

## # Source Code transformations

For all global built-in objects, functions, and libraries:

- create a surrogate object
- map global variables by adding prefix AG
- exception for instanceof
- Enclose all non-number property names in `backticks`
- Replace a[b] with ACgetItem(a,b) \*
- Replace a.b with ACgetItem(a,"b") \*

```
var f = function f (x) {  
  console.log(x);  
  return {  
    foo : 'bar',  
    '10' : 20  
  };  
};
```

```
var f = function f (x) {  
  ACgetItem(AGconsole,"log")(x);  
  return {  
    '`foo`' : 'bar',  
    '10' : 20  
  };  
};
```

## # Runtime Transformations

- ACgetItem(a,"b") returns a["`b`"]
- if (! isNaN(y)), then  
 ACgetItem(x,y) returns x[y]
- ACgetItem(a,"length") returns a.length, ...