## A Reply to Prof. Boyd's Question on the Phrase of Raining and Not-Raining

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First of all, I would like to thank Prof. Boyd and Prof. Nakata for their kind replies to my comments on their papers. I would be grateful if my comments could be of some help to them.

Prof. Boyd mentions me in his comment on Prof. Nakata's paper concerning the phrase of raining and not-raining. It does seem to stem from Aristotle because it is an example of the principle of excluded middle (or the principle of non-contradiction). it also seems to stem from Kant because it is an example of tautology. (The notion of tautology as analytic truth, a truth in virtue of its meaning, was originated by Kant.) However, the examples that Aristotle and Kant use are not about raining.

Perhaps it is Wittgenstein who popularized the phrase because he is the first philosopher who claims that a logical truth is a tautology, as I learned it only a few days ago. Presumably, the combination of raining and not-raining is intended to insignificant. For Aristotle, however, the principle of excluded middle is not insignificant because it is an important logical principle. For Kant, similarly, tautology is not insignificant because it is an analytic truth (a truth in virtue of its meaning). For Wittgenstein, in contrast, the principle of excluded middle (and a tautology) is insignificant (or "sinnlos") because, according to his notion of tautology, a logical truth is a tautology it the sense that it does not represent any possible states of affairs. Before Wittgenstein, accordingly, philosophers did not need such a insignificant example of tautology or the principle of excluded middle.

By the way, I think that raining alone (without combining not-raining) is a paradigmatic example of knowledge for empiricism: we know that it is raining simply by looking out of the window. Popper seems to me to use the example in this vein.