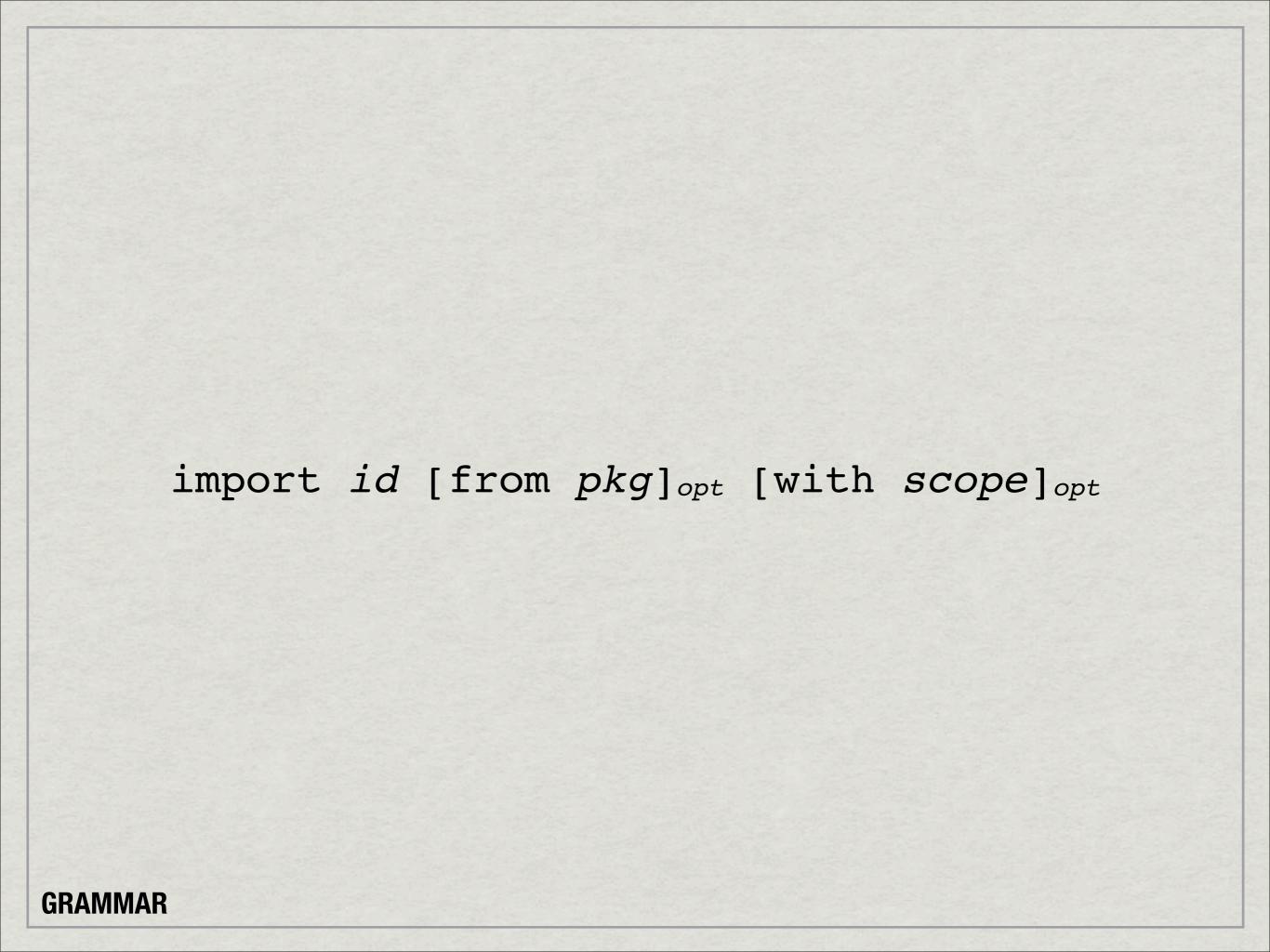
Module Primordials Man of Straw

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- * grammar
- * primordials
- * why

Grammar



(import id)

require(id)

DESUGAR: MEMOIZED MODULE EXPORTS FROM WITHIN THE CURRENT PACKAGE

(import id from pkg)

require(id, pkg)

DESUGAR: MEMOIZED MODULE EXPORTS FROM AN EXTERNAL PACKAGE

(import id with scope)

load(id)(scope)

DESUGAR: CALL A MAKER FROM THE CURRENT PACKAGE

(import id from pkg with scope)

load(id, pkg)(scope)

DESUGAR: CALL A MAKER FROM AN EXTERNAL PACKAGE

Primordials



```
let RhinoContext =
    Packages.org.mozilla.javascript.Context;
let rhinoContext = new RhinoContext();
rhinoContext.initStandardObjects();
```

```
new Module(
    text,
    fileName<sub>opt</sub>,
    lineNo<sub>opt</sub>
)
```

```
new Function( new Module(
    ...args,
    text,
    text,
    fileName<sub>opt</sub>, fileName<sub>opt</sub>,
    lineNo<sub>opt</sub>
)
```

MODULE CONSTRUCTOR

MODULE FUNCTION

```
let f = new Function("x", "y", "return x + y");
let z = f(10, 20);
```

```
let m = \text{new Module("return x + y", "m", 1);}
let z = f(\{"x": 10, "y": 20\});
```

EQUIVALENT PROGRAMS

```
let m = new Module("import 'm'");
m.dependencies[0][0] == "m";
```

STATIC ANALYSIS OF MODULE DEPENDENCIES

```
array [
    array {
        string id;
        any pkg;
        any pkg;
    };
] dependencies;

[id, pkg],

[id, pkg]

...
```

"ORDERLY" JSON SCHEMA OF DEPENDENCIES

EXAMPLE

Roadmap

- ** require, exports, module
 - * Migration: <script>able modules
- * Context, Module, import, export
 - * Migration: require, exports, module

Why

- * frozen globals vs. mutable globals vs. isolated worlds
- * singleton modules vs. e-makers
- * require, exports, module vs. import, export
- * return promises vs. alter exports object

