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# Moral panic related to mineral development projects – Examples from Poland

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## ABSTRACT

This paper describes a moral panic as a social phenomenon in relation to the issue of mineral development projects. A moral panic involves creating a sense of insecurity in a group of people by exaggerating facts that are perceived as a social problem. Mineral exploration and exploitation are activities that are particularly likely to spark public protests because of the common misunderstanding of the character and scale of the impact that they might have on the natural environment and local community. The paper presents the sources, mechanisms and results of such a moral panic based on the examples from Poland concerning various kinds of mineral resources that are extracted with the use of different methods and on a different scale. The perceived threats associated with mineral exploitation are often exaggerated and sometimes completely false, which is because society is susceptible to manipulation by the media. This causes substantial financial losses not only for exploration and mining companies which are forced to give up their projects even though particular environmental requirements are met, but also for the local communities themselves since they are deprived of potential jobs as well as income from taxes and mining royalties. The phenomenon of moral panic related to mineral development is a serious problem also because local government activists increasingly more often create such a panic out of political expediency. This kind of panic can also be created by other interest groups. It should be emphasised that resistance to a moral panic does not mean that one cannot object to geological and mining activities when this is justified; then such protests can be even more effective.

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## Introduction

Mineral exploitation constitutes one of the more important sectors of the economy. The extraction of mineral fuels is of particular significance for the security and political position of countries. The exploitation of certain other minerals (in Poland these are, for example, copper and silver) brings significant revenue to the State Treasury and also to local government units. Analyses in this area usually deal with the technical and economic as well as environmental aspects of mineral exploitation. Also, the issue of social acceptance of mineral extraction is increasingly often being discussed by business practitioners and social theorists with a special focus on people's concerns about the negative impact of mining on the broadly defined natural and anthropogenic environment (Badera, 2010; Campbell and Roberts, 2010; Steelman and Carmin, 1998). For example, one website that is devoted to business ([biznes.pl](http://biznes.pl)) says the following: "According to

experts from the UK Energy Research Centre, the greatest challenge for companies that are interested in exploiting shale gas in the UK and throughout Europe is how to convince the public that hydraulic fracturing technology is safe".

Obviously, shale gas is not the only mineral which is the subject on ongoing disputes over the political and socio-economic importance and environmental safety of exploitation. In practice, the exploitation of any kind of mineral deposits can meet with either hostility or acceptance from the public.

Numerous papers describe social actors and the dynamics of environmental conflicts associated with various mining projects, mainly outside Europe (e.g. Lane and Rickson, 1997; Hilson, 2002; Muradian et al., 2003; Hilson and Yakovleva, 2007; Anguelovski, 2011; Farrell et al., 2012; Velásquez, 2012; Bacci and Diniz, 2013; Tiainen et al., 2014). The available literature dealing with socio-environmental issues in European countries is relatively modest (Damigos and Kaliampakos, 2006; Badera, 2010; Zobrist et al., 2009; Vintro et al., 2012; Suopajarvi, 2013; Sobczyk and Badera, 2013; Sobczyk et al., 2014; Ranängen and Zobel, 2014), probably because there have been no large investments in recent years. Currently, a relatively large number of new mining projects are being implemented in Europe as a result of the increase in the

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demand for raw materials, coal-based energy policy in certain countries, as well as changes in the EU resource policy related to the non-energy sector (which took place several years ago). Consequently, also problems associated with the public's acceptance of such projects started to occur. Because Europe is relatively highly urbanised, and at the same time there are great nature conservation sites, it is usually a difference in opinions concerning further land development (e.g. Król and Kot, 2010; Niec et al., 2014) that is the direct cause of conflicts in Europe. The context of every mineral development project is unique (Prno and Slocombe 2012), but one can also notice certain regularities. The specific role of particular groups of stakeholders (stakeholder theory) was presented in detail in many publications (e.g. *Breaking new ground: mining, minerals and sustainable development. The Report of the MMSD Project, 2002*; Azapagic, 2004; Badera, 2010; Mutti et al., 2012). Apart from worrying about the environment, local communities also demand a greater share in the benefits and more involvement in decision-making (Prno and Slocombe, 2012; Prno, 2013).

It is not as much the more or less reliable and objective information as collective emotions that are to blame for the above-mentioned acceptance or the lack of it. Fear, panic, jealousy and a moral upheaval are often fuelled by the media according to the principle: "bad news is good news" (Badera and Jaksoń, 2011). Finally, it should also be stressed that the political and socio-economic objectives of the state and sometimes also those of the local authorities may be incompatible with the views of a certain group of citizens on mineral exploitation. In accordance with the "not in my backyard" (NIMBY) principle, it is mainly local communities living in the existing or projected mining areas or in the immediate vicinity of such areas that have a negative attitude towards mineral development projects (Fischel, 2001; Freudenberg and Steinsapir, 1991; Smith and Marquez, 2000).

In a democratic state under the rule of law society has many tools for expressing disapproval of the exploitation of minerals. Consumer boycotts (of products of those companies that mine or process minerals as well as of their franchisees), petitions to the authorities, demonstrations, websites or statements to the media are very effective methods for hindering the implementation of mineral development projects. Whether these tools will be used depends on many factors. Among such factors is a moral panic about mining activity, i.e. the social phenomenon that is discussed in this paper. This phenomenon was originally analysed in the context of subcultures (Cohen, 2002). Currently, it seems to occur wherever economic activities, such as mineral exploitation, whose impact on the natural and anthropogenic environment causes concern are carried out.

### Moral panic – the concept

According to one American Internet dictionary (sociology.about.com), "Moral panic is an extreme social response to the belief that the moral condition of society is deteriorating at a rapid pace. Numerous sociologists have interpreted moral panic as a device used to distract public attention from underlying social problems and justify increased social control over the working class and other potentially rebellious segments of society".

The Polish authors Sztompka and Bogunia-Borowska (2008) state that "a moral panic occurs when particular states, events, individuals or groups of people are began to be identified as threats to societal values and interests; their nature is presented in a stylised way by the media, preachers and politicians".

M. Soin believes (2011) that a moral panic is when an event, person or group are unreasonably defined, in particular by the

media, as a threat to the values that are cherished by society, and this threat is at the least exaggerated. A moral panic, somewhat by definition, is an overreaction which is disproportionate to the actual problem. Among those who create, sustain and also succumb to this panic are the media, experts, political elites, state administration bodies, legislative bodies as well as interest groups which, more or less consciously, manipulate public opinion. One can also cite Hunt (1997) who says that a moral panic "refers to an exaggerated response or over-reaction in the media to what is seen as a social problem".

According to S. Cohen, one of the pioneers of research on this concept, the fact that "the relationship between the perception of a social object and an attitude towards this object is complicated" is the root cause of a moral panic. "To put it simply, at least two stages occur: first we perceive certain things and then we make a selection against certain already existing orientation, and then we shape and integrate what we have perceived into more permanent attitudes. (...) after the first impression has passed, the social reaction to any unexpected social occurrence involves assigning a meaning to what has happened, especially if such an occurrence is perceived as a disruption to the existing social structure or a threat to the values cherished by society"<sup>1</sup> (Cohen, 2002). In other words, a moral panic means that certain occurrences are interpreted negatively with regard to their conformity to ethical norms, irrespective of the actual course of events and consequences of such occurrences.

Very often it is centres of power (also of symbolic power) that create panic which is related to compliance with moral norms and values. "Attention is focused on fictitious problems and shifted away from real problems. If no ways of dealing with such an alleged threat are proposed then it takes on a life of its own. It becomes dangerous when it leads to repressive actions" (Soin, 2011). Therefore, a moral panic can be a political tool. According to Goode and Ben-Yehuda (2009), "the theoretical framework that is most often used to explain the causes of a moral panic is connected with an attitude that is based on the theory of interest groups which indicates that power elites are only one of the collective actors who have a reason and the ability to foment unrest and uncertainty among larger groups of people for the sake of safeguarding their own economic, ideological and political interests".<sup>2</sup> Therefore, a moral panic can be created by politicians who want to gain the local community's support by acting as its defenders and sometimes also to divert attention from their own actions. The media sustain this panic in order to make profit and/or win these politicians' favour.

The harmfulness of a moral panic that entails making bad law is an important aspect of this discussion. In Poland, the moral panic about great financiers and the hysteria surrounding the privatisation of banks led to the adoption of the Financial Market Supervision Act of 2006, which is one of the most socially harmful acts centralising financial supervision in Europe in the opinion of many experts.

Goode and Ben-Yehuda (2009) identified five elements of a moral panic:

1. Concern – there must be an awareness of the fact that a given group and/or its activity may have a negative influence on society.
2. Hostility – resentment against a given group and/or its activity which is somewhat different than the rest of society and its activities; a clear division is created between "us" and "them".

<sup>1</sup> Translation from Polish edition.

<sup>2</sup> Translation from Polish edition.

3. Consensus – in certain social circles there must be an agreement that a given group and/or its activity represent a very real threat.
4. Disproportion – there must be a large disproportion between the anticipated and actual threats.
5. Volatility – the public's interest in a given topic and the phenomenon of moral panic itself can disappear as quickly as they came.

Therefore, as for mineral resources, first the information about the possibility of the exploitation of a given mineral deposit causes concern. Then this concern turns into resentment towards the company that is going to carry out a given mineral exploitation project as well as all those stakeholders (the authorities, experts, etc.) who are in favour of such a project. Since there is a “threat” that a mineral extraction project will be launched, the members of a local community unite in opposition to this plan, and their reaction is disproportionate to the problem – this already happens at the stage of exploration (the results of which are not yet known), whereas the scale and scope of the project's potential impact are blown out of proportion, although the very project might not even have the chance to be implemented. However, stereotypes are created and they will be firmly entrenched in the mainstream consciousness. At the last stage, a given community might finally become less eager to take any action, but as for mineral resources, a moral panic usually breaks out again when the next steps related to a mineral development project are to be taken.

A moral panic can break out especially if a potential mining project violates (material and non-material) interests of specific groups within a local community, in particular of a local elite. These elites prepare more or less valid information about the negative impact of mineral extraction activities, whereas the media spread such negative information, thus increasing sales, attracting more audience, etc. Obviously, a local elite does not necessarily have to start rumours, but it might use such rumours to achieve its own ends. As for mineral resources, also ecological organisations can be the catalyst for panic.

The phenomena of a moral and media panic are relatively often described in the literature, both in detail and generally (e.g. Jasper, 2001; Leach, 2006; Altheide, 2009 and others). Moral dilemma as well as technological and environmental fears in society were studied and described, for example, by Ungar (1995, 2001); Albrecht and Amey (1999); Hier (2003) or Rohloff (2011). Previous studies do not analyse the conflicts associated with mineral industry as a manifestation of moral panic. Some part of them describes emotional social reactions, intentionally fuelled by elites with the use of the media (e.g. Leschine, 2002; Campbell and Roberts, 2010; Vesalon and Cretan, 2013) but they do not use the concept of moral panic to describe these phenomena and it is never the main content of papers so far. Also in Poland there have not been found any research work concerning moral panic in the context of mineral resources extraction and the existing studies were focused on the problems of social stigmatisation, football violence or homosexuality. What is more, one ought to remember that coal or copper mining is the important factor of regional identity in Poland, hence a moral panic may concern not only start but also stopping some operations.

### Case studies

This section presents examples related to different kinds of minerals which are extracted by using different methods and which are of different importance for the economy. The authors of this paper know about these cases not as much from the media as

from their own experience, i.e. from their direct actions and own research. The first two cases are connected with the activities of international companies as well as the basic mineral deposits (shale gas and zinc–lead ores). The third case is related to a common mineral of local importance deposit (gravels and sands); this case, however, is somewhat symptomatic of the problem that is dealt with in this paper and it may be of interest to readers from outside of Poland. This analysis will not deal with the rationale behind launching mineral exploitation projects, the correctness of the procedures that make it possible to carry out exploration or extraction works, or investors' activities related to public relations. This analysis will instead focus on the actors, the course of events during the conflicts as well as the specificity of conflicts, in particular their political and media-related aspects.

#### *Shale gas exploration in the Grabowiec commune (the Lublin region)*

Since the US estimates of shale gas resources in Poland were published in the first decade of the 21st century, the use of this gas has been widely debated by politicians, experts as well as the media and the public. On the one hand, the existence of shale gas resources offers hope for Polish energy independence and an increase in the country's budget revenues, but on the other hand, this causes concern about the state of the environment and distribution of potential benefits. Although the Polish government strongly supports shale gas exploration, geological field work might not always meet with acceptance. Data as at 30 June 2014 show that a total of 76 projects are being carried out under mineral exploration licences covering large areas in different parts of Poland (since 2007 about 115 such licences have been issued but their number is gradually decreasing; there are various reasons for that and these range from the lack of clear regulations to unsatisfactory results of geological works). Until now more than 60 boreholes have been drilled (among them are only several boreholes including horizontal sections, fracking and production tests). Apart from Eastern Pomerania, geological works are currently being carried out in Lublin Province. The Polish company Orlen Upstream Sp. z o.o. and the US company Chevron Polska Energy Resources Sp. z o.o. are the main licence holders in this region. Many public opinion polls show that the majority of those who live in the Lublin region support potential shale gas development projects, and the number of such supporters is equal to or above the national average. Despite this, a conflict has occurred over three boreholes that have been either drilled or planned to be drilled by the Chevron company near Horodysko (the Leśniowice commune), Ministrówka and, above all, Żurawłów (the Grabowiec commune).

The protests started at the beginning of 2012 and have lasted virtually until now (July 2014). They have taken different forms and occurred with varying degrees of intensity. Some of the Grabowiec commune's inhabitants, mainly those living in the Żurawłów and Rogów villages, oppose the works. This group is supported by the national ecological society Eko-Unia, which is based in Wrocław. On the one hand, the protests involve taking legal steps (appeals against administrative decisions and interventions in various institutions), and on the other hand, they take the form of physically blocking the works on land that has been leased to Chevron. The official and less official arguments that are used by the opponents reveal a whole range of objections and concerns, from the impact of such works on the adjacent nature conservation sites to strictly economic and political issues. However, it seems that the events related to the geological works which were carried out about one and a half year earlier in the area of the nearby villages, i.e. Rogów and Siedlisko, by the Polish company Geofizyka Toruń S.A. (PGNiG group, i.e. Polish Petroleum and Gas Mining), and which were commissioned by the Ministry of the

Environment, have been the immediate cause of this conflict. These works were carried out by using vibroseis trucks, which led to damaging certain road sections and caused some buildings to crack. The geophysical company paid compensation for this damage. Locally, also turbidity and other kinds of contaminants were observed in well water, which is why it was no longer fit for drinking. The opinions of experts and even of the inhabitants themselves on the real cause of this damage varied (heavy rains or poor condition of the buildings?). Nonetheless, this event undermined the local community's confidence in the safety of shale gas exploration, the effects of which were later still felt by the licence holder (Chevron). The residents started to look for information on shale gas on their own; for example, they came across the film *Gasland* and other materials (mainly on the Internet) presenting the impact of shale gas exploitation on the human being's environment in a negative light. When the Chevron company came into play, there had already been a group of committed opponents of shale gas exploration and all the organised information meetings did not change anything. A moral panic reached a high level and it mainly focused on the impact that such exploration might have on the infrastructure and environment, especially water environment. During the conflict new misunderstandings occurred, which only heightened the tension between the residents, the local authorities, and the investor. Żurawłów was visited by the representatives of different levels of the government and members of the parliament as well as by more or less organised groups of ecologists from outside the region and especially by the media (from the local newspapers to the national television stations and even foreign media). The protest was accompanied by a kind of folklore which involved presenting various slogans and symbols on billboards, T-shirts and gadgets, etc. (Fig. 1).

Actions in support of the protest were even organised in the capital of the province (i.e. Lublin) and in Warsaw. However, it was merely a group of the inhabitants of two small villages that formed the core of the protest movement, whereas the other people living in this commune were relatively neutral. Interestingly, even a group of people who were actively pro-drilling was formed in the Ministrówka village (where the next drilling was to take place).

Obviously, the conflicted parties exchanged their opinions and arguments in the mass media (both in social media and on professional websites). The same facts were often commented on in a different manner by the opponents and supporters of mineral exploration projects (Szczepanowski, 2014). The parties to the conflict tried to use the media as much as possible to present their own stance, and the media eagerly covered this conflict, especially the more exciting moments. The creation of the website *Occupy Chevron* by a group of young ecologists from Warsaw was one of the ways to publicise the protest. Obviously, there is also an official website belonging to the investor, i.e. Chevron, in Poland. Among others, the American documentary filmmaker of Polish origin Lech Kowalski became interested in the issue of the protest. He directed films such as *Holy Field Holy War* (2013), *Drill Baby Drill* (2013) and *Frack Democracy* (2014).

As for the political aspect of this conflict, one might venture to state that the investor's American pedigree did not make things easier for him, although slogans saying that "the national wealth is being plundered by foreign companies" were not much emphasised in the discussions. The authors of this paper do not have enough data to assess the local politics against the background of the case.

There have been no drillings in Żurawłów and Ministrówka, at least for now. At first, the company Chevron decided to cooperate with the state-owned company PGNiG S.A. and move geological works about 50 km towards the Susiec village, but at the beginning of 2015 finally withdrew from the Poland.

#### *The Zawiercie Zn–Pb ore district (the Silesian-Cracovian region)*

The zinc–lead ore deposits (of Mississippi Valley-type) in the Silesian-Cracovian region have been extracted since the Middle Ages. Nowadays they are mined underground only in the vicinity of Olkusz (ZGH Bolesław S.A.), where developed reserves are practically depleted. There is a possibility of exploring satellite fields around the existing Pomorzany mine and, first of all, of developing new mining projects nearby Zawiercie, where several deposits were explored in the 1950s; these deposits have not been exploited yet. Zawiercie I and Zawiercie II are the best deposits from a techno-economic perspective. In 2007 the company ZGH Bolesław asked the local authorities about the possibility of changing land-use plans but they refused, although the project entailed carrying out ore processing and waste disposal in Olkusz, i.e. 20 km away from the deposit (Badera, 2008). Since 2010 additional geological exploration projects have been carried out; they are sponsored by Rathdowney Polska Sp. z o.o. belonging to Hunter Dickinson Inc. (a mineral exploration and development group with Canadian capital). The Ministry of the Environment granted a mineral exploration licence to this company despite negative opinions from the local authorities. Moreover, there are also informal group of inhabitants (representing mainly one of the villages), who actively express their opposition to the potential mine. Some of the social fears seem to be partially justified, especially those concerning the risk of degrading the quality of underground water after the closure of the mine and cessation of pumping. The other fears are completely absurd, like those concerning rumours about co-occurring uranium ores. The fact that a total of 666 boreholes have been designed in the area of the commune where the group of protesters comes from (this is the



**Fig. 1.** Poster with the inscription: "Say 'no' to shale gas!!! Stop. We have the right to a clean environment and clean water, and we still want to be able to produce good food; we don't want to pay for governmental fads; we have the right to reliable information. Sign the petition". Source: <http://occupychevron.tumblr.com/>

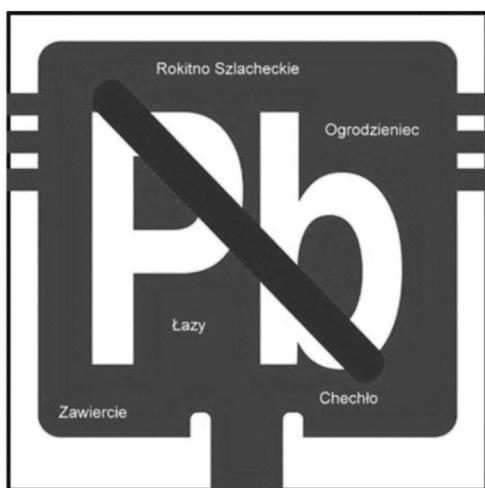


Fig. 2. Logo of the protest movement in the Zawiercie area with the names of towns and villages. Source: <http://www.antyprojektolza.com.pl/>

biblical number of the beast; at the same time the name of the village where the drillings are concentrated has associations with the name of one of the devils that are described in Polish folk tales) can be treated as a joke. A moral panic is, however, mainly related to the potential impact of mineral exploitation on the residents' health because apart from lead (Fig. 2) the ores also contain an admixture of other toxic metals (Cd, Ta and As). Also, negative experiences from the past are invoked even though they are mainly connected with non-ferrous metal smelting and the situation related to the emission of these pollutants has greatly improved since the beginning of the 1990s. In general, the threats posed by mines or associated with exploration works are clearly blown out of proportion (“catastrophe”, “doom”, etc.), especially with regard to the scope of this impact (the whole macroregion of the Kraków-Częstochowa Upland with the Eagles' Nests Landscape Park). The area of Zawiercie is relatively highly urbanised, which is not insignificant as far as the opinions held by certain parts of society are concerned.

But there are also political implications, both on a global and local scale. The protesters refer to, for example, the slogan saying that “the national wealth is being plundered by foreign companies”, which was very popular in post-communist Poland. This is accompanied by a complete lack of confidence in the state's institutions, in particular those at the government level. The main allegations are that these institutions disregard the voice of the local community, are incompetent in handling the matters related to the foreign investor and only care about their own interests. Similar accusations are made against the local authorities in one of the communes and it is not a coincidence that the group of protesters closely cooperates with a group of council members who are in opposition to the incumbent mayor. The mayor, who initially gave a negative opinion on granting a licence, later took a more neutral position, commissioned independent expert assessments and also promised to hold a referendum if anyone should present a mine construction project. However, the protesters and the opposition think that the mayor should maintain his negative stance and even strengthen it by means of the appropriate Town Council's resolution. Meanwhile (July 2014), the company Rathdowney applied for an extension of the licence until 2025 (without changing the character and amount of geological work). The company justified its request by stating that it was necessary to learn more about the geological and mining conditions in this area; however, a broadly defined market game is probably the main reason behind this move.

As for the media, this topic is currently covered by two competing websites (one of them belongs to Rathdowney and the other one to the group of protesters), two separate Facebook profiles that are against the project, one blog (there was a different blog in 2007–2008) as well as several threads on Internet forums. In social media this topic is clearly intertwined with political issues. Also, the local and regional press, websites and the radio have noticed this topic. One must admit that these media cover the issue in a relatively neutral way, without clearly emphasising the stance of the protesting group.

#### *The Ińsko aggregate deposit (the West Pomeranian region)*

There are relatively many deposits of glacial sands and gravels, which are considerably rich and which are a source of aggregate for the Szczecin agglomeration, other towns and cities as well as infrastructure projects that are carried out in this region. At the same time this is an area of significant environmental value (with an abundance of lakes, forests and the related biocoenoses); large parts of this area are covered by environmental protection measures.

Since the 1990s the company SKSM S.A. (which is 100% employee-owned) has been taking steps to develop one of the region's largest sand and gravel deposit which is located on the outskirts of the town Ińsko, in the vicinity of lakes and forests. The deposit is situated in a buffer zone of the Ińsko Landscape Park as well as within a Natura 2000 site, where certain species of birds are under special protection. Nonetheless, the very area where the deposit is located is of low environmental value (mainly poor agricultural land).

The project entails carrying out the surface extraction of the deposit stored under water by using floating excavators, which means that it will not be necessary to dewater the rock mass and change water conditions. The first expert opinions and assessments of the project's impact on the environment were presented as early as in the 1990s. Although the results of hydrogeological evaluations were generally positive, one of the synthetic studies contained a completely unfounded assertion about the probable lowering of the water table in the lakes that are adjacent to the deposit and a threat to municipal water intakes (*nota bene*, this statement was signed by a professor of biology who specialised in lichenology and who was an authority on the subject). The situation was a breeding ground for the local opponents of mineral extraction projects; this opinion also influenced the opinions and decisions that were issued by the bodies involved in the planning and environmental procedures which were initiated by the investor from time to time. The hysteria surrounding the alleged drainage impact of the gravel pit could not even be stopped by presenting complete hydrogeological documentation which was prepared with the use of computer modelling in 2007 and which clearly showed that the project would have no significant impact on the environment (mostly because it was commissioned by the investor). Among other and no less important causes of the moral panic is concern for an excessive increase in truck traffic in Ińsko (although the investor is planning to route truck traffic around the town and other villages located in the commune). The alleged indirect effect of the above-mentioned and other kinds of impact would be that Ińsko would ultimately lose its tourism and recreational value (in fact, this has already been observed over the years due to a number of other reasons) and that property prices would fall.

In 2011, when an announcement was made (again) that a local development plan was to be drawn up for the purposes of the future open pit, a referendum was held in the commune concerning the mine, the results of which were inconclusive because the turnout was too low (there were 17% of voters while the required minimum was 30%). It must be admitted that the attitude of the

local authorities has been somewhat unstable and ambiguous over the years. The same mayor who was against building the mine during one of the previous political campaigns officially called for a boycott of the referendum. Although the composition of the group of opponents has changed over the years, currently the protesters are also the members of the local political opposition. The local ecological organisation, the current opposition within the Town Council and the latest electoral committee are, in fact, made up of the same individuals who are united in the fight against the gravel pit.

Currently, as for the media, there is the company SKSM's website that is devoted to the project, a website run by the opponents of the incumbent mayor and the gravel pit project as well as an extensive thread on a local Internet forum. The opponents usually discuss local political issues, very often by making references to the general political and economic events in Poland. The local and regional press as well as websites show relatively limited interest in this topic. The media coverage of this issue was most intense during the above-mentioned referendum. Most such articles emphasise society's views more strongly.

#### Other cases

The cases that were described above are obviously only some of the examples of moral panics surrounding mineral extraction projects. Conflicts related to new mining projects are characteristic of the majority of young, post-communist democracies in Central and Eastern Europe, such as Poland, Slovakia, Hungary, and Romania. Such conflicts have also been reported in the countries of "old" Europe (Finland, Germany, and the UK).

In Poland the problems associated with public opinion, the local authorities' stance on the issue and the media's attitude to this issue also occurred in connexion with other cases of shale gas drilling, exploration for gold and other metals (the Sudetes), underground hard coal mining (Upper Silesia) and, in particular, brown coal surface extraction (different regions, compare [Badera and Kocoń, 2014](#)). Numerous and by no means weaker protests are also held against mining for industrial or construction minerals ([Badera, 2010](#)).

The moral panic about uranium exploration and potential extraction projects (the Sudetes) is particularly strong. This problem can be analysed in a broader context of the panic surrounding the fate of nuclear power, and not only in Poland (compare [Albrecht and Amey, 1999](#)). The construction of a nuclear power plant in Żarnowiec was discontinued after Poland had regained independence in 1989. The project was abandoned, for example, because of protests from the local communities and ecologists. It should, however, be noted that the protests were supported by those media which were in opposition to the communist system and all statements in support of the construction of a nuclear power plant that were made to the media were regarded as unobjective at that time, like all of the propaganda that was spread by the then government authorities.

#### Summary, additional comments and conclusions

There are obviously certain differences between the analysed cases, but there are also similarities between them. A moral panic can draw attention to selected threats, for example, those related to people's living conditions (Grabowiec) and health (Zawiercie) or the environmental attributes of particular areas (Ińsko). In practice, however, such a panic is related to a whole range of different fears, and at least some of them are interconnected.

The marked dominance of political issues over an actual debate about the potential benefits and threats resulting from geological and

mining activities gives cause for concern. Locally, this conflict may be used as a tool in political games played by the opposition and the local authorities that are currently in power, especially if such a conflict takes place before elections. While it is doubtful that politicians are really concerned about the environment, it is quite obvious that they use public anxiety to pursue their own political goals.

Moreover, if a foreign company is the investor, a discussion is usually held about how foreign companies make use of Polish national wealth. It should be noted that the general political and economic climate in Poland affects particular projects, even those that are relatively small-scale. The general view of corruption and/or incompetence in the state's institutions as well as at all levels of the government does not make things easier for the decision-making bodies or entrepreneurs. In this context, the public-relation activities undertaken by investors, especially promotional ("beads for the natives") and informational ("propaganda") campaigns, meet with particular disapproval (compare [Mickey, 2003](#)).

The opponents of mineral exploration and extraction projects usually speak on behalf of the whole society, while in fact the public is divided on this issue and the majority of the inhabitants are often simply indifferent to it. Also, almost as a rule, the opponents are capable of voicing their views more effectively and expressively. Typically, people coming from the nearby agglomerations and larger cities who quite recently moved to the outskirts or to the country in pursuit of a more peaceful life have a particularly negative attitude towards such projects (compare [Eser and Luloff, 2003](#)). These people are usually quite wealthy and/or well educated, and thus they often are the local elite or at least an important group of opinion-makers.

What is important, such conflicts are also characterised by a feedback loop between the protesters and the media. The leaders of the protests are interested in publicising their opinions, whereas a moral panic makes a great topic for discussion in the media. The media usually more strongly emphasises the stance of the public, i. e. of their readers and audiences. However, a moral panic mainly spreads in social media. Facebook, Twitter etc. become increasingly popular tool for information and mobilisation of anti-mining activists. For example, the above mentioned website *Occupy Chevron* has its Facebook equivalent (over 2500 likes) and Zawiercie project is questioned on two independent profiles. There are many other examples of intense social media use in order to organise the anti-mining protests all over the world e.g. Rosia Montana in Romania, Conga in Peru, Tibetan projects (see selected links in References). They present more or less justified fears but, regrettably, also one-sided and often distorted (intentionally?) coverage of impacts and threats. It can be photos out of context, false scale of diagrams, negative occurrences from distant times or even ordinary hoaxes (for example about radioactivity of raw material as in the Zawiercie case). In response to this, companies are also increasingly more willing to use the Internet as one of their public relations tools (compare [Lodhia, 2012](#)). Using the media, companies address valid concerns properly, but they also need to prove inadequate information and hoaxes to be wrong. Anyway, social networks (web portals, forums etc.) still require profound examination as the source of moral panic and, at the same time, a tool to fight this phenomenon.

Obviously, every mineral exploitation project has both negative and positive effects on the natural and social environment. It should, however, be noted that not every protest against such projects is associated with a moral panic in the sense that is meant here. [Goode and Ben-Yehuda \(2009\)](#) that a moral panic is characterised by five indicators of inappropriateness:

1. overstated data,
2. fabricated data,

3. rumours about damage (information which was invented and which people believe to be true),
4. other harmful factors (i.e. when attention is focused on one potentially harmful factor much more than on other factors even though the potential threat that is posed by this factor is not greater than the remaining factors, or sometimes even less serious than these factors), and
5. changes occurring over time (when attention is much more focused on one of the factors at a given time than it used to be or than it will be later).

When a true moral panic occurs, this entails major social, economic, and even political losses since it involves an excessive reaction to a social problem (Rohloff and Wright, 2010). When a mining project is abandoned or limited, this is not only disadvantageous to the investor but also from the perspective of the (national and local) public good. Among the major problems that might occur is a threat to resource security as well as the limitation of potential budget revenues and new jobs. Further negative effects of a moral panic include succumbing to blackmail, which sets a precedence for future events, false beliefs that become permanently entrenched in society and double intellectual standards (different for “ordinary people” and different for “the elite”). The authorities, who are concerned about the result of next election, yield to mass fears or the dissatisfaction expressed by small interest groups while being fully aware of the damage that they cause to society and the economy. It should be emphasised that resistance to a moral panic does not mean that one cannot object to geological and mining activities when this is justified; then such protests can be even more effective.

Therefore, by referring to Coser's (1956) general and classic idea, let us say that the phenomena of social conflicts and moral panics surrounding geological and mining activities clearly indicate that there is a need for more effective pro-social activities in the mining sector (compare Harvey, 2014), further modifications of the law (compare Dupuy, 2014) and the modernisation of those institutional structures which are responsible for sustainable management of mineral resources. For example, the support of local communities should include their essential social needs, not only sponsoring of events. However, first of all, the rules of public participation in decision-making procedures (land use planning, environmental impact assessment) need to be improved, because in the present form they sometimes might provoke conflict, especially open public debates which pose a field for populist speeches.

Authors find a significant limitation of the study on moral panic due to the lack of transparency in local and state policy. Nevertheless, further research works are needed to learn the mechanism of the phenomenon and to develop prevention methods, satisfying for opposite stakeholders and the state interest. Otherwise, there is a risk that the mineral resources policy will be pursued at the local level only, constituting a hazard to state mineral security. Interestingly, an additional research perspective is also associated with the study of social pressure to develop some mineral resources. For example, exaggerated reactions to restricting of shale gas exploration have the characteristics of moral panic – according some politicians gas extraction is the Polish reason of state and protests are inspired and financed by Russia.

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### Web links

- <https://www.facebook.com/OccupyChevronPL>.
- <https://www.facebook.com/pages/Nie-dla-kopalni-cynku-i-olowiu-na-Jurze/501510136578858>.
- <https://www.facebook.com/pages/Stop-Mining-in-Tibet/421367447950572>.
- <https://twitter.com/alburnusmaior>.