

The Future of PPX

**Towards a unified and more robust
ecosystem**

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What is PPX?

Syntax extensions for PPXes

- Extension points:

```
let x = [%eq: int list] [1; 2] [2; 3]
```

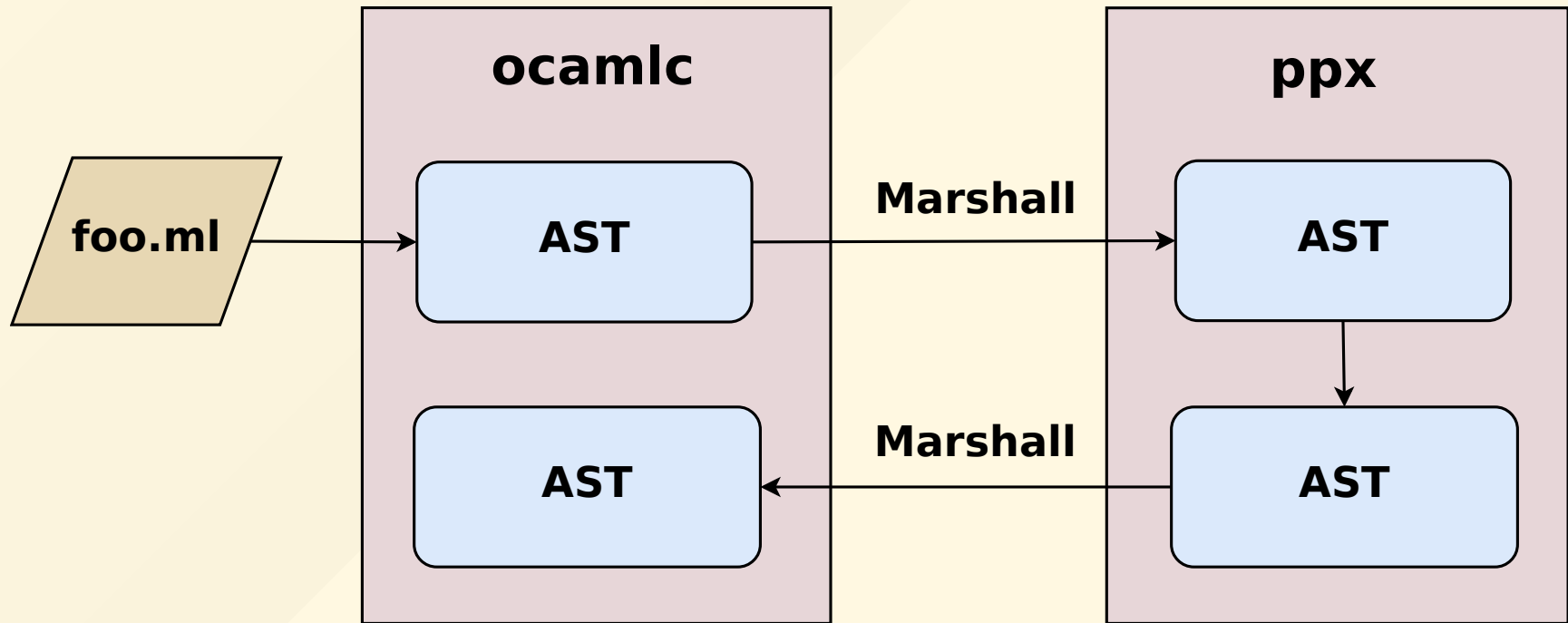
- Attributes:

```
type t = int list [@@deriving eq]
```

What is PPX?

Compiler integration

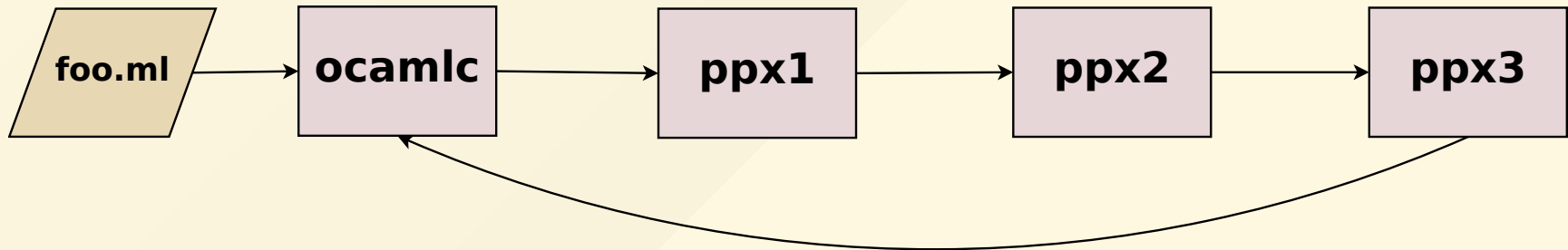
```
ocamlc -ppx ppx foo.ml
```



What are the issues with PPX?

Combining several PPXes

```
ocamlc -ppx ppx1 -ppx ppx2 -ppx ppx3 foo.ml
```

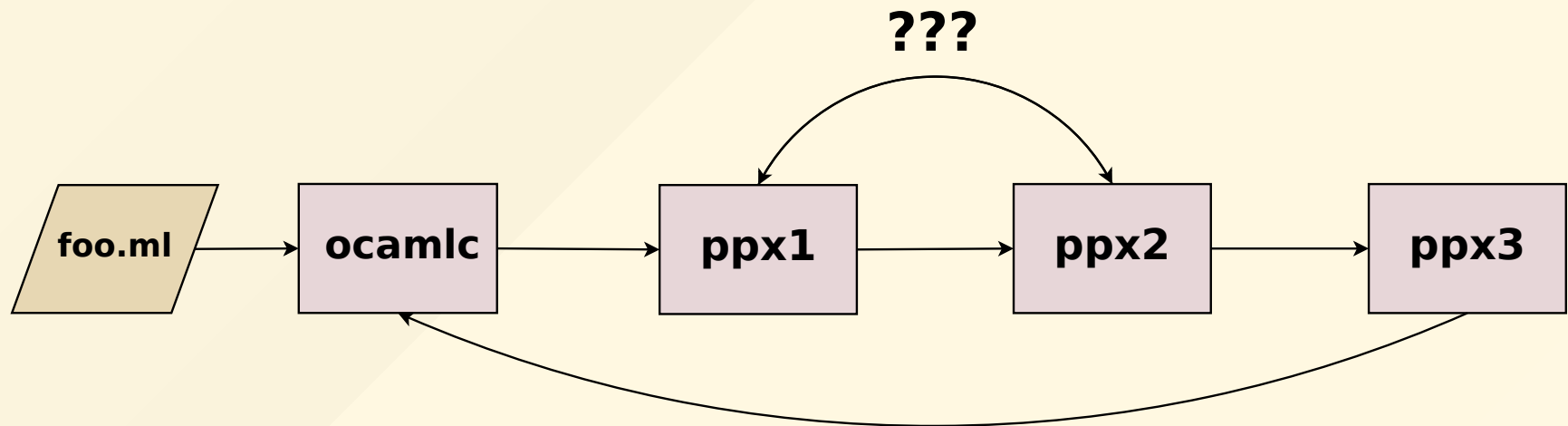


What are the issues with PPX?

Combining several PPXes

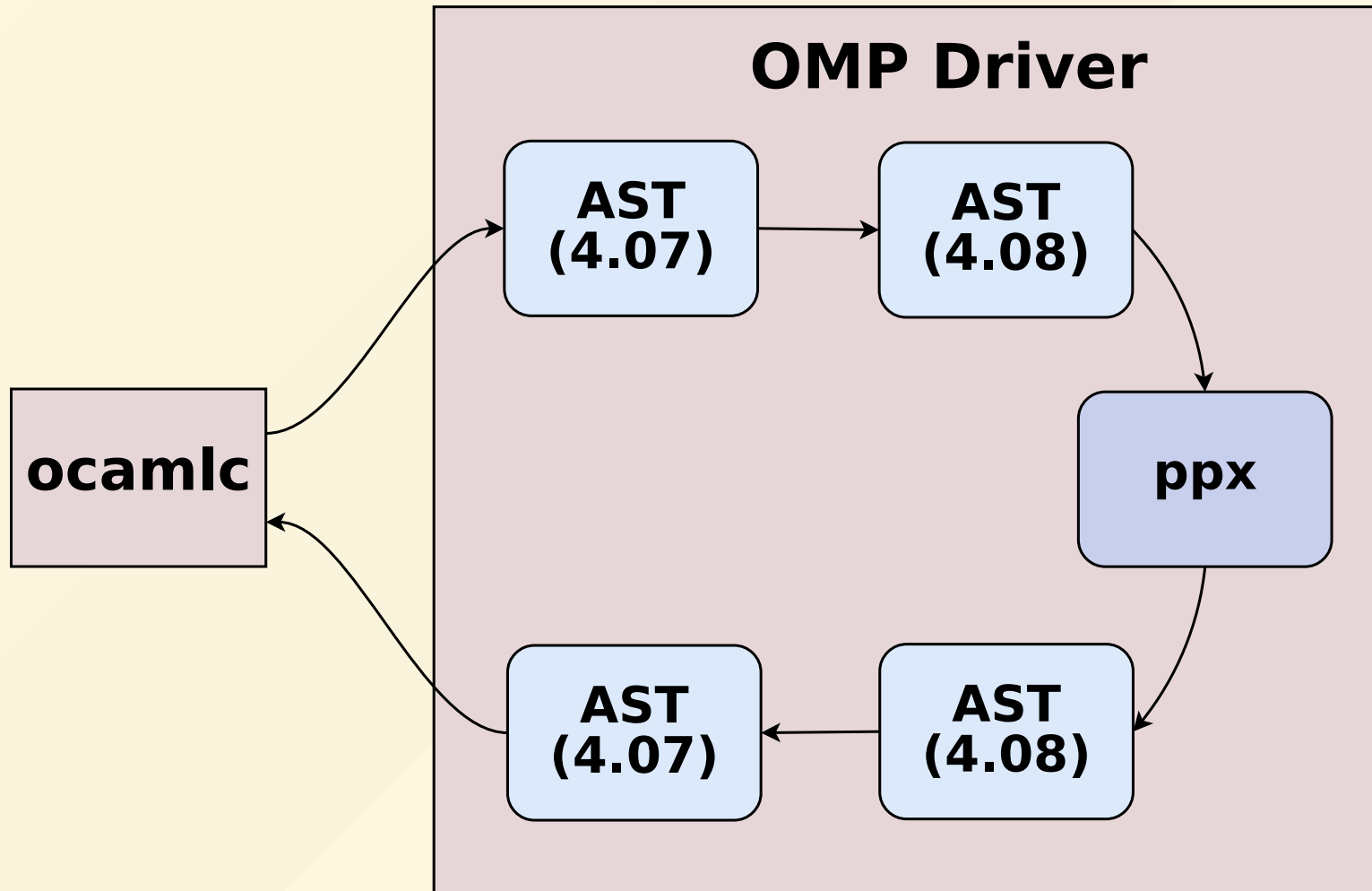
Is it equivalent to run

```
ocamlc -ppx ppx1 -ppx ppx2 -ppx ppx3 foo.ml and  
ocamlc -ppx ppx2 -ppx ppx1 -ppx ppx3 foo.ml ?
```



Issue for both PPX authors and users...

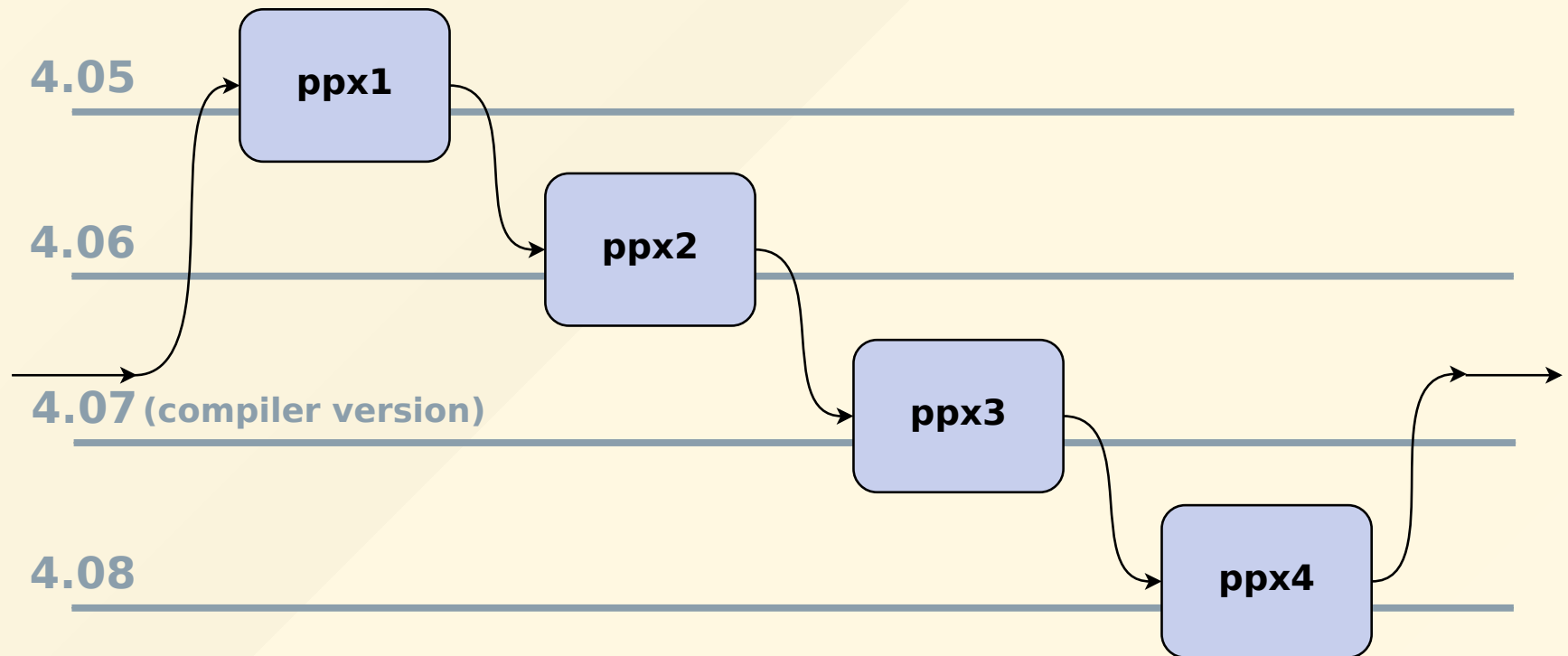
ocaml-migrate-parsetree



ocaml-migrate-parsetree

Combining several PPXes

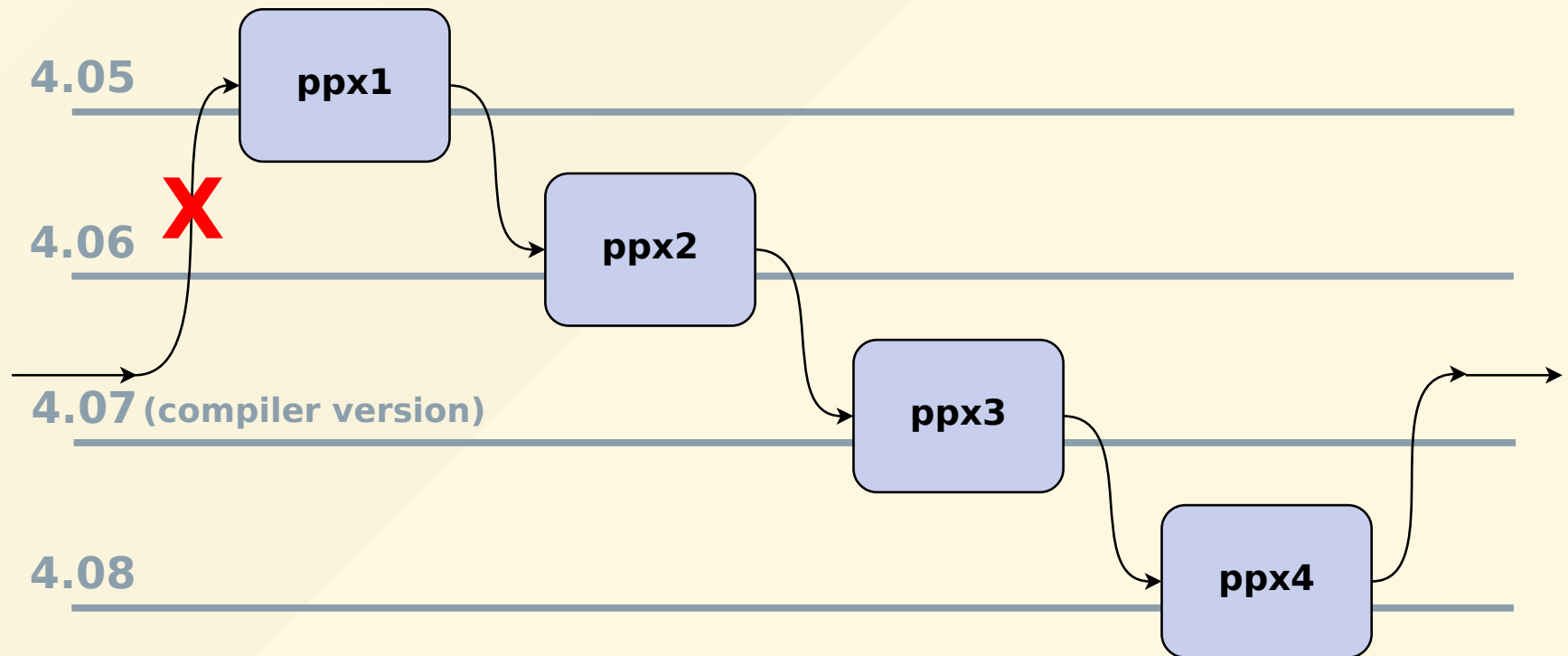
May involve a lot of AST migrations



ocaml-migrate-parsetree

Combining several PPXes

Backward migrations can fail



ocaml-migrate-parsetree

Combining several PPXes

The order is still an issue

