Implementing User-level Value-weak Hashtables

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Key	Value			
'a	"Something"			
' b	"Something Too"			

What are Hashtables?

Get Put

Update Delete

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Key	Value		
'a	"Something"		
' b	"Something Too"		

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Key	Value			
'a	"Something"			
' b	"Something Too"			

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Key	Value			
'a	"Something"			
' b	"Something Too"			

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Key	Value			
'a	"Something"			
' b	"Something Too"			

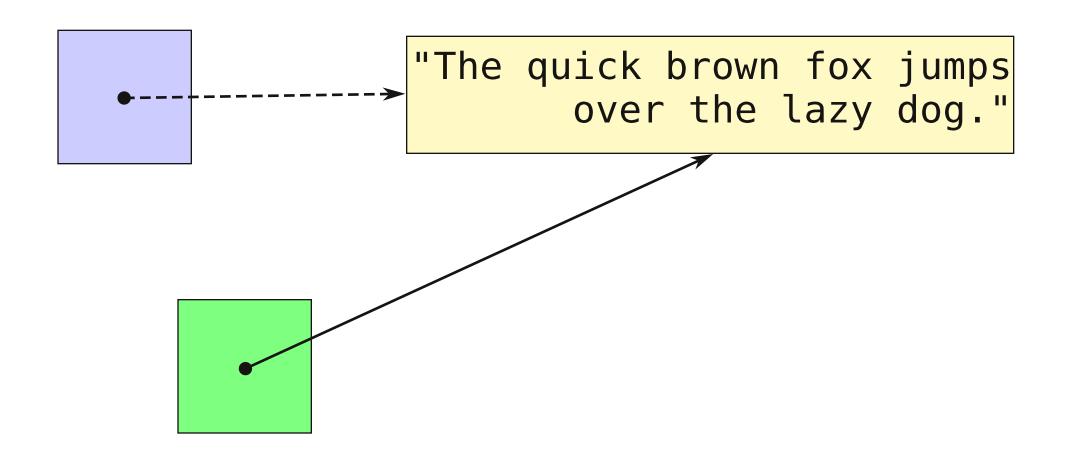
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"The quick brown fox jumps over the lazy dog."

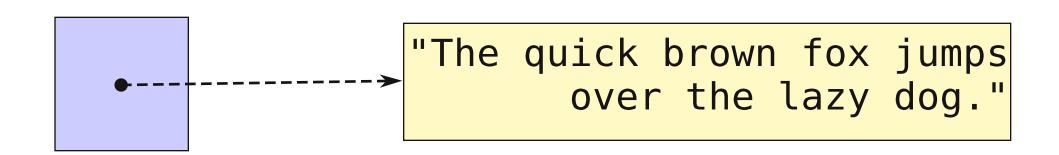
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"The quick brown fox jumps over the lazy dog."

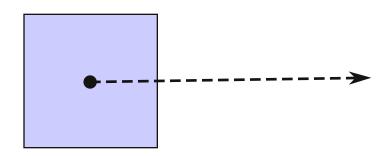
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#!BWP

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Value-weak Tables, Round 1

Key	Value
'a	"Something"
'b	"Nothing"

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Value-weak Tables, Round 1

Key	Value
'a	"Something"
'b	"Nothing"

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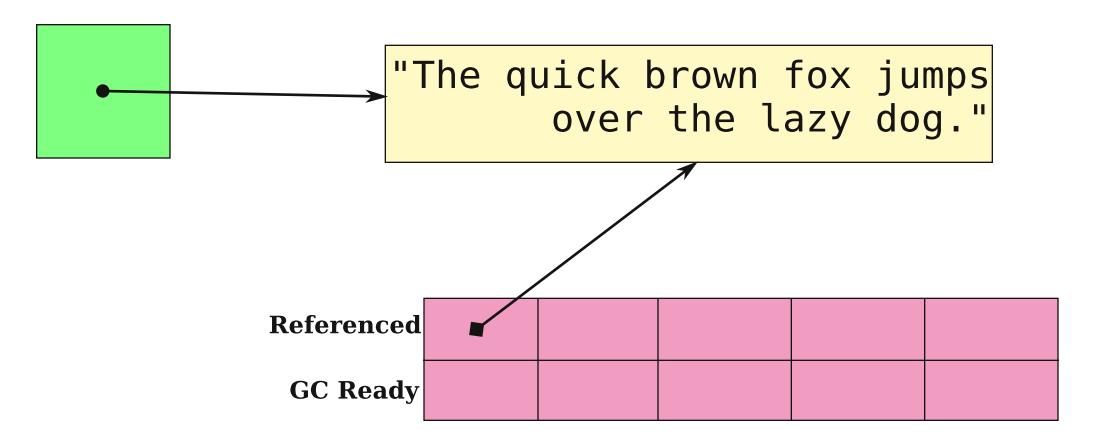
Value-weak Tables, Round 1

Key	Value
'a	"Something"
'b	#!BWP

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Guardians to the Rescue

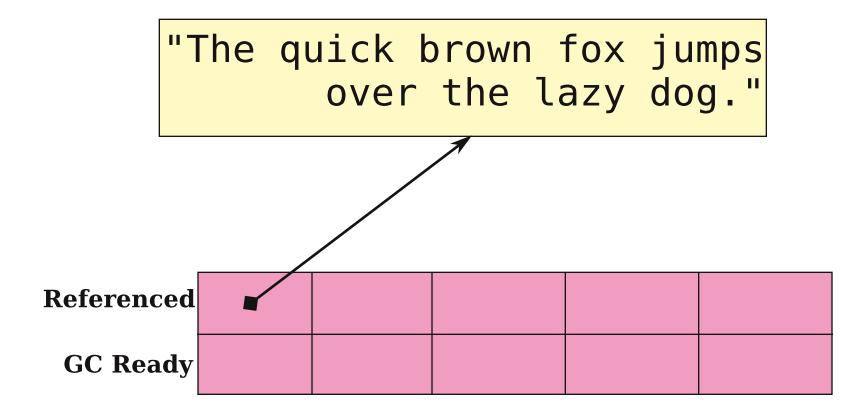
Any reasonable GC hook (such as Gambit's Wills or a capable finalizer mechanism) will work, too.



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Guardians to the Rescue

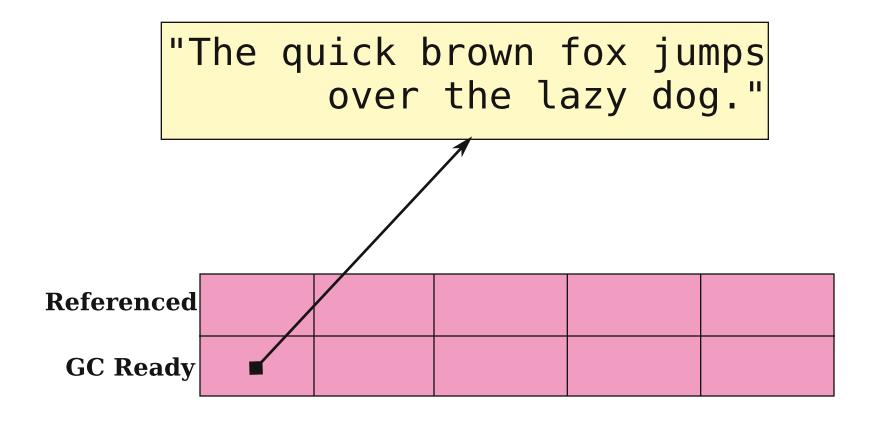
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Guardians to the Rescue

Any reasonable GC hook (such as Gambit's Wills or a capable finalizer mechanism) will work, too.



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Value-weak Tables, K.O.

Key	Value		Key	Value	
'a	"Something"		"Something"	clean-a	
' b	"Nothing"		"Nothing"	clean-b	←
	Referenced	•	•		
	GC Ready				

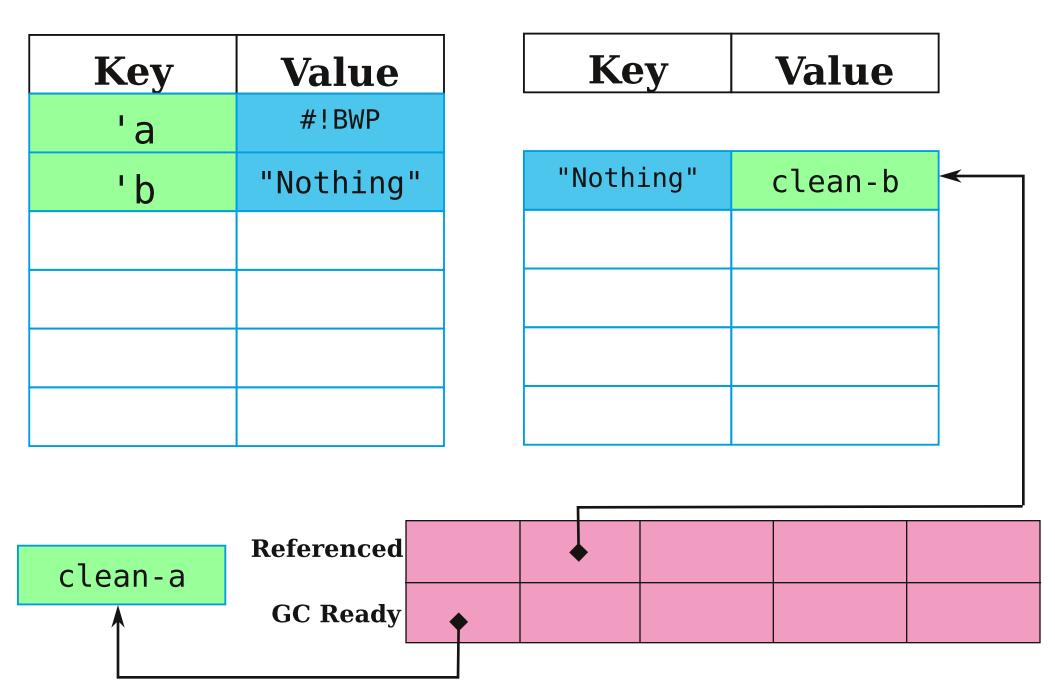
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Value-weak Tables, K.O.

Key	Value		Key	Value	
'a	#!BWP		#!BWP	clean-a	
'b	"Nothing"		"Nothing"	clean-b	←
	Referenced	•	•		
	GC Ready				

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Value-weak Tables, K.O.



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Questions, Clarification, and Discussion...

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