The Terminal Function & Propositions of Irrelevance

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Assume you have the following functions:

```
human(object) → bool
mortal(object) → bool
mortal([human] true) = true
```

All that is needed to determine whether a human is mortal, is precisely knowing “the object is human”. No other information is required.

Assume you make a computer program where a person has a name, age and species:

```
objs := [
        {name: “John”, age: 32},
        {name: “Peter”, age: 48},
        {name: “Carl”, age: 89},
]
```

You call the function “mortal(string, f64) → bool” like this:

```
mortal(objs[i].name, objs[i].age)
```

Since all objects are humans, this function will always return `true`. How do you prove that the object’s name and age is irrelevant to the result of “mortal”?

The Terminal function (often called “unit”) can be used to remove information in a path:

```
unit(a) → ()
unit(_) = ()
```

Now you can write:

```
mortal[unit × unit → bool] <=> \((), ()) = true
```

This is a proposition of the irrelevance of the two arguments.