# 8.6.0 (2021-11-18)

#### Bug fixes

Fix a bug where an object literal with multiple \_\_proto\_\_ properties would incorrectly be accepted if a later property value held an assignment.

#### New features

Support class private fields with the in operator.

# 8.5.0 (2021-09-06)

#### Bug fixes

Improve context-dependent tokenization in a number of corner cases.

Fix location tracking after a 0x2028 or 0x2029 character in a string literal (which before did not increase the line number).

Fix an issue where arrow function bodies in for loop context would inappropriately consume in operators.

Fix wrong end locations stored on SequenceExpression nodes.

Implement restriction that for/of loop LHS can't start with let.

## New features

Add support for ES2022 class static blocks.

Allow multiple input files to be passed to the CLI tool.

# 8.4.1 (2021-06-24)

### Bug fixes

Fix a bug where allowAwaitOutsideFunction would allow await in class field initializers, and setting ecmaVersion to 13 or higher would allow top-level await in non-module sources.

# 8.4.0 (2021-06-11)

#### New features

A new option, allowSuperOutsideMethod, can be used to suppress the error when super is used in the wrong context.

# 8.3.0 (2021-05-31)

#### New features

Add support for the d (indices) regexp flag.

# 8.2.4 (2021-05-04)

#### Bug fixes

Fix spec conformity in corner case 'for await (async of ...)'.

# 8.2.3 (2021-05-04)

## Bug fixes

Fix an issue where the library couldn't parse 'for (async of ...)'.

Fix a bug in UTF-16 decoding that would read characters incorrectly in some circumstances.

# 8.2.2 (2021-04-29)

#### Bug fixes

Fix a bug where a class field initialized to an async arrow function wouldn't allow await inside it. Same issue existed for generator arrow functions with yield.

# $8.2.1 \ (2021-04-24)$

## Bug fixes

Fix a regression introduced in 8.2.0 where static or async class methods with keyword names fail to parse.

# 8.2.0 (2021-04-24)

#### New features

Add support for ES2022 class fields and private methods.

# 8.1.1 (2021-04-12)

#### Various

Stop shipping source maps in the NPM package.

# 8.1.0 (2021-03-09)

#### Bug fixes

Fix a spurious error in nested destructuring arrays.

#### New features

Expose allowAwaitOutsideFunction in CLI interface.

 $\label{thm:make} Make \verb| allowImportExportAnywhere also apply to \verb| import.meta|.$ 

# 8.0.5 (2021-01-25)

#### Bug fixes

Adjust package.json to work with Node 12.16.0 and 13.0-13.6.

# 8.0.4 (2020-10-05)

## Bug fixes

Make await x \*\* y an error, following the spec.

Fix potentially exponential regular expression.

# 8.0.3 (2020-10-02)

## Bug fixes

Fix a wasteful loop during Parser creation when setting ecmaVersion to "latest".

# 8.0.2 (2020-09-30)

#### Bug fixes

Make the TypeScript types reflect the current allowed values for ecmaVersion.

Fix another regexp/division tokenizer issue.

# 8.0.1 (2020-08-12)

## Bug fixes

Provide the correct value in the version export.

# 8.0.0 (2020-08-12)

# Bug fixes

Disallow expressions like (a = b) = c.

Make non-octal escape sequences a syntax error in strict mode.

#### New features

The package can now be loaded directly as an ECMAS cript module in node 13+.

Update to the set of Unicode properties from ES2021.

# Breaking changes

The ecmaVersion option is now required. For the moment, omitting it will still work with a warning, but that will change in a future release.

Some changes to method signatures that may be used by plugins.

# 7.4.0 (2020-08-03)

#### New features

Add support for logical assignment operators.

Add support for numeric separators.

# 7.3.1 (2020-06-11)

#### Bug fixes

Make the string in the version export match the actual library version.

# 7.3.0 (2020-06-11)

#### Bug fixes

Fix a bug that caused parsing of object patterns with a property named set that had a default value to fail.

#### New features

Add support for optional chaining (?.).

# $7.2.0 \ (2020-05-09)$

## Bug fixes

Fix precedence issue in parsing of async arrow functions.

### New features

Add support for nullish coalescing.

Add support for import.meta.

Support export \* as ... syntax.

Upgrade to Unicode 13.

# 6.4.1 (2020-03-09)

## Bug fixes

More carefully check for valid UTF16 surrogate pairs in regexp validator.

# $7.1.1 \ (2020-03-01)$

#### Bug fixes

Treat \8 and \9 as invalid escapes in template strings.

Allow unicode escapes in property names that are keywords.

Don't error on an exponential operator expression as argument to await.

More carefully check for valid UTF16 surrogate pairs in regexp validator.

# 7.1.0 (2019-09-24)

## Bug fixes

Disallow trailing object literal commas when ecmaVersion is less than 5.

### New features

Add a static acorn property to the Parser class that contains the entire module interface, to allow plugins to access the instance of the library that they are acting on.

# 7.0.0 (2019-08-13)

## Breaking changes

Changes the node format for dynamic imports to use the ImportExpression node type, as defined in ESTree.

Makes 10 (ES2019) the default value for the ecmaVersion option.

# 6.3.0 (2019-08-12)

# New features

sourceType: "module" can now be used even when ecmaVersion is less than 6, to parse module-style code that otherwise conforms to an older standard.

# $6.2.1 \ (2019-07-21)$

#### Bug fixes

Fix bug causing Acorn to treat some characters as identifier characters that shouldn't be treated as such.

Fix issue where setting the allowReserved option to "never" allowed reserved words in some circumstances.

# 6.2.0 (2019-07-04)

### Bug fixes

Improve valid assignment checking in for/in and for/of loops.

Disallow binding let in patterns.

#### New features

Support bigint syntax with ecmaVersion >= 11.

Support dynamic import syntax with ecmaVersion >= 11.

Upgrade to Unicode version 12.

# 6.1.1 (2019-02-27)

#### Bug fixes

Fix bug that caused parsing default exports of with names to fail.

# 6.1.0 (2019-02-08)

## Bug fixes

Fix scope checking when redefining a var as a lexical binding.

### New features

Split up parseSubscripts to use an internal parseSubscript method to make it easier to extend with plugins.

# 6.0.7 (2019-02-04)

#### Bug fixes

Check that exported bindings are defined.

Don't treat \u180e as a whitespace character.

Check for duplicate parameter names in methods.

Don't allow shorthand properties when they are generators or async methods.

Forbid binding await in async arrow function's parameter list.

## 6.0.6 (2019-01-30)

## Bug fixes

The content of class declarations and expressions is now always parsed in strict mode.

Don't allow let or const to bind the variable name let.

Treat class declarations as lexical.

Don't allow a generator function declaration as the sole body of an if or else.

Ignore "use strict" when after an empty statement.

Allow string line continuations with special line terminator characters.

Treat for bodies as part of the for scope when checking for conflicting bindings.

Fix bug with parsing yield in a for loop initializer.

Implement special cases around scope checking for functions.

# 6.0.5 (2019-01-02)

#### Bug fixes

Fix TypeScript type for Parser.extend and add allowAwaitOutsideFunction to options type.

Don't treat let as a keyword when the next token is { on the next line.

Fix bug that broke checking for parentheses around an object pattern in a destructuring assignment when preserveParens was on.

## 6.0.4 (2018-11-05)

## Bug fixes

Further improvements to tokenizing regular expressions in corner cases.

# 6.0.3 (2018-11-04)

## Bug fixes

Fix bug in tokenizing an expression-less return followed by a function followed by a regular expression.

Remove stray symlink in the package tarball.

# 6.0.2 (2018-09-26)

#### Bug fixes

Fix bug where default expressions could fail to parse inside an object destructuring assignment expression.

# $6.0.1 \ (2018-09-14)$

### Bug fixes

Fix wrong value in version export.

# 6.0.0 (2018-09-14)

## Bug fixes

Better handle variable-redefinition checks for catch bindings and functions directly under if statements.

Forbid new.target in top-level arrow functions.

Fix issue with parsing a regexp after yield in some contexts.

#### New features

The package now comes with TypeScript definitions.

#### Breaking changes

The default value of the ecmaVersion option is now 9 (2018).

Plugins work differently, and will have to be rewritten to work with this version.

The loose parser and walker have been moved into separate packages (acorn-loose and acorn-walk).

# 5.7.3 (2018-09-10)

## Bug fixes

Fix failure to tokenize regexps after expressions like x.of.

Better error message for unterminated template literals.

## 5.7.2 (2018-08-24)

#### Bug fixes

Properly handle allowAwaitOutsideFunction in for statements.

Treat function declarations at the top level of modules like let bindings.

Don't allow async function declarations as the only statement under a label.

# 5.7.0 (2018-06-15)

### New features

Upgraded to Unicode 11.

# 5.6.0 (2018-05-31)

#### New features

Allow U+2028 and U+2029 in string when ECMAVersion  $\geq 10$ .

Allow binding-less catch statements when ECMAVersion  $\geq 10$ .

Add allowAwaitOutsideFunction option for parsing top-level await.

# 5.5.3 (2018-03-08)

#### Bug fixes

A *second* republish of the code in 5.5.1, this time with yarn, to hopefully get valid timestamps.

# $5.5.2 \ (2018-03-08)$

### Bug fixes

A republish of the code in 5.5.1 in an attempt to solve an issue with the file timestamps in the npm package being 0.

# 5.5.1 (2018-03-06)

#### Bug fixes

Fix misleading error message for octal escapes in template strings.

# 5.5.0 (2018-02-27)

#### New features

The identifier character categorization is now based on Unicode version 10.

Acorn will now validate the content of regular expressions, including new ES9 features.

# $5.4.0 \ (2018-02-01)$

#### Bug fixes

Disallow duplicate or escaped flags on regular expressions.

Disallow octal escapes in strings in strict mode.

#### New features

Add support for async iteration.

Add support for object spread and rest.

# 5.3.0 (2017-12-28)

# Bug fixes

Fix parsing of floating point literals with leading zeroes in loose mode.

Allow duplicate property names in object patterns.

Don't allow static class methods named prototype.

Disallow async functions directly under if or else.

Parse right-hand-side of for/of as an assignment expression.

Stricter parsing of for/in.

Don't allow unicode escapes in contextual keywords.

#### New features

Parsing class members was factored into smaller methods to allow plugins to hook into it.

# 5.2.1 (2017-10-30)

## Bug fixes

Fix a token context corruption bug.

# $5.2.0\ (2017-10-30)$

## Bug fixes

Fix token context tracking for class and function in property-name position.

Make sure **%\*** isn't parsed as a valid operator.

Allow shorthand properties get and set to be followed by default values.

Disallow super when not in callee or object position.

## New features

Support directive property on directive expression statements.

# 5.1.2 (2017-09-04)

### Bug fixes

Disable parsing of legacy HTML-style comments in modules.

Fix parsing of async methods whose names are keywords.

# 5.1.1 (2017-07-06)

#### Bug fixes

Fix problem with disambiguating regexp and division after a class.

# 5.1.0 (2017-07-05)

## Bug fixes

Fix tokenizing of regexps in an object-descructuring for/of loop and after yield.

Parse zero-prefixed numbers with non-octal digits as decimal.

Allow object/array patterns in rest parameters.

Don't error when yield is used as a property name.

Allow async as a shorthand object property.

#### New features

Implement the template literal revision proposal for ES9.

# 5.0.3 (2017-04-01)

#### Bug fixes

Fix spurious duplicate variable definition errors for named functions.

# 5.0.2 (2017-03-30)

#### Bug fixes

A binary operator after a parenthesized arrow expression is no longer incorrectly treated as an error.

# $5.0.0\ (2017-03-28)$

#### Bug fixes

Raise an error for duplicated lexical bindings.

Fix spurious error when an assignement expression occurred after a spread expression.

Accept regular expressions after of (in for/of), yield (in a generator), and braced arrow functions.

Allow labels in front or var declarations, even in strict mode.

#### Breaking changes

Parse declarations following export default as declaration nodes, not expressions. This means that class and function declarations nodes can now have null as their id.

# 4.0.11 (2017-02-07)

#### Bug fixes

Allow all forms of member expressions to be parenthesized as lvalue.

# 4.0.10 (2017-02-07)

### Bug fixes

Don't expect semicolons after default-exported functions or classes, even when they are expressions.

Check for use of 'use strict' directives in non-simple parameter functions, even when already in strict mode.

## 4.0.9 (2017-02-06)

#### Bug fixes

Fix incorrect error raised for parenthesized simple assignment targets, so that (x) = 1 parses again.

# 4.0.8 (2017-02-03)

## Bug fixes

Solve spurious parenthesized pattern errors by temporarily erring on the side of accepting programs that our delayed errors don't handle correctly yet.

# 4.0.7 (2017-02-02)

#### Bug fixes

Accept invalidly rejected code like (x).y = 2 again.

Don't raise an error when a function inside strict code has a non-simple parameter list.

# 4.0.6 (2017-02-02)

#### Bug fixes

Fix exponential behavior (manifesting itself as a complete hang for even relatively small source files) introduced by the new 'use strict' check.

# 4.0.5 (2017-02-02)

### Bug fixes

Disallow parenthesized pattern expressions.

Allow keywords as export names.

Don't allow the async keyword to be parenthesized.

Properly raise an error when a keyword contains a character escape.

Allow "use strict" to appear after other string literal expressions.

Disallow labeled declarations.

# 4.0.4 (2016-12-19)

#### Bug fixes

Fix crash when export was followed by a keyword that can't be exported.

# 4.0.3 (2016-08-16)

## Bug fixes

Allow regular function declarations inside single-statement if branches in loose mode. Forbid them entirely in strict mode.

Properly parse properties named async in ES2017 mode.

Fix bug where reserved words were broken in ES2017 mode.

# 4.0.2 (2016-08-11)

### Bug fixes

Don't ignore period or 'e' characters after octal numbers.

Fix broken parsing for call expressions in default parameter values of arrow functions.

# 4.0.1 (2016-08-08)

#### Bug fixes

Fix false positives in duplicated export name errors.

## 4.0.0 (2016-08-07)

## Breaking changes

The default ecmaVersion option value is now 7.

A number of internal method signatures changed, so plugins might need to be updated.

#### Bug fixes

The parser now raises errors on duplicated export names.

arguments and eval can now be used in shorthand properties.

Duplicate parameter names in non-simple argument lists now always produce an error.

#### New features

The ecmaVersion option now also accepts year-style version numbers (2015, etc).

Support for async/await syntax when ecmaVersion is >= 8.

Support for trailing commas in call expressions when ecmaVersion is >= 8.

# 3.3.0 (2016-07-25)

## Bug fixes

Fix bug in tokenizing of regexp operator after a function declaration.

Fix parser crash when parsing an array pattern with a hole.

#### New features

Implement check against complex argument lists in functions that enable strict mode in ES7.

# $3.2.0\ (2016-06-07)$

#### Bug fixes

Improve handling of lack of unicode regexp support in host environment.

Properly reject shorthand properties whose name is a keyword.

#### New features

Visitors created with visit.make now have their base as *prototype*, rather than copying properties into a fresh object.

# 3.1.0 (2016-04-18)

#### Bug fixes

Properly tokenize the division operator directly after a function expression.

Allow trailing comma in destructuring arrays.

# 3.0.4 (2016-02-25)

#### Fixes

Allow update expressions as left-hand-side of the ES7 exponential operator.

# 3.0.2 (2016-02-10)

#### **Fixes**

Fix bug that accidentally made undefined a reserved word when parsing ES7.

# 3.0.0 (2016-02-10)

#### Breaking changes

The default value of the ecmaVersion option is now 6 (used to be 5).

Support for comprehension syntax (which was dropped from the draft spec) has been removed.

#### **Fixes**

let and yield are now "contextual keywords", meaning you can mostly use them as identifiers in ES5 non-strict code.

A parenthesized class or function expression after export default is now parsed correctly.

#### New features

When ecmaVersion is set to 7, Acorn will parse the exponentiation operator (\*\*).

The identifier character ranges are now based on Unicode 8.0.0.

Plugins can now override the raiseRecoverable method to override the way non-critical errors are handled.

# 2.7.0(2016-01-04)

#### **Fixes**

Stop allowing rest parameters in setters.

Disallow y rexexp flag in ES5.

Disallow  $\backslash 00$  and  $\backslash 000$  escapes in strict mode.

Raise an error when an import name is a reserved word.

# 2.6.2 (2015-11-10)

#### Fixes

Don't crash when no options object is passed.

# 2.6.0 (2015-11-09)

## Fixes

Add await as a reserved word in module sources.

Disallow yield in a parameter default value for a generator.

Forbid using a comma after a rest pattern in an array destructuring.

### New features

Support parsing stdin in command-line tool.

# 2.5.0 (2015-10-27)

## **Fixes**

Fix tokenizer support in the command-line tool.

Stop allowing new.target outside of functions.

Remove legacy  ${\tt guard}$  and  ${\tt guardedHandler}$  properties from try nodes.

Stop allowing multiple \_\_proto\_\_ properties on an object literal in strict mode.

Don't allow rest parameters to be non-identifier patterns.

Check for duplicate paramter names in arrow functions.