Call parse analysis

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Here we study the Scrall parser tree and named tuples resulting from a parse of a variety of operation chains following an attribute write action so that we can figure out how to populate the actions in the xUML populate tool

Close attempts.reset

Close attempts.reset.convert

Call Statement

call

op_chain

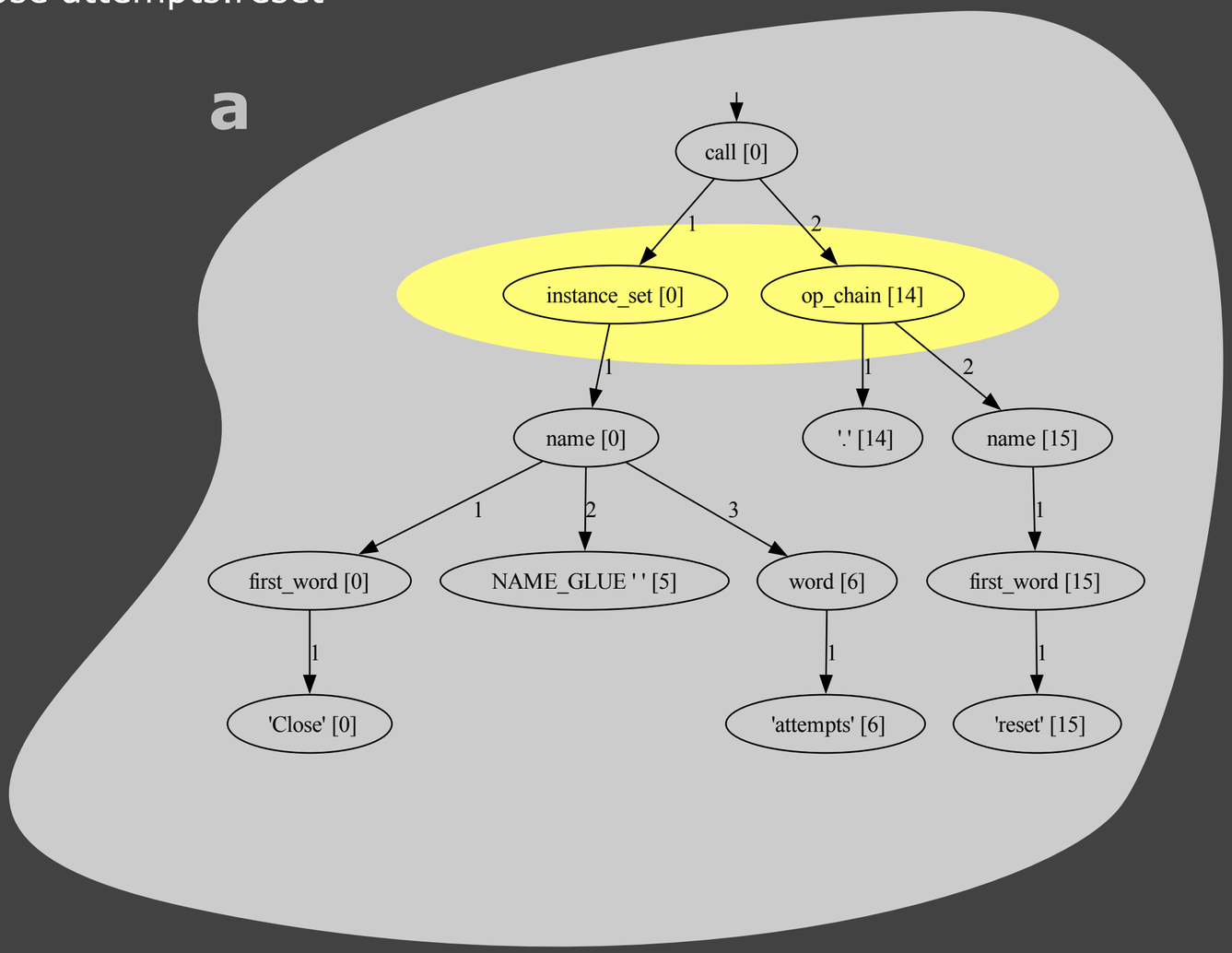
If we get an N_a in call field it can only be an attribute or a method name

N_a

INST_a

```
> statement = {Call_a} Call_a(call=N_a(name='Close attempts'), op_chain=Op_chain_a(components=[N_a(name='reset')]))
```

Close attempts.reset

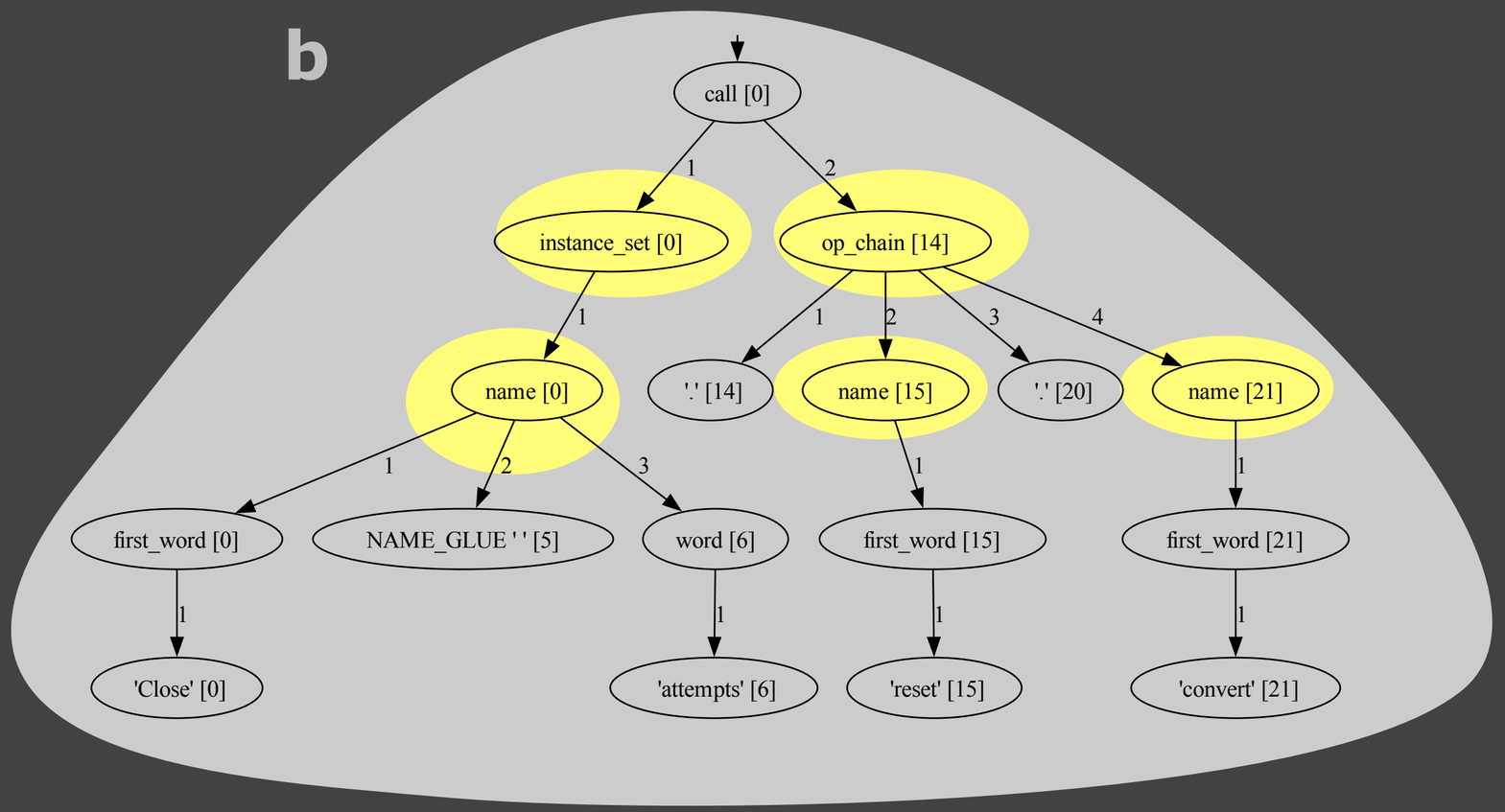


At this point, Close attempts could be either an attribute name, (which it is, in our example) OR the name of a single instance flow qualifying the attribute name in the first component element of the op_chain field.

It's not the name of a method since we don't see any () which are required in the Scrall syntax for a method call, even if no parameters are supplied. And definitely not an external service since the ~ symbol would force an INST_a tuple instead of an N_a in the call field.

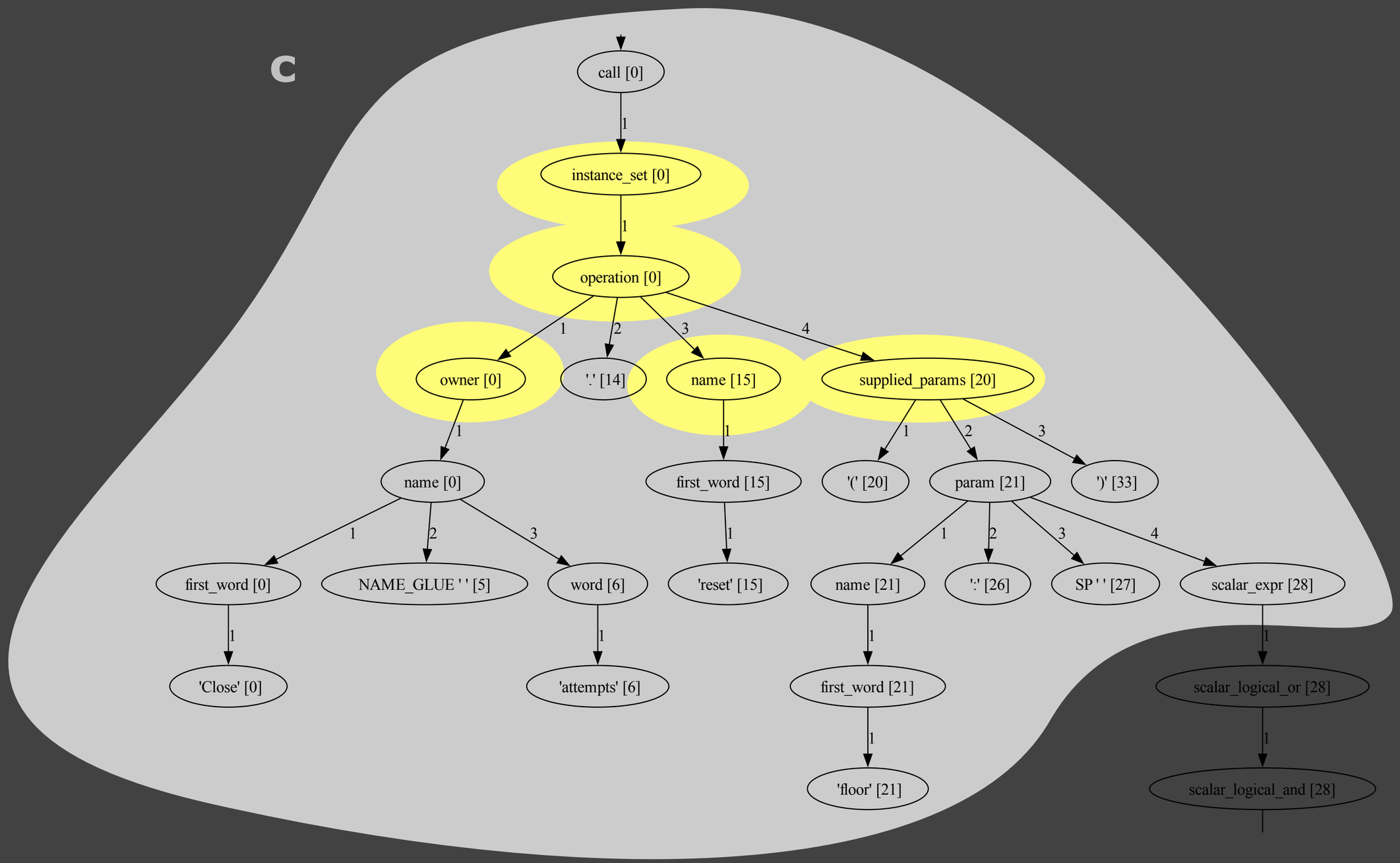
Close attempts.reset.convert

```
call = {N_a} N_a(name='Close attempts')
op_chain = {Op_chain_a} Op_chain_a(components=[N_a(name='reset'), N_a(name='convert')])
```



Close attempts.reset(floor: level)

```
call = {INST_a} INST_a(components=[Op_a(owner='Close attempts', op_name='reset', supplied_params=[Supplied_Parameter_a(pname='floor', sval=N_a(name='level'))])])
  components = {list} [Op_a(owner='Close attempts', op_name='reset', supplied_params=[Supplied_Parameter_a(pname='floor', sval=N_a(name='level'))])]
    0 = {Op_a} Op_a(owner='Close attempts', op_name='reset', supplied_params=[Supplied_Parameter_a(pname='floor', sval=N_a(name='level'))])
      op_name = {str} 'reset'
      owner = {str} 'Close attempts'
      supplied_params = {list} [Supplied_Parameter_a(pname='floor', sval=N_a(name='level'))]
```



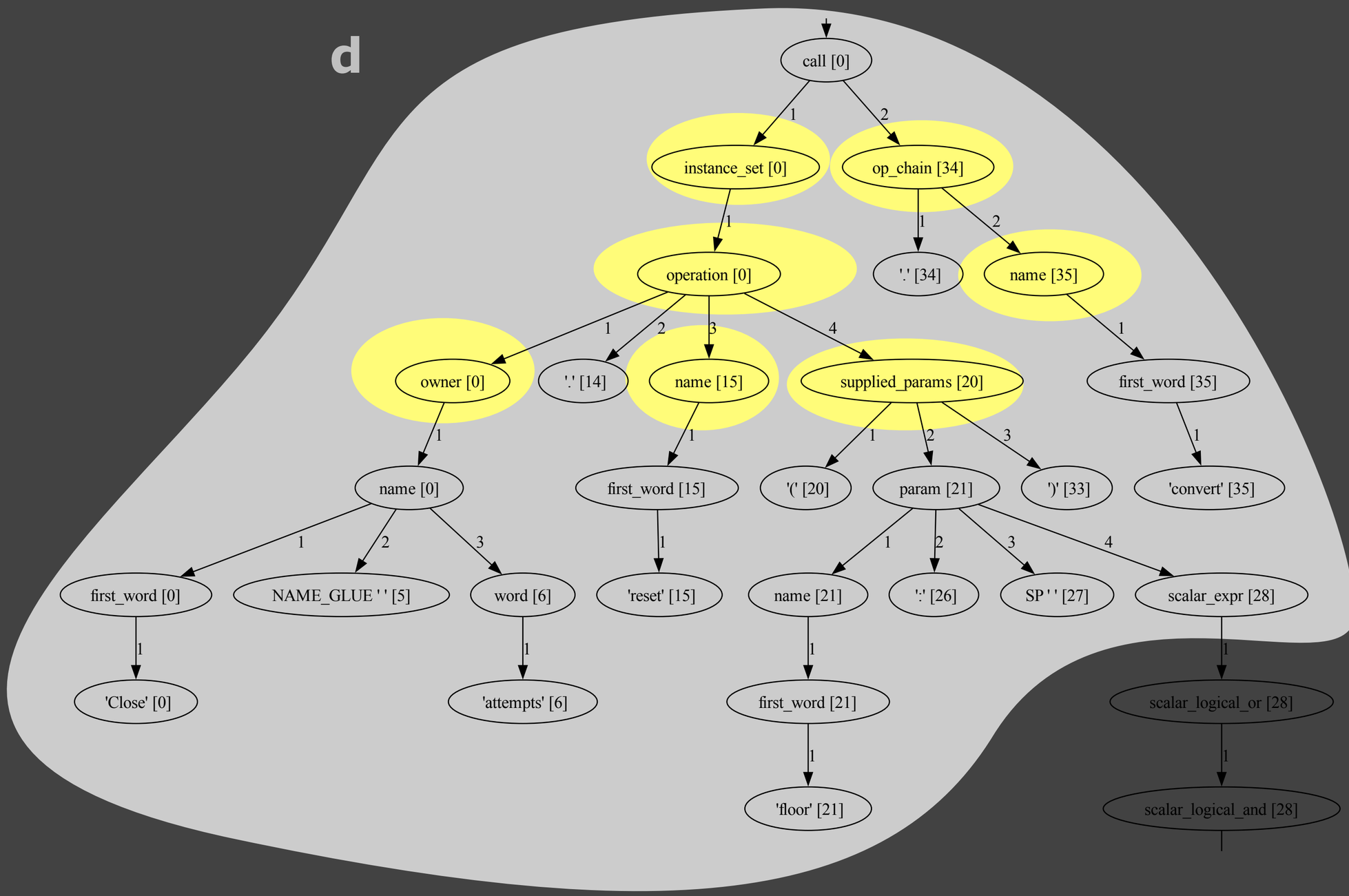
Close attempts.reset(floor: level).convert

call = {INST_a} INST_a(components=[Op_a(owner='Close attempts', op_name='reset', supplied_params=[Supplied_Parameter_a(pname='floor', sval=N_a(name='level'))])])

components = {list} [Op_a(owner='Close attempts', op_name='reset', supplied_params=[Supplied_Parameter_a(pname='floor', sval=N_a(name='level'))])]

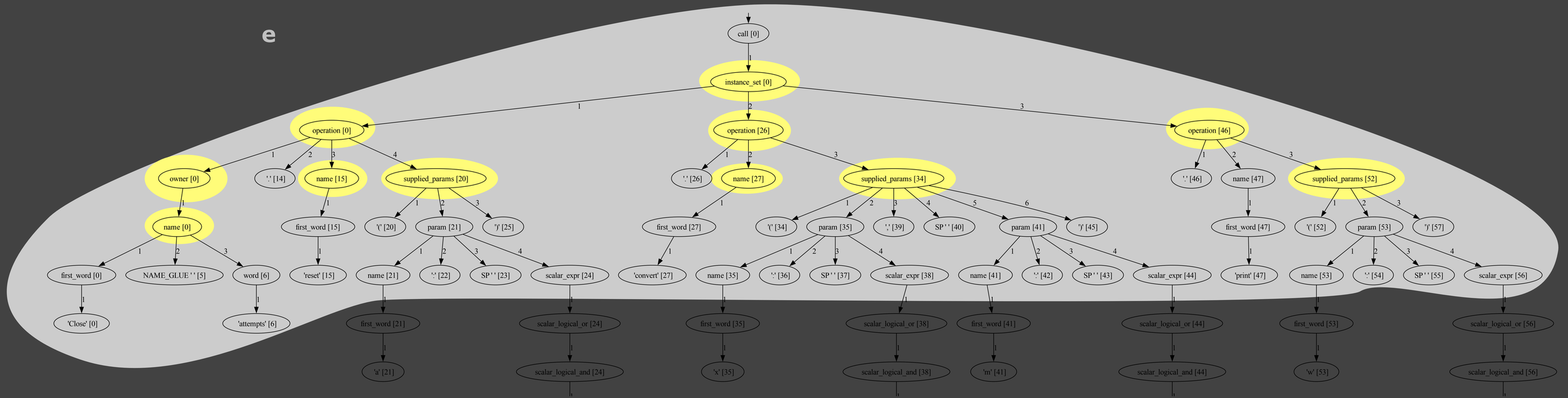
op_chain = {Op_chain_a} Op_chain_a(components=[N_a(name='convert')])

d



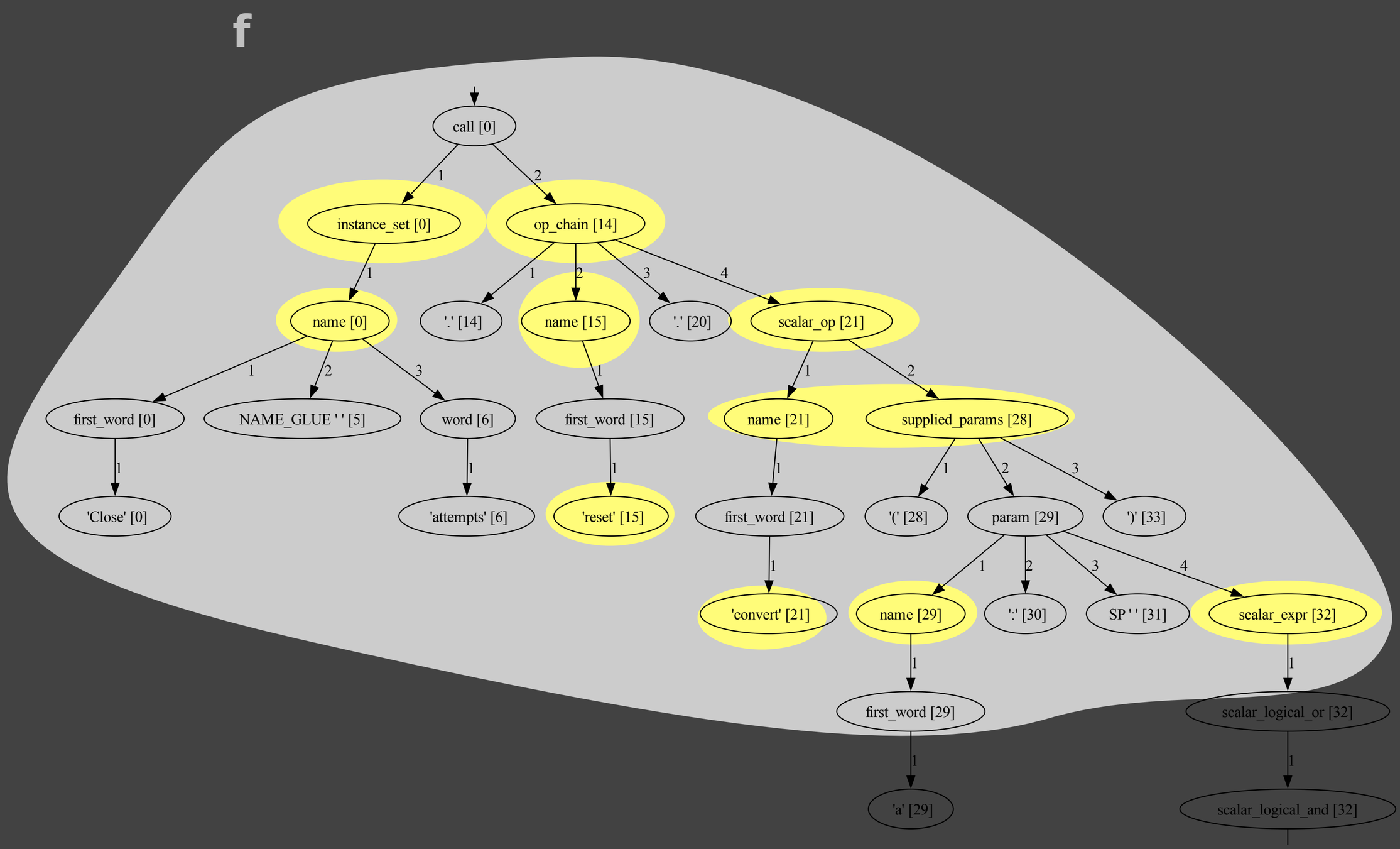
Close attempts.reset(a: b).convert(x: y, m: n).print(w: z)

```
call = {INST_a} INST_a(components=[Op_a(owner='Close attempts', op_name='reset', supplied_params=[Supplied_Parameter_a(pname='a', sval=N_a(nam...name='n'))]), Op_a(owner='_implicit', o
  components = {list} [Op_a(owner='Close attempts', op_name='reset', supplied_params=[Supplied_Parameter_a(pname='a', sval=N_a(name='b'))]), Op_a(owner='_implicit', op_name='convert',
    0 = {Op_a} Op_a(owner='Close attempts', op_name='reset', supplied_params=[Supplied_Parameter_a(pname='a', sval=N_a(name='b'))])
    1 = {Op_a} Op_a(owner='_implicit', op_name='convert', supplied_params=[Supplied_Parameter_a(pname='x', sval=N_a(name='y')), Supplied_Parameter_a(pname='m', sval=N_a(name='n'))])
    2 = {Op_a} Op_a(owner='_implicit', op_name='print', supplied_params=[Supplied_Parameter_a(pname='w', sval=N_a(name='z'))])
op_chain = {NoneType} None
```

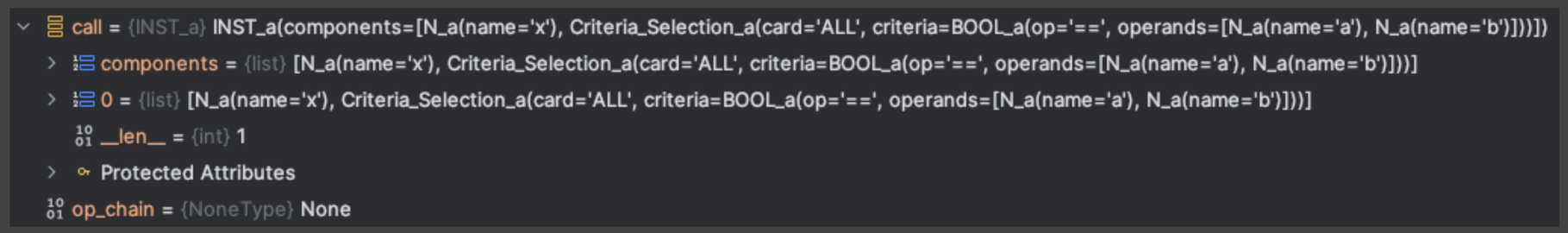


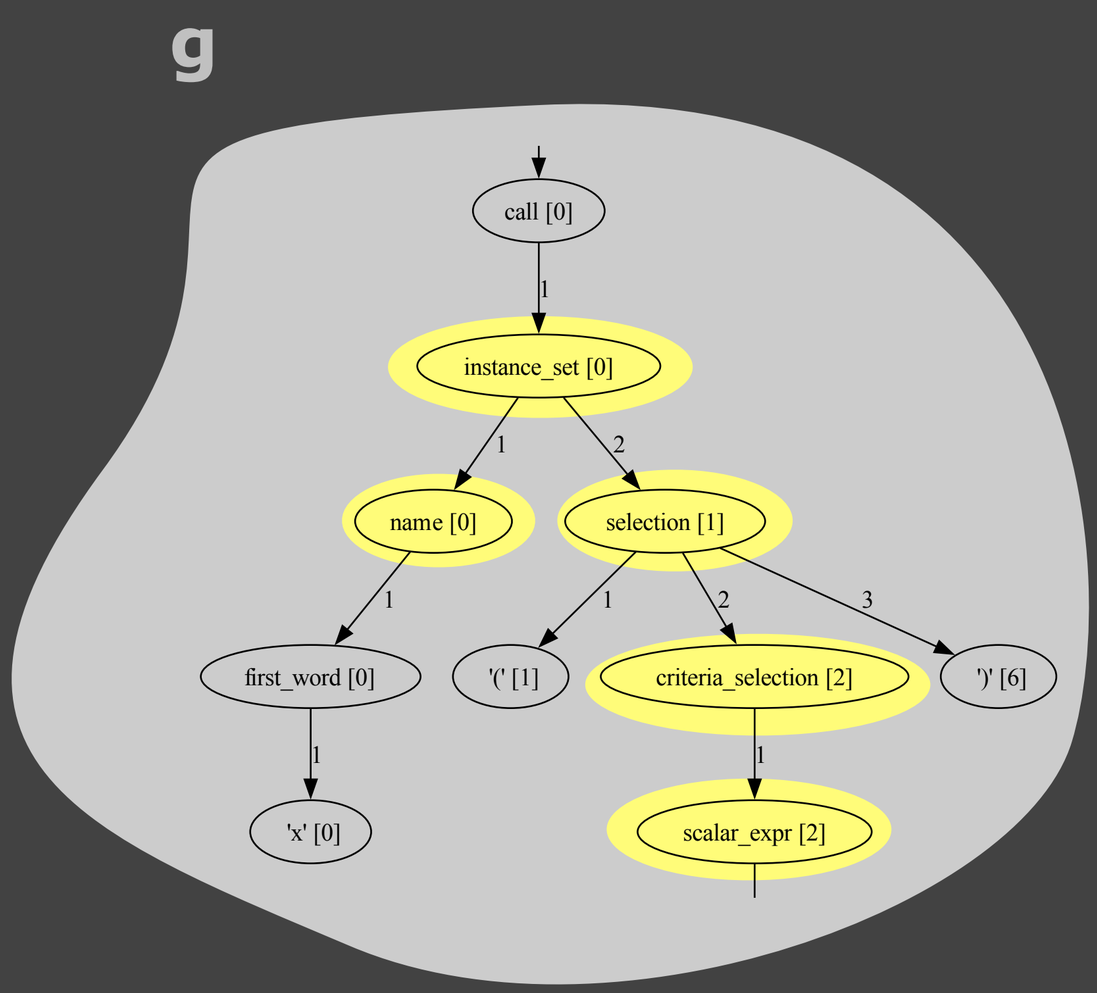
Close attempts.reset.convert(a: b)

```
call = {N_a} N_a(name='Close attempts')
op_chain = {Op_chain_a} Op_chain_a(components=[N_a(name='reset'), Scalar_op_a(name=N_a(name='convert'), supplied_params=[Supplied_Parameter_a(pname='a', sval=N_a(name='b'))])])
  components = {list} [N_a(name='reset'), Scalar_op_a(name=N_a(name='convert'), supplied_params=[Supplied_Parameter_a(pname='a', sval=N_a(name='b'))])]
    0 = {N_a} N_a(name='reset')
    1 = {Scalar_op_a} Scalar_op_a(name=N_a(name='convert'), supplied_params=[Supplied_Parameter_a(pname='a', sval=N_a(name='b'))])
```



x(a: b)


call = {INST_a} INST_a(components=[N_a(name='x'), Criteria_Selection_a(card='ALL', criteria=BOOL_a(op='==', operands=[N_a(name='a'), N_a(name='b')]))])
components = {list} [N_a(name='x'), Criteria_Selection_a(card='ALL', criteria=BOOL_a(op='==', operands=[N_a(name='a'), N_a(name='b')]))]
0 = {list} [N_a(name='x'), Criteria_Selection_a(card='ALL', criteria=BOOL_a(op='==', operands=[N_a(name='a'), N_a(name='b')]))]
__len__ = {int} 1
Protected Attributes
op_chain = {NoneType} None

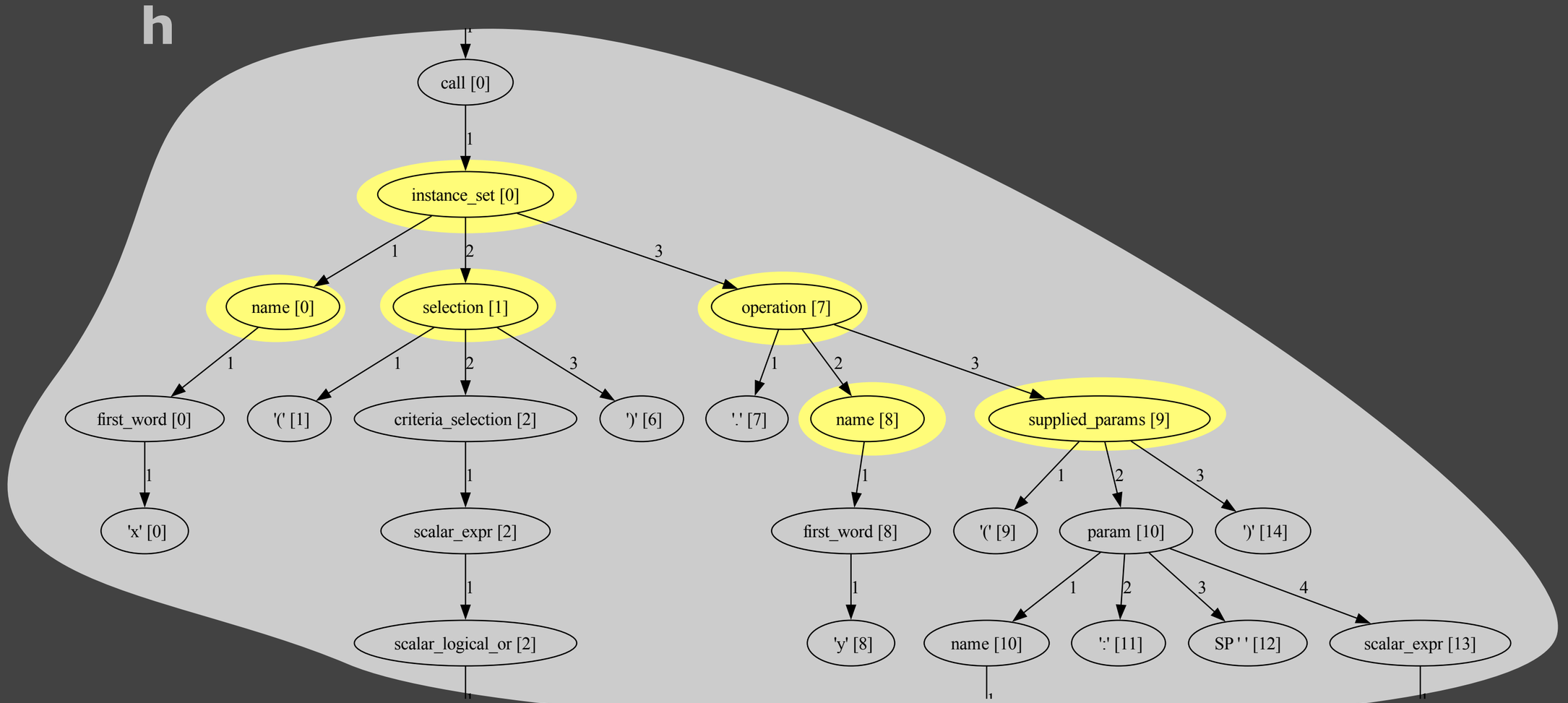

g
call [0]
1
instance_set [0]
1
2
name [0]
selection [1]
1
1
2
3
first_word [0]
'(' [1]
criteria_selection [2]
')' [6]
1
1
'x' [0]
scalar_expr [2]

x(a: b).y(c: d)

```
call = {INST_a} INST_a(components=[N_a(name='x'), Criteria_Selection_a(card='ALL', criteria=BOOL_a(op='==', operands=[N_a(name='
  components = {list} [N_a(name='x'), Criteria_Selection_a(card='ALL', criteria=BOOL_a(op='==', operands=[N_a(name='a'), N_a(name
    0 = {N_a} N_a(name='x')
    1 = {Criteria_Selection_a} Criteria_Selection_a(card='ALL', criteria=BOOL_a(op='==', operands=[N_a(name='a'), N_a(name='b')]))
    2 = {Op_a} Op_a(owner='_implicit', op_name='y', supplied_params=[Supplied_Parameter_a(pname='c', sval=N_a(name='d'))])
```

```
op_chain = {NoneType} None
```

h



/R4/Cabin.Ping

```
> call = {INST_a} INST_a(components=[PATH_a(hops=[R_a(rnum='R4'), N_a(name='Cabin')])])
> op_chain = {Op_chain_a} Op_chain_a(components=[N_a(name='Ping')])
```