Sweeten Your JavaScript: Hygienic Macros for ES5

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Macro systems are used extensively in programming languages such as Lisp and Scheme in large part due to both languages using symbolic (s) expressions to represent expressions and data. These s-expressions make source code easy to manipulate via macros. In contrast, languages with ambiguous grammars (e.g. JavaScript) are more challenging for macros to refactor

While this paper only explicitly describes how to implement the proposed scheme in JavaScript, the approach can be applied to other ambiguous grammar languages.