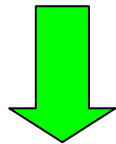


*Explicit names  
for fields and attributes*

```
DATA Expr
= Add  a: Expr  b: Expr
| Var  x: String
| ...
```

```
ATTR Expr inh e: Env
        syn  c: Code
```



*generates*



```
data Expr
= Add  Expr  Expr
| Var  String
| ...
```

*Attribute value equations  
instead of functions*

```
SEM Expr
| Add  this.code = a.code ++ b.code
                        ++ [Apply (+)]

      a.e = this.e
      b.e = this.e

| Var  this.code = [Load (lookup e x)]
```

```
codeSem =
( \ a b → \ e → a e ++ b e ++ [Apply (+)]
, \ x   → \ e → [Load (lookup e x)]
, .....)
```