

Pragmas: Literal Messages as Powerful Method Annotations

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Smalltalk

has: #unary , #binary

and: #(keyword messages)

and: \$A

rich: 'literal'

syntax: 12345678 who do we appreciate

size

"Primitive. Answer the number of indexable variables in the receiver. This value is the same as the largest legal subscript. Essential. See Object documentation whatIsAPrimitive."

<primitive: 62>

self class isVariable ifFalse: [self errorNotIndexable].

^ 0

Behavior methods for creating method dictionary

addSelector: selector **withMethod:** compiledMethod

"Add the message selector with the corresponding compiled method to the receiver's method dictionary."

methodDict at: selector put:

(self validateMethod: compiledMethod forSelector: selector).

self flushVMmethodCacheEntriesFor: selector

BlockClosure class methods for private

validateMethod: compiledMethod **forSelector:** selector

"Intercept this so we can mark unwind method"

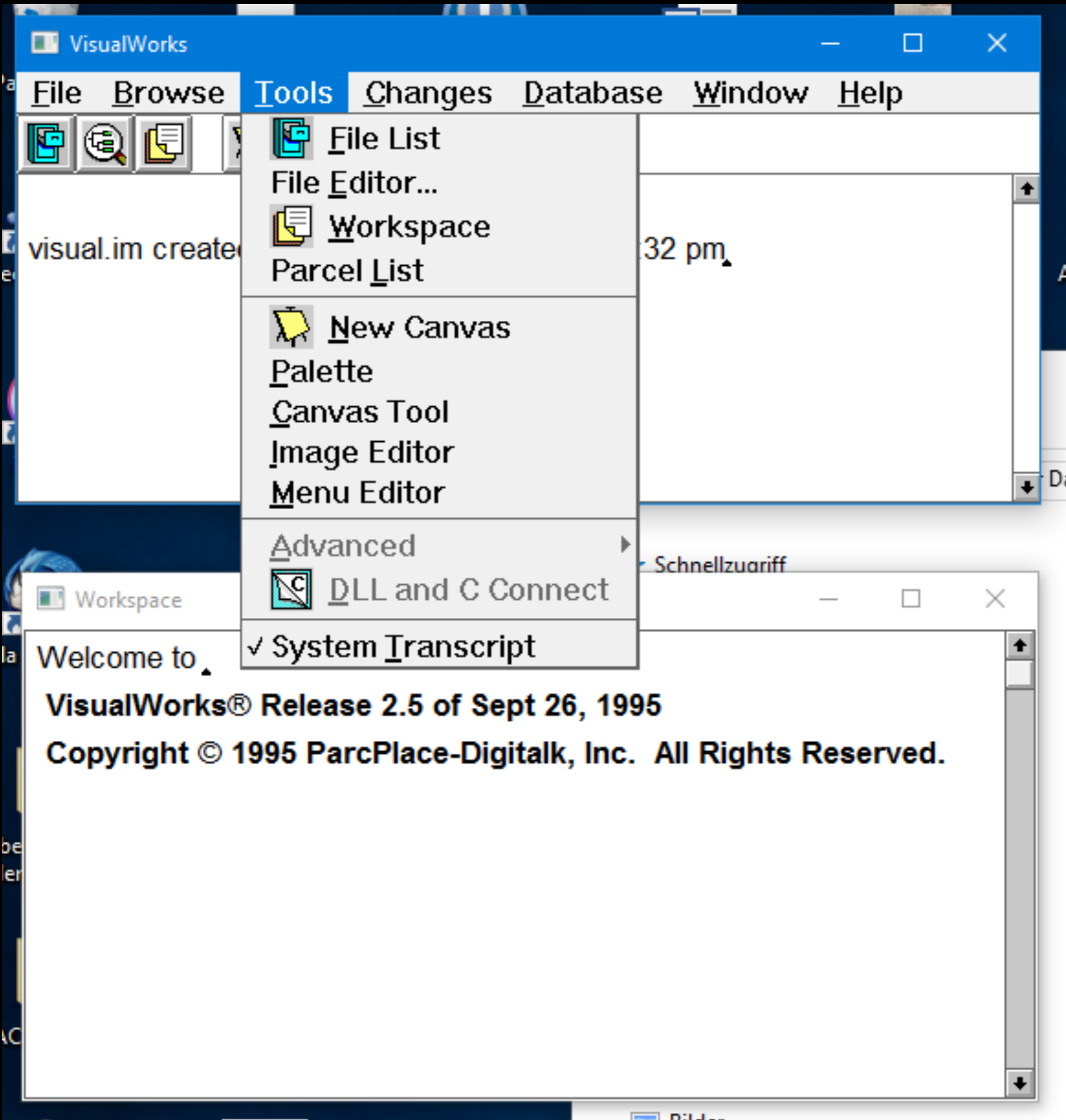
| method |

method := super validateMethod: compiledMethod
forSelector: selector.

^((selector == #valueOnUnwindDo: or: [selector ==
#valueNowOrOnUnwindDo:])

ifTrue: [method asUnwindMethod]

ifFalse: [method])



inspectUndeclared

```
<menuItem: 'Inspect Undeclared'  
  nameKey: nil  
  menu: #(#menuBar #browse #inspect)  
  position: 15.1>  
Undeclared inspect
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[Smalltalk hasMetaObjects]
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on: MessageNotUnderstood  
do: [:ex| ex message]
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Smalltalk perform: #hasMetaObjects withArguments: #()
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[Smalltalk hasMetaObjects]
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Smalltalk perform: #hasMetaObjects withArguments: #()
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```
add/remove => select/collect => visit & apply => update
```


integrated/ion

- subset of language
- senders/implementors browsing works
- Convenient access (Vassili)
 - Pragma allNamed: symbol from: subclass to: superclass

more generally useful

- COM server
 api method pragma vs class side config
- Preferences

AboutVisualWorksPage class

pagePragma

<pragmas: #class>
^#(pageOrder:)

systemPragma

<pragmas: #class>
^#(systemInformation:)

ApplicationModel class

menuItemPragmas

<pragmas: #instance>
^MenuItem pragmas

BlockClosure class

exceptionPragmas

<pragmas: #instance>
^#(exception:)

L
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more generally useful

- Trippy/GlamorousToolkit inspector pages
- Examples
-?