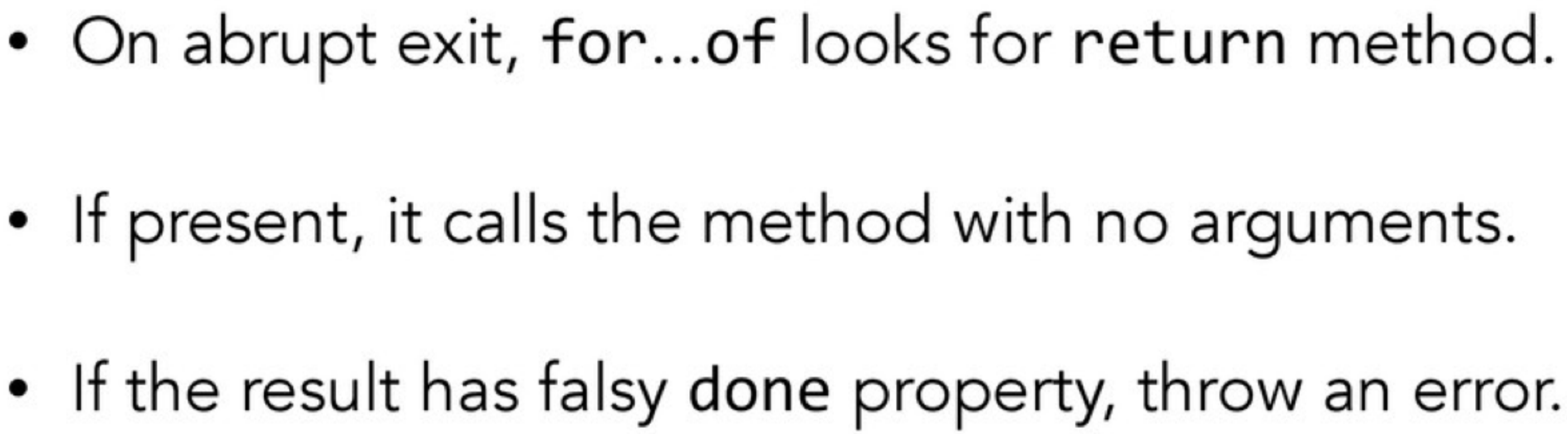
Ecma/TC39/2015/009

Bug 3395
Should for-of throw if iterator.return does not return {done:true} ?

- https://bugs.ecmascript.org/show_bug.cgi?id=3395
- Dave’s original presentation:



- On abrupt exit, **for...of** looks for **return** method.
- If present, it calls the method with no arguments.
- If the result has falsy **done** property, throw an error.

Current spec

- Throws if return result is an object, but doesn’t check for ‘done” property
- Why not:
  - No where else in the spec. do we do such a structural validity check on IteratorResult objects.
  - It’s be useful to have iterators that refuse to be closed

Utility (1 of 3)

```
let arrowOfTime = function*() {
    let now = 0;
    while (true) yield now++;
} ();
arrowOfTime.return = () => {done:false};
```

Utility (2 of 3)

```
function eon1 (aOfT) {
    for (t of aOfT) {
        dayInTheLife1(t);
        if (endOfEon) break;
    }
}
function eon2 (aOfT) {
    for (t of aOfT) {
        dayInTheLife2 (t);
        if (endOfEon) break;
    }
}
```

Utility (3 of 3)

```
function timeMarchesOn(aOfT){
   eon1(aOfT);
   eon2(aOfT);
   …
}
timeMarchesOn(arrowOfTime);
```