Proof by Cases:
Alice in Wonderland

Soon her eye fell on a little glass box that was lying under the table: she opened it, and a found a very small cake, on which the words "EAT ME" were beautifully marked in currants.

"Well, I'll eat it, " said Alice, "and ***if it makes me larger****, I can reach the key; and* ***if it makes me smaller****, I can creep under the door; so* ***either way I'll get into the garden****.*

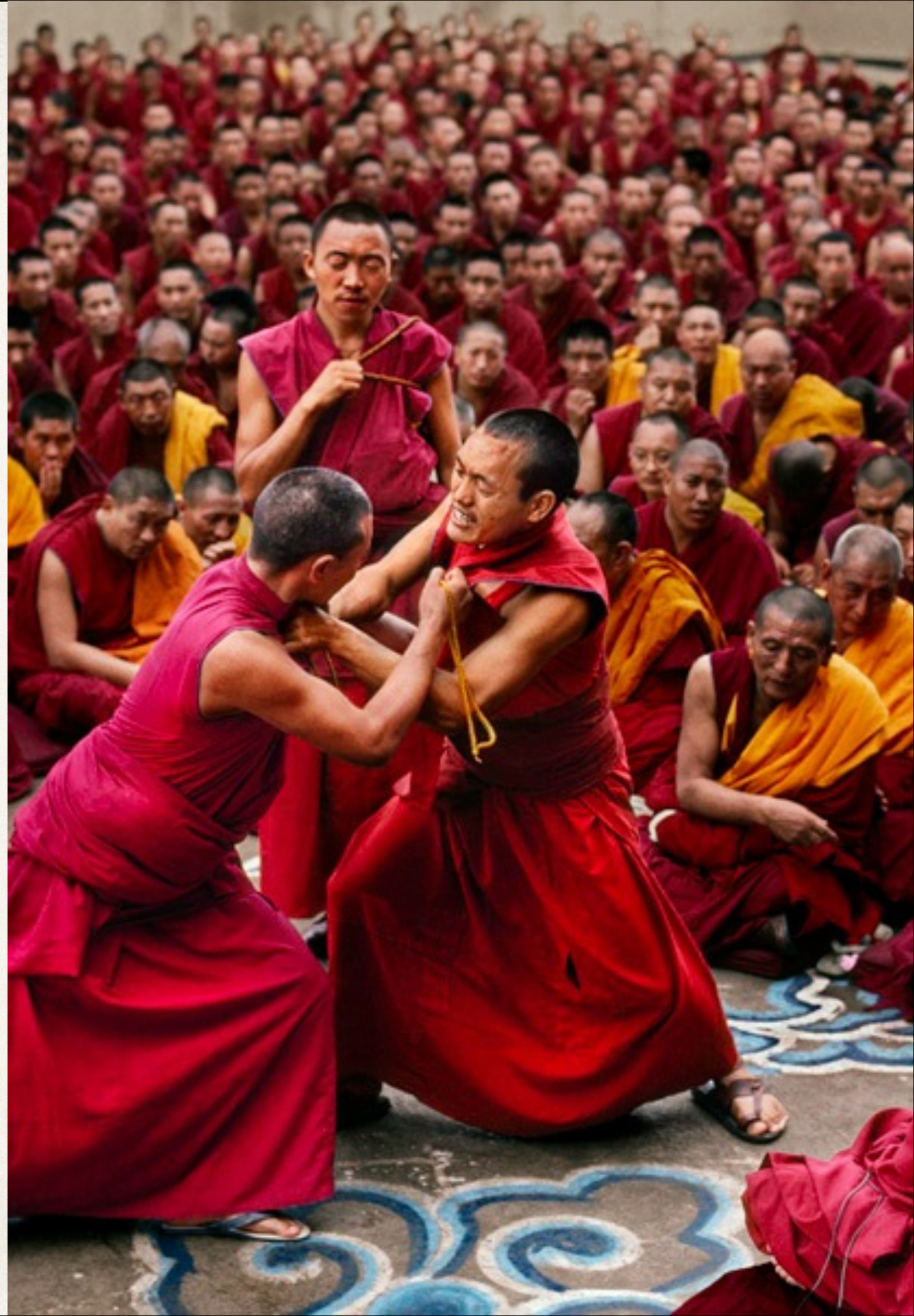
Proof by Cases: *Buddhist Logic*

If something is known, *giving a definition of it is useless.*

If something is not known, *giving a definition of it is impossible, and hence useless.*

Either way giving a definition of something is useless.

Theodore Stcherbatsky, *Buddhist Logic*



On Rule ∨E

$$\dfrac{\phi \vee \psi \qquad \begin{array}{c}[\phi]^{i}\\ \vdots\\ \sigma\end{array} \qquad \begin{array}{c}[\psi]^{i}\\ \vdots\\ \sigma\end{array}}{\sigma}\ \vee E^{i}$$

If by assuming **ϕ**, one can derive **σ**, and by assuming **ψ**, one can also derive **σ**, then one can derive **σ** from **ϕ ∨ ψ.**