

# Languages-beta: SL-Disambiguation

The PPlanCompS Project

Languages-beta/SL/SL-Disambiguation/SL-Disambiguation.cbs\*

*Language "SL"*

## A Disambiguation

Specification of disambiguation for parsing currently requires direct use of the corresponding SDF3 notation in comments, along with embedded productions in CBS notation. The well-formedness of the SDF3 notation is not checked. A future version of CBS is to include appropriate constructs for specifying disambiguation.

*Syntax SDF*

context-free syntax

```
expr ::= expr + expr {left}
expr ::= expr / expr {left}
expr ::= expr * expr {left}
expr ::= expr - expr {left}
expr ::= expr == expr {non-assoc}
expr ::= expr <= expr {non-assoc}
expr ::= expr < expr {non-assoc}
expr ::= expr != expr {non-assoc}
expr ::= expr >= expr {non-assoc}
expr ::= expr > expr {non-assoc}
expr ::= expr && expr {left}
expr ::= expr || expr {left}
expr ::= id = expr {right}
expr ::= expr . id = expr {right}
```

context-free priorities

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\*Suggestions for improvement: [plancomps@gmail.com](mailto:plancomps@gmail.com).  
Issues: <https://github.com/plancomps/CBS-beta/issues>.

```

{left:
  expr ::= expr . id ( expr-list? )
}
>
{right:
  expr ::= ! expr
}
>
{left:
  expr ::= expr * expr
  expr ::= expr && expr
}
>
{non-assoc:
  expr ::= expr == expr
  expr ::= expr <= expr
  expr ::= expr < expr
  expr ::= expr != expr
  expr ::= expr >= expr
  expr ::= expr > expr
}
>
{left:
  expr ::= expr + expr
  expr ::= expr - expr
  expr ::= expr || expr
}
>
{right:
  expr ::= id = expr
  expr ::= expr . id = expr
}

```

*Lexis SDF*

```

lexical syntax
id = "function" {reject}
id = "true" {reject}
id = "false" {reject}
id = "return" {reject}
id = "break" {reject}
id = "continue" {reject}
id = "while" {reject}
id = "if" {reject}
id = "else" {reject}

```

```
lexical restrictions
// Ensure greedy matching for lexicals
nat -/- [0-9]
id -/- [a-zA-Z0-9_]
```