**Homework**

**Lecture 1 „Scientific English“**

**Your name:**

**Excercise**: Identify problems of reader friendliness in the text below and highlight the changes you made in the text

Consider the following: Word order, sentences containing too many ideas, front-loading sentences (too much information before the subject and verb are identified), awkward use of passive voice, inappropriate vocabulary and incorrect verb use, and other aspects.

**Abstract:**

Climate change and surface mining

How climate change interacts upon human activities necessary for meeting the needs of a society and preservation of natural resources while simultaneously exploiting those resources for human benefit is important to understand. Mining is such an activity, as it provides the fundamental raw materials required in everyday life. However, mining is potentially extremely vulnerable to climate change. This is because of the exacerbation of interactions already occurring to the local environment-human system, as well as the development of new interactions and their subsequent impacts. Within the literature, that has so far been published in journals, including English sources, there has been no generic review or synthesis of the fundamental interactions between climate change and surface mining. This paper intends to undertake such a review and synthesis of the literature. The potential and actual interactions between climate change and surface mining in relation to five core themes are discussed in this paper: Heavy Metals; Hydrological Processes & Resources; Ecological Impacts; Air Pollution; and Mass Movement. This is based upon an extensive and focussed review of the current and available literature. The paper then concludes with a discussion of open themes and future research concerning climate change and surface mining in relation to three fundamental spatial dynamic questions.

Surface Mining and Its Interaction with Climate Change

Understanding how climate change impacts human activities necessary for societal needs and natural resource preservation, while simultaneously exploiting those resources for human benefit, is crucial. Mining, a fundamental activity providing raw materials for everyday life, is particularly vulnerable to climate change. This vulnerability arises due to the exacerbation of existing interactions within the local environment-human system and the development of new interactions and their subsequent impacts. Despite numerous studies published in journals, including English sources, there has been no comprehensive review or synthesis of the fundamental interactions between climate change and surface mining. This paper aims to undertake such a review and synthesis. It discusses the potential and actual interactions between climate change and surface mining in relation to five core themes: Heavy Metals; Hydrological Processes & Resources; Ecological Impacts; Air Pollution; and Mass Movement. This discussion is based upon an extensive and focused review of the current and available literature. Finally, the paper concludes with a discussion of open themes and future research directions concerning the spatial dynamics of climate change and surface mining.

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