

## Epistemic Conditions of Moral Responsibility in the Case of Chernobyl Nuclear Disaster

In this talk, we shall argue that due to incomplete technological rules and regulatory environment, the epistemic conditions of moral responsibility cannot be satisfied in the case of the Chernobyl nuclear disaster. Epistemic conditions of moral responsibility include awareness of actions, their moral significance, possible consequences, and possible alternatives. If the widely held framework for moral responsibility is accepted, operators cannot be taken as responsible for the accident, regardless of their actions. Even if operators in Chernobyl broke regulations, and some of their rule-breakings were contributory causes of the accident, and intuitively it seems that they were responsible for the accident, causing serious damage to humankind and the environment, but all the same, moral responsibility cannot be attributed to them.

Operators in Chernobyl were expected to follow technological rules blindly. Blind rule-following can be analysed in a Wittgensteinian or command-based framework. In this framework, epistemic conditions of moral responsibility do not need to be satisfied: agents are responsible for their actions in a formal or legal way only, namely, whether they follow the regulations or not (regardless of the moral status and consequences of their actions). This makes the problem of moral responsibility inapplicable to blind rule-following. Hence, operators cannot be taken as responsible for the accident.

It would be an improvement on the situation if operators had been expected to follow rules in a reflective manner. We shall show that conditions of reflective rule-following, in contrast with blind rule-following, are identical with (or entailed by) the epistemic conditions of moral responsibility. Hence, if reflective rule-following had been expected, operators would have been expected to meet the four above-mentioned epistemic conditions of moral responsibility. But in the case of Chernobyl, some of the above-mentioned epistemic conditions of moral responsibility, and, in particular, the awareness of possible consequences, were not met. Hence, even if a framework for reflective rule-following were applied to the Chernobyl case, operators could not be taken as responsible for the accident, even though they broke the rules and their rule-breaking contributed to the accident.

This somewhat paradoxical conclusion follows from the fact that even if operators had been expected to follow rules reflectively, conditions for reflection would have not been satisfied. In the lack of all relevant information about possible consequences of rule-breaking, operators are formally responsible for rule violation but not responsible for the disaster morally. The Chernobyl case indicates that in order to take operators morally responsible for their acts, a

reflective framework for rule-following is required, a condition of which being a complete formulation of regulations with a specific emphasis on the possible consequences of breaking those regulations.