Twister Puzzle

S: There is a can opener that can open any can that any can opener that can open any can can open.

    Ga: a is a can opener
    Fa: a is a can
    Hab: a can open b

Define

Ry: y is a can that any can opener that can open any can can open.

Then

S : ∀x[Gx ∧ ∀y(Ry → Hxy)]

Now,

Ry: Fy ∧ ∀w[Gw ∧ ∃z(Fz → Hwz) → Hwy].

So we get

S : ∀x[Gx ∧ ∀y(Fy ∧ ∀w[Gw ∧ ∃z(Fz → Hwz) → Hwy] → Hxy)]

This understands “can opener that can open any can” to mean a can opener that can open any can at all (i.e. every can)

However “can opener that can open any can” might mean a can opener that can open some can (or other). Then we’d replace Ry by Qy where

Qy: Fy ∧ ∃w[Gw ∧ ∀z(Fz ∧ Hwz) → Hwy].

Then we’d get

S : ∀x[Gx ∧ ∀y(Fy ∧ ∃w[Gw ∧ ∀z(Fz ∧ Hwz) → Hwy] → Hxy)]