

# 2nd Clause

```
((_ ((hhd . ht) . tl) literals match-value fail-value success-expr)
 (cond ((eq? match-value fail-value)
        fail-value)
        ;; Macros are allowed to expand into instances of themselves.
        (else (match-pattern (hhd . ht) literals (maybe-car match-value fail-value)
                              fail-value
                              (match-pattern tl literals (maybe-cdr match-value fail-value) fail-value success-expr))))))
```

(match (hhd . ht) ... <head match-value> ...)

(match tl ... <rest match-value> ...)



ignore "literals" arg for now  
(imagine that it is empty)



# 3rd Clause

```
((_ (hd . tl) literals match-value fail-value success-expr)
  (cond ((eq? match-value fail-value)
        fail-value)
        ((exists-in? 'hd 'literals)
         (if (eq? (maybe-car match-value fail-value) 'hd)
             (match-pattern tl literals (maybe-cdr match-value fail-value)
                             fail-value success-expr)
             fail-value))
        (else
         (let ((hd (maybe-car match-value fail-value)))
           (if (eq? hd fail-value)
               fail-value
               (match-pattern tl literals (maybe-cdr match-value fail-value)
                                   fail-value success-expr)))))))
```

} failure under way

} hd is a literal  
try matching tail (tl)

} hd is an atom  
try matching tail (tl)

pattern is a list  
deconstruct it into 2 parts  
hd and tl

hd might be a literal, like  
"else"

note to self: what are the quotes in  
(exists-in? 'hd 'literals)  
[looks like a typo]