

$$F(M \otimes^{\mathcal{M}} C, N) \longrightarrow F(M, C \otimes^{\mathcal{N}} N)$$

$$\downarrow$$

$$\downarrow$$

$$G(M \otimes^{\mathcal{M}} C, N) \longrightarrow G(M, C \otimes^{\mathcal{N}} N)$$