that generate eco-behaviour-related actions, will also be approached in detail in this article.

As there still are some who naively believe that the physical world around us can indefinitely take any sort of abuse and "heal" itself while easily putting up with people's indifference and unconsciousness, where there is a general belief that we can live carelessly without thinking about the environment and, on a bigger scale, Planet Earth, Greenly

Magazine (<http://greenly.ro/>), a volunteer-based project, emerged as a natural necessity in the Romanian academic milieu, within the Geography Department of the University of Bucharest, delivering free and immediate access to environment-related scientific content, with new articles posted on a daily basis (Manoiu V.M., 2013, 2014).

Greenly's articles – genuine environmental narratives – provide scientific support for undergraduate, postgraduate and doctoral students interested in environmental issues, as well as for professionals and ecology enthusiasts. Greenly is a highly useful tool for students and faculty members of the Geography Department of the University of Bucharest, as it is for other institutions, as it enables access to essential scientific information needed for a wide range of courses and seminars. Greenly is also used by primary and secondary education students and teachers who want to improve their training (Manoiu V.M., 2013, 2014).

Therefore, Greenly constitutes a bridge between the “*environment*” (scientific content, environmental understanding and awareness, means of action for environmental protection, eco-projects, the lifestyle change from “consuming life” to “Eco life”, the habit of always thinking about the effects of personal actions on the environment, of what we leave behind us, and also thinking about those who will come after us) and “*education*”, regarded as the optimal dissemination solution for all facets of the concept of environment, looking to transmute knowledge into practical actions, to perpetuate eco-habits and eco-lifestyle and to shape up eco-characters (Manoiu V.M., 2013, 2014).

The articles featured so far can be grouped into the following major thematic clusters (Manoiu V.M., 2013, 2014):

- A. Physical and socio-economic geography (in conjunction with various environmental issues);
- B. Ecology and environmental protection;
- C. Science (scientific articles about the environment);
- D. Practical tips (tutorials) on how to protect the environment, to reduce the consumption of our non-renewable resources, waste-recycling etc;
- E. Nature protection activities;
- F. Essays on the environment, nature, education (strong positive emotional impact);
- G. Environmental events and legislation;
- H. Engaging sections (“Wall of Fame”; “The right way! The wrong way! A campaign for a clean European environment!”; “Guests”).

There are several important elements regarding the educational role of these thematic clusters, which can be identifiable through a careful analysis of the website.

a) The most read article to date is called “*One of the biggest environmental disasters in Romania*”/“*Unul din cele mai mari dezastre ecologice din România*” (Fig.1). Using many dramatic images, the article describes (Spiridon R., 2013) the Sesii Valley disaster, from the former Geamăna village, in Alba County, Transylvania (Fig.2). In this area, there is a pond of tailings resulted from the copper exploitation at Roșia Poieni, the largest of its kind in Europe. The pond completely covered Geamăna village, but the cemetery and church were not relocated. The church tower stands witness that once upon a time, before the major changes took place, the area was a human settlement. The pond's level, however, keeps rising each year and discharges keep coming in consistently.

The article was meant as a warning sign for what is expected to happen in the Roșia Montană village, located in the same county (due to a cyanide-based gold and silver mining project). The paper was featured in numerous online magazines and social media channels (blogs, forums, social networks etc.), and was even used in a campaign for saving Roșia Montană during the “*aNOther Festival Wien*”, which took place in Wien, Austria, on October 19th 2013.

The popularity of this article as an environmental narrative and testimonial offers clear proof of the growing awareness on environmental issues in Romania, the desire to learn more about the activities which affect the environment, and also of the resoluteness to act by all means possible in order to see to it that the Roșia Montana mining project is stopped permanently.

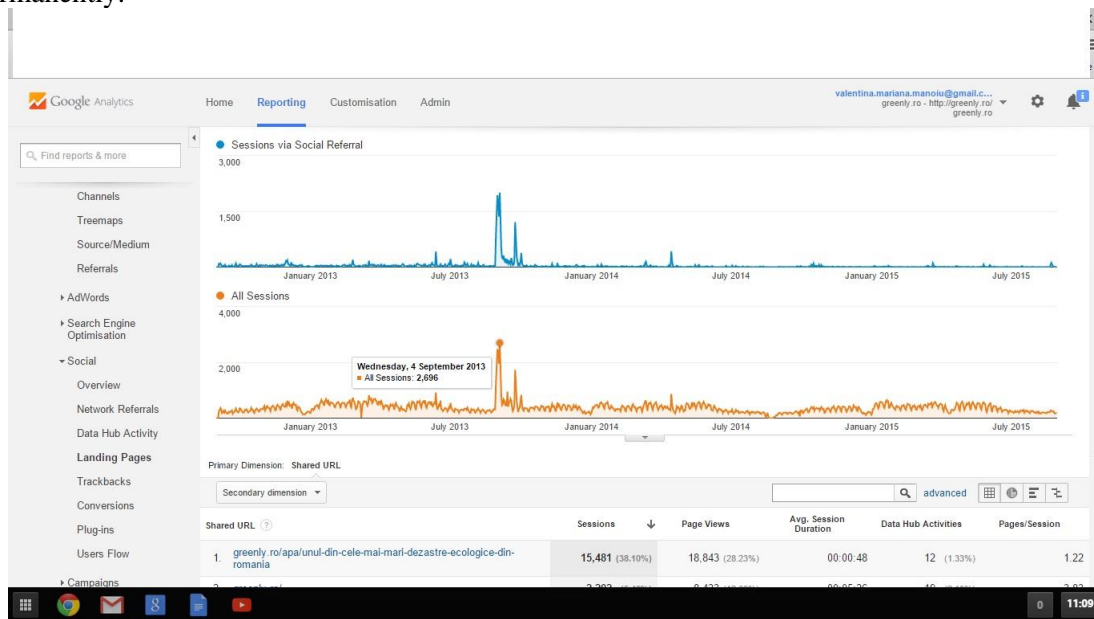


Figure 1: The most read Greenly article to date: “One of the biggest environmental disasters in Romania”/“Unul din cele mai mari dezastre ecologice din România” (Google Analytics, August 30, 2015).



Figure 2: The Sesii Valley disaster: the pond of tailings covered Geamăna village and the cemetery and church were not relocated (Photo source: Spiridon R., 2013)

b) Amongst Greenly's top 20 most read articles, 6 cover "energy". The readers have shown interest in finding scientific information about little-known energy sources (free energy, wind energy, geothermal energy, the energy willow etc). The article titled "*Free Energy – Clean Certainty for the Future (part III)*" (Manoiu V.M., 2012) is part of a 4-piece series on "free energy", which is highly popular with the magazine's readers.

Although it may sound like "the horn of plenty" taken from fairy tale books, free energy has been a proven scientific certainty for more than a century. The concept of free energy is based – primarily – on the zero point energy or vacuum energy. Free energy production is obtained by creating resonant systems which use the ultimate substrate energy or point zero energy. These systems have already been created and they work. Fortunately, there are many directions to be taken in order to obtain free energy. However, they are not available on the open market. As long as energy represents the key for controlling the masses, no government will support the development of independent and almost free energy sources. Or is this an overstatement? (Manoiu V.M., 2013, 2014) The free energy issues have been recently brought up in the article "*Free Energy in the Alps*" (Manoiu V.M., 2013, online), which excited the supporters of this movement by describing the project of Fabrice André from the Alps. The readers of environmental narratives on free energy expressed their interest through various comments to learn more about free energy devices and to plan a trip to the Alps in order to visit Fabrice André's home which is fully dependent on free energy. Yet more proof that Greenly Magazine's environmental narratives "move" people in a green direction!

c) Greenly published numerous articles on the Roşia Montană mining project in Alba County, the dangers of cyanide use in mining and alternatives to cyanide-based exploitation. Greenly is convinced that this project will be stopped and banned (Manoiu V.M., 2013, 2014; Petre A.M., 2013).

The project entails setting up the largest gold mine in Europe in order to extract approximately 300 tons of gold and 1600 tons of silver through surface excavation in four 100-acre open pits, which will require the extraction of 220 million tons of ore. The gold extraction technology relies on treating the crushed ore with sodium cyanide solution. The rock waste is to be stored in two dumps of 66 and 70 hectares. The sludge resulting from the gold and silver extraction process will be stored in a tailings pond (open lake) with a 250 million ton capacity and an estimated area of about 100 ha to 600 ha, behind a 180 meter-high waste rock dam. The project will affect 38% of the Roşia Montană commune's surface and about 1,800 inhabitants who will have to be relocated, and will involve the demolition of 740 houses and several churches and cemeteries (Manoiu V.M., 2013, 2014; Petre A.M., 2013).

d) Our magazine published several articles on the hazards related to shale drilling through the use of fracking technologies (Manoiu V.M., 2013, 2014; Stan F., 2013). Hydrofracking involves the artificial splitting of rocks through underground explosions in vertical drillings at depths of 3 to 6 km. At a pressure of over 1000 atmospheres, millions of litres of water mixed with chemicals are injected into the ground. This procedure creates fractures in a production well which is dug into reservoir rock formations.

While the procedure was introduced in 1974, the present fracking technique was first used in the late 1990s in Texas. The energy resulting from the injection of a high-pressure fracturing fluid creates new channels in the rock, increasing the extraction rate and the fossil fuel exploitation efficiency. Fracking supporters argue that one of the main advantages of this

process is the significant amount of hydrocarbons hitherto inaccessible that can now be extracted.

The main risks related to hydraulic fracturing technology are: land use modification, land contamination, noise pollution from drilling equipment and transportation, the use of millions of cubic meters of water per drilling at the expense of agriculture (as the land will no longer be irrigated). Also, groundwater and drinking water supplies can be contaminated, earthquakes may be provoked and the process may entail the generation of radioactive substances, methane and other greenhouse gases (Manoiu V.M., 2013, 2014; Stan F., 2013).

Environmental narratives about the Roșia Montană mining project in Alba County and the hazards related to shale drilling through the use of fracking technologies enjoyed the appreciation of Greenly readers, who are in favour of banning such environmentally damaging projects. These articles, similarly to the one on the Sesii Valley disaster, were highly popular with Greenly readers and widely disseminated on social media in September 2013, when most of the demonstrations against the Roșia Montană project took place (Fig.3). We were happy to see that Greenly articles – authentic and original environmental narratives – were an efficient trigger for environmental actions.

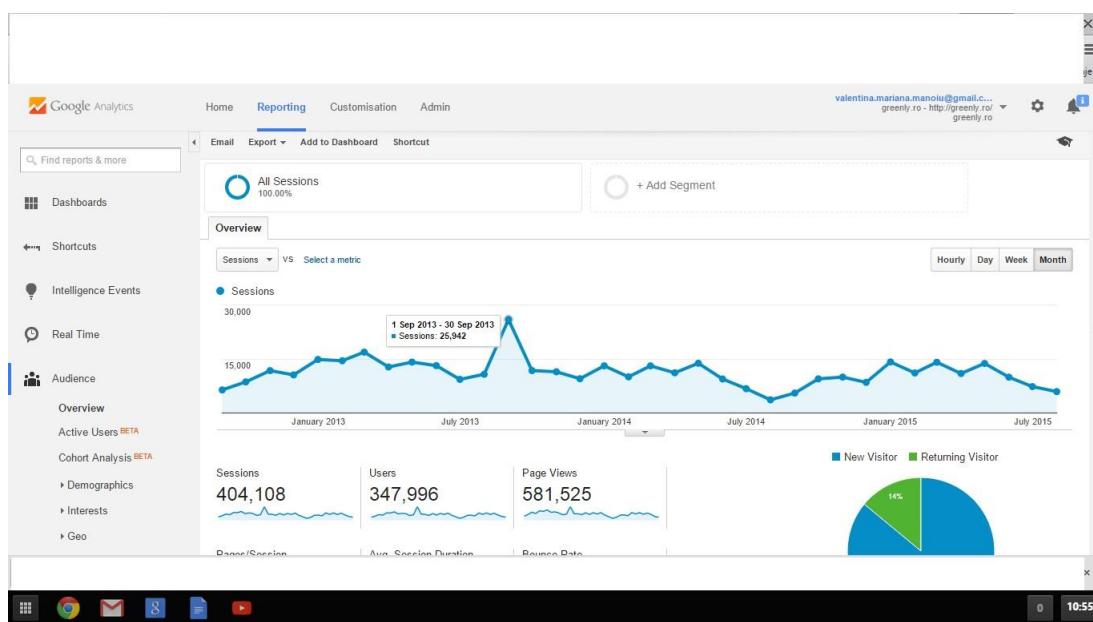


Figure 3: Environmental narratives about the Roșia Montană mining project in Alba County, the hazards related to shale drilling through the use of fracking technologies and the Sesii Valley disaster were highly popular with Greenly readers and widely disseminated on social media in September 2013 (Google Analytics, August 30, 2015).

In Romania, similarly to the rest of the world, there is a growing demand for environmental information coming from all online user-categories.

The emergence of such an online environmental magazine was absolutely necessary in Romania, a conclusion supported by the users' answers recorded by a survey posted on the home page in the first half of November 2012 (Manoiu V.M., 2013), as well as by the magazine's growing audience, which constantly disseminates articles by means of social media and mass-media channels. Readers stressed the

importance of having an online environmental magazine in Romania, given the insufficient environmental information sources and the high need for a free and easily accessible environmental platform (Manoiu V.M., 2013, 2014).

Greenly Magazine, a strong educational vector which brings together the public interested in all environmental issues, can be described using words such as authenticity, professionalism, scientific quality and the audacity to tackle sensitive scientific topics.

Caring for the environment starts in our minds, actions come later. Therefore, education and information by means of environmental narratives represent the “spark” that ignites the “nature and environment-love flames”.

Conclusions

Our answer is...Yes, the present environmental narratives are efficient triggers for environmental actions, but only if they meet certain conditions!

In order for environmental narratives to actually promote environmental ethics and trigger ethical concerns and subsequently environmental actions, they must include scientific information from fields such as ecology, geography, biology, geology etc. Environmental narratives entail personal commitment in ecologic and environmental issues, and illustrate the concerns and interests of the narrator, thus defining the context of the analyses, discussions and ethical debates related to the environmental issues in question.

Environmental narratives require attentive readers, who can “fight” the possible intellectual and/or emotional choices. Environmental narratives appeal to our emotional, intellectual, emphatic and poetic imagination. They follow a certain literary pattern in order to eventually build sound narratives, and the ability to shape and influence the readers' actions results from the combined elements of this literary pattern.

Environmental narratives are currently part of academia's agenda. As highlighted in this paper, the environmental narratives presented by students during the first course of Environmental Pollution, at the beginning of each academic year, represent an encouragement for spending the childhood years in nature, which can result in adults who are willing to get involved in environmental protection activities. At the same time, they warn about the high atmospheric pollution in Romania's capital, the narrators become role models for their colleagues, thus influencing their lives and the quality of the environment. Moreover, the environmental narratives featured by the Greenly online environmental magazine are efficient triggers for environmental actions. When environmental narratives target the general public, the language register they employ must be simple, clear and easily understandable. It basically has to be the public's language, and Greenly articles meet this condition.

Environmental narratives have the potential to contribute to environmental health restauration. They can and must change the misconceptions of policymakers. Environmental narratives can influence future researcher generations in environmental science, as well as the path their studies will take and the solutions which will be brought forward for mitigating the anthropogenic impact on the environment. Science will never be as convincing as sound, genuine environmental narratives.

References

1. Alatout S. 2006. Towards a bio-territorial conception of power: Territory, population, and environmental narratives in Palestine and Israel, *Political Geography* 25: 601-621, doi:10.1016/j.polgeo.2006.03.008,

- http://www.researchgate.net/profile/Samer_Alatout/publication/222666215_Towards_a_bio-territorial_conception_of_power_Territory_population_and_environmental_narratives_in_Palestine_and_Israel/links/02e7e52ce50d8255f4000000.pdf
2. Bixler R.P. 2013. The political ecology of local environmental narratives: power, knowledge, and mountain caribou conservation, *Journal of Political Ecology* Vol. 20, 273-285, http://jpe.library.arizona.edu/Volume20/Volume_20.html
 3. Carswell G. 2003. Continuities in Environmental Narratives: The Case of Kabale, Uganda, 1930-2000, *Environment and History* 9, no. 1: 3-29, http://www.environmentandsociety.org/sites/default/files/key_docs/carswell-9-1.pdf
 4. Dawson D. 2005. Applying Stories of the Environment to Business: What Business People Can Learn From the Virtues in Environmental Narratives. *Journal of Business Ethics*, 58 (1-3). pp. 37-49. ISSN 0167-4544, <http://eprints.glos.ac.uk/573/1/Dawson2005ApplyingStories.pdf>
 5. Eliade M. 1991. *India. Editura pentru Turism. București.*
 6. Flynn, A. 2008. The Mechanics of Legitimation: An Aristotelian Perspective on Environmental Narratives, *Conservation and Society* 6(4): 308-319, http://www.conservationandsociety.org/temp/ConservatSoc64308-2721217_073332.pdf
 7. Forsyth, T. 2008. Political ecology and the epistemology of social justice, *Geoforum*, 39 (2), DOI: 10.1016/j.geoforum.2006.12.005, http://personal.lse.ac.uk/forsyth/forsyth_geoforum_blaikie%20paper.pdf
 8. Leopold, A. 1966. *A Sand Country Almanac*. Oxford University Press. New York.
 9. Mănoiu V.M. 2012. Energia gratuită ("Free Energy") – Certitudine nepoluantă pentru viitor (partea a III-a), *Greenly Magazine (online)*, January 2012, <http://greenly.ro/energii-alternative/energia-gratuita-%E2%80%9Efree-energy-certitudine-nepoluanta-pentru-viitor-partea-a-iii-a>
 10. Mănoiu V.M. 2013. Energie gratuită în Alpi!, *Greenly Magazine (online)*, January 2013, <http://greenly.ro/apa/energie-gratuita-in-alpi>
 11. Mănoiu V. M. 2013. Greenly Magazine A modern educational project for a better environment, *Global Journal on Advances in Pure and Applied Sciences*, North America, Vol 1 (2013) 805-810, ISSN: 2301-2706, <http://www.world-education-center.org/index.php/paas/article/view/2399>, <http://www.world-education-center.org/index.php/paas/article/view/2399/1928>
 12. Manoiu V.M. 2014. A bridge between education and the environment: Greenly Magazine, *INTCESS14 – International Conference on Education and Social Sciences*, Istanbul, Turkey, 3-5 February 2014, ISBN 978-605-64453-0-9, *ISI Conference Proceedings* http://www.ocerint.org/cd/paper_a.html, <http://www.ocerint.org/cd/abstracts/a455.pdf>,
 13. Manoiu V.M., Azzedine Madani 2015. *Profound Ties: Nature - Environmental Psychology – Education*, *INTCESS15 Conference (2nd International Conference on Education and Social Sciences)*, Istanbul, Turkey, February 2-4, 2015, ISBN: 978-605-64453-2-3, *Conference Abstracts* http://www.ocerint.org/intcess15_e-publication/abstracts/a224.pdf, *ISI Conference Proceedings* http://www.ocerint.org/intcess15_e-publication/papers/224.pdf
 14. Nygren A. 2000. Environmental Narratives on Protection and Production: Nature-based Conflicts in Rio San Juan, Nicaragua, *Development and Change* Vol. 31: 807-830, DOI: 10.1111/1467-7660.00178, http://www.researchgate.net/profile/Anja_Nygren/publication/227509205_Environmental_Narratives_on_Protection_and_Production_Naturebased_Conflicts_in_R7iacuteo_San_Juan_Nicaragua/links/00b7d5241ac414b08a000000.pdf
 15. Petre A.M. 2013. Există alternative la exploatarea cu cianuri!, *Greenly Magazine (online)*, September 2013, <http://greenly.ro/soluri/exista-alternative-la-exploatarea-cu-cianuri>
 16. Robertson M., Nichols P., Horwitz P., Bradby K., MacKintosh, D. 2000. Environmental Narratives and the Need for Multiple Perspectives to Restore Degraded Landscapes in Australia. *Ecosystem Health*, 6: 119-133. doi: 10.1046/j.1526-0992.2000.00013.x, <http://onlinelibrary.wiley.com/doi/10.1046/j.1526-0992.2000.00013.x/abstract>
 17. Ryan J. C. 2012. Narrative Environmental Ethics, Nature Writing, and Ecological Science as Tradition: Towards a Sponsoring Ground of Concern. *Philosophy Study*, 2(11), 822-834, ISSN 2159-5313, <http://ro.ecu.edu.au/cgi/viewcontent.cgi?article=1633&context=ecuworks2012>

18. Schoenfeld S. 2005. Types of Environmental Narratives and their Utility for Understanding Israeli and Palestinian Environmentalism, pp 93-113 in Stuart Schoenfeld, ed., *Palestinian and Israeli Environmental Narratives: proceedings of a conference held in association with the Middle East Environmental Futures Project*. Toronto: York University Centre for International and Security Studies,
http://www.academia.edu/2534596/Types_of_Environmental_Narratives_and_their_Utility_for_Understanding_Israeli_and_Palestinian_Environmentalism
19. Shanahan M. 2012. What's in a narrative? In policy, everything or nothing, Blogs, International Institute for Environment and Development, <http://www.iied.org/what-s-narrative-policy-everything-or-nothing>
20. Spiridon, R. 2013. Unul din cele mai mari dezastre ecologice din România, *Greenly Magazine (online)*, June 2013, <http://greenly.ro/apa/unul-din-cele-mai-mari-dezastre-ecologice-din-romania>
21. Stan, F. 2013. Împreună împotriva exploatării gazelor de șist!, *Greenly Magazine (online)*, March 2013, <http://greenly.ro/apa/impreuna-impotriva-exploatarii-gazelor-de-sist>
22. Swan, A.J. 1993. Kinship with Nature: The Psychology of Environmental Conservation, *Environ. Carcino & Ecotox. Revs.*, C 11 (2).

