



THE EXPERIMENT

The mechanics of the devious and methodical elimination (possibly) of innocent felines in the pursuit of scientific knowledge. Herein the various diabolical facets of the experiment will be reviewed.



Setting Up The Experiment

A cat is penned up in a steel chamber, along with the following device (which must be secured against direct interference by the cat): in a Geiger counter there is a tiny bit of radioactive substance, so small, that perhaps in the course of the hour one of the atoms decays, but also, with equal probability, perhaps none; if it happens, the counter tube discharges and through a relay releases a hammer which shatters a small flask of hydrocyanic acid. If one has left this entire system to itself for an hour, one would say that the cat still lives if meanwhile no atom has decayed. The psi-function of the entire system would express this by having in it the living and dead cat (pardon the expression) mixed or smeared out in equal parts.

So there's this box.

There's no way to know what happens inside the box.

A cat goes in the box. This may be hard or easy, depending on the cat.

Chances are fifty-fifty that poison gets released into the box.

If it does, the cat dies. Potentially making quite a mess.

Until you open the box, there's no way to tell if the cat is alive or dead.

So it's both.

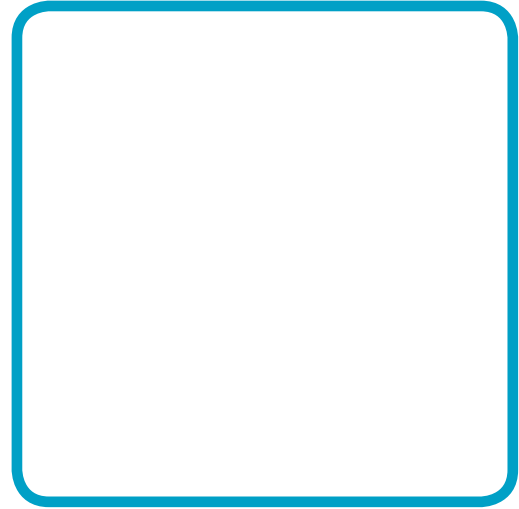


fig 3.1: Box

The inside of the box (fig 2.1) is totally impenetrable to any kind of observation whatsoever. Schrodinger's initial test using standard cardboard boxes (to cut costs) were failures of a very large magnitude and prompted decades of box-related research .

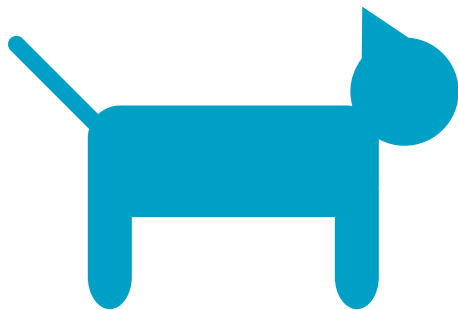


fig 3.2: Cat

The principle element is the cat (fig 3.2). It's eventually indeterminate status is the defining quality of the experiment. The first cat ever submitted to this experiment was named Mr. Mittens.

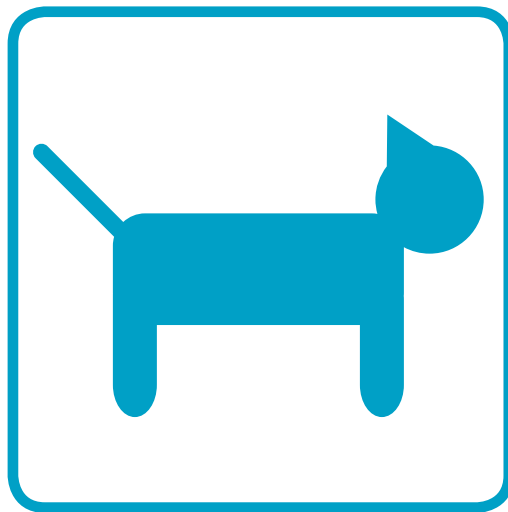
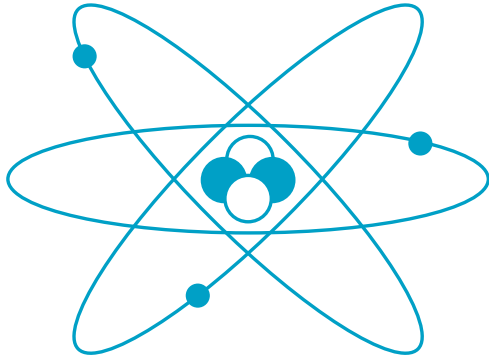
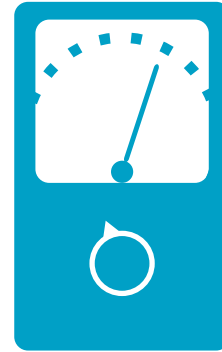


fig 3.3: Cat in Box

As most evolutionary biologists and cat psychologists are already aware, cats have a natural inclination towards being in boxes. This stems from their primitive ancestors, who dwelled predominantly in very tiny caves. They are thought to be the cutest of the early felines.



The atom (fig 3.4). A fundamental building block of life itself.
Illustration not to scale.



A geiger-counter (fig 3.5) is used to ultimately determine whether the cat will be poisoned or not. It's use is rather ironic, as Francois Geiger, inventor and namesake of the device, was tragically mauled to death by a pack of rabid alley cats at the height of his professional career.



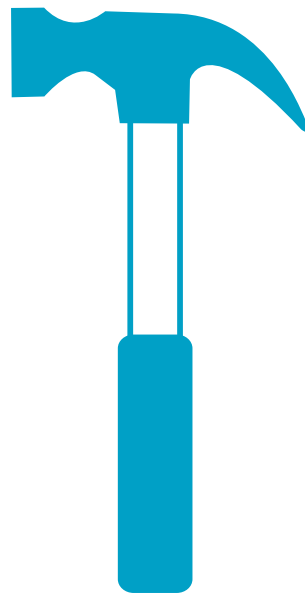
If the atom decays it will set off the geiger-counter (fig 3.6). This helps the geiger-counter to avoid any moral responsibility for its role in the tragedy which may follow. Alas, it still cries itself to sleep each night.

Text on random chance and atom decay

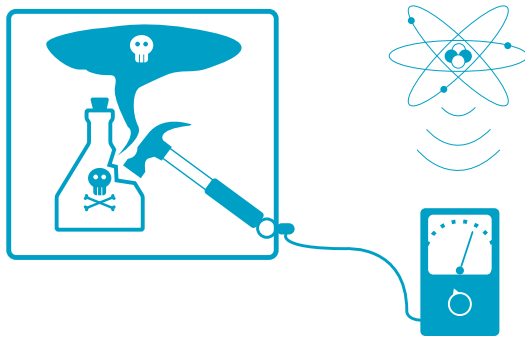
Einstein's contribution to the creation of the atomic bomb was very likely influenced a desire to blow up cats on a much grander scale.



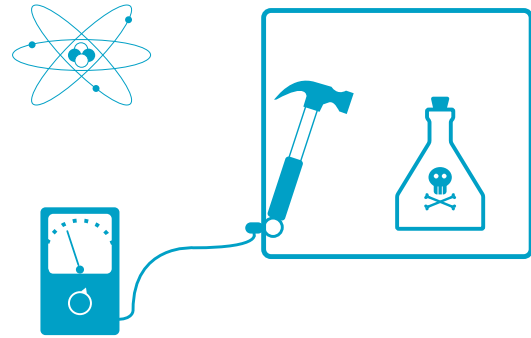
Schrodinger specifies the use of hydrocyanic acid, a notoriously lethal chemical agent. In small doses it is commonly used as a garnish in high-end mohitos for its delicate, nutty aroma.



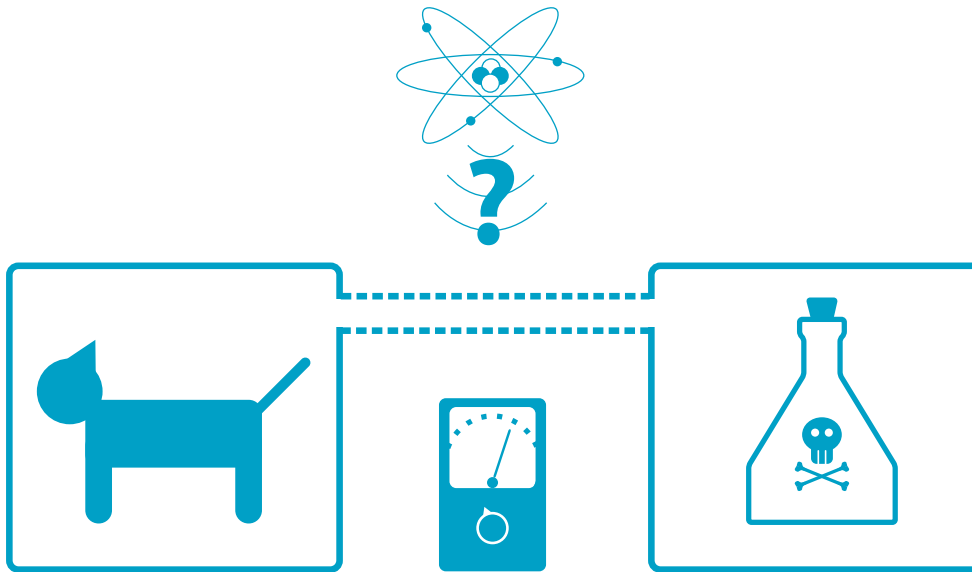
Hammer make poison go smash!



If the atom decays, the geiger-counter will go off, release a hammer, which smashes a vial, releasing the poison, which kills the cat. This will result in a very unhappy feline.

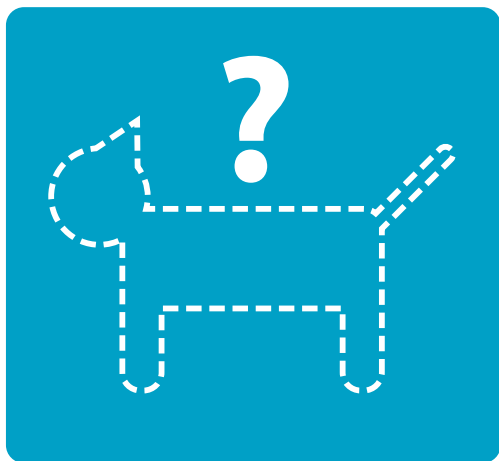


Or not.

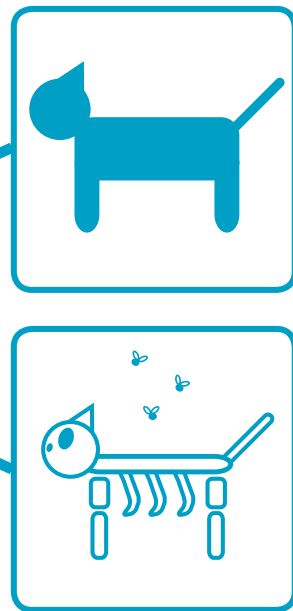


The real brain bender happens when we consider that since there is an exact fifty-fifty chance of the poison getting released, there is nothing to say whether the cat will be alive or dead.

This is, quite understandably, a rather precarious and distressing situation for the cat in question.



At this point, things get very confusing. Since there's no way that the cat could be either alive or dead without opening the box and checking, which would disrupt the experiment, (observation influences outcomes on a quantum level because of very complicated reasons) the cat is now in a very odd state.



In a bizarre and creepy turn of fate, the cat, since it can be neither alive nor dead, now occupies two “superpositions” (explained later) where it is both simultaneously. Not to be confused with zombie-cats.