The Bottle Imp

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The Bottle Imp Rules

- Grants wishes
  (but cannot prolong life).
- If you die owning the bottle,
  you go to hell for all eternity.
- You can only get rid of the bottle
  by selling it for a price less than
  you paid for it.

If any man buys this bottle the imp is
at his command; all that he desires —
love, fame, money, houses like this
house, ay, or a city like this city — all
are his at the word uttered.

There is one thing the imp cannot
do — he cannot prolong life; and,
it would not be fair to conceal
from you, there is a drawback to
the bottle; for if a man die before
he sells it, he must burn in
hell forever.

It cannot be sold at all, unless sold at
a loss. If you sell it for as much as you
paid for it, back it comes to you again
like a homing pigeon. It follows that
the price has kept falling in these
centuries, and the bottle is now
remarkably cheap.
The paradox

- **No-one should buy the bottle for one cent.**
  - No-one can sell the bottle for less than a cent.
- **No-one should buy the bottle for two cents.**
  - By above, you won’t be able to sell it for one cent.
- **No-one should buy the bottle for three cents.**
- ...
- **No-one should buy the bottle for fifty dollars.**
Sorites paradox

- A million grains of sand is a heap.
- Taking a grain out of a heap of sand still leaves a heap.
- So 999,999 grains is still a heap...
- So one grain of sand is a heap!?

The unexpected hanging (or surprise examination) is a famous example.
How far in the future does an apocalypse have to be for society to collapse, when actions have no consequences (panic & rioting, etc.)?

- Surely society collapses when the apocalypse is a day away?
- Will society collapse five years before an impending apocalypse?
- How about fifty years? Five thousand? Five billion years?

The situation involves everyone anticipating everyone else’s reactions, a bit like selling the bottle imp.

A closer-to-home example is how people decide when the ‘end-game’ of a board game is. When to stop ‘exploring’ and start ‘exploiting’.
The Bottle Imp game

**Trick-taking game:** Follow suit (if you can), and the highest card wins the trick.

**Unless:** Someone plays a card with a value less than the current value of the bottle. These cards act as trumps — the highest of them buys the bottle, and wins the trick.

But if you end the round with the bottle you score nothing... and get a penalty.
Links and References

The Bottle Imp (RL Stevenson): Full text (Full text alternative)

The Bottle-Imp (an earlier telling of the tale):
https://archive.org/details/populartalesroma01musaiala/page/64

“Tempered in the flames of hell”: a review of similar tales:


Sorites paradox (and the Unexpected Hanging paradox)

Last Night (1998 film) for an exploration of final reactions about the apocalypse.