JavaScript is disabled on your browser.

* [Overview](http://docs.google.com/overview-summary.html)
* [Package](http://docs.google.com/package-summary.html)
* Class
* [Use](http://docs.google.com/class-use/VPPhraseSpec.html)
* [Tree](http://docs.google.com/package-tree.html)
* [Deprecated](http://docs.google.com/deprecated-list.html)
* [Index](http://docs.google.com/index-files/index-1.html)
* [Help](http://docs.google.com/help-doc.html)
* [Prev Class](http://docs.google.com/simplenlg/phrasespec/SPhraseSpec.html)
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* [Frames](http://docs.google.com/index.html?simplenlg/phrasespec/VPPhraseSpec.html)
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simplenlg.phrasespec

## Class VPPhraseSpec

* java.lang.Object
  + [simplenlg.framework.NLGElement](http://docs.google.com/simplenlg/framework/NLGElement.html)
    - [simplenlg.framework.PhraseElement](http://docs.google.com/simplenlg/framework/PhraseElement.html)
      * simplenlg.phrasespec.VPPhraseSpec
* public class VPPhraseSpec  
  extends [PhraseElement](http://docs.google.com/simplenlg/framework/PhraseElement.html)
* This class defines a verb phrase. It is essentially a wrapper around the PhraseElement class, with methods for setting common constituents such as Objects. For example, the setVerb method in this class sets the head of the element to be the specified verb From an API perspective, this class is a simplified version of the SPhraseSpec class in simplenlg V3. It provides an alternative way for creating syntactic structures, compared to directly manipulating a V4 PhraseElement. Methods are provided for setting and getting the following constituents:
  + PreModifier (eg, "reluctantly")
  + Verb (eg, "gave")
  + IndirectObject (eg, "Mary")
  + Object (eg, "an apple")
  + PostModifier (eg, "before school")
* NOTE: If there is a complex verb group, a preModifer set at the VP level appears before the verb, while a preModifier set at the clause level appears before the verb group. Eg "Mary unfortunately will eat the apple" ("unfortunately" is clause preModifier) "Mary will happily eat the apple" ("happily" is VP preModifier) NOTE: The setModifier method will attempt to automatically determine whether a modifier should be expressed as a PreModifier or PostModifier Features (such as negated) must be accessed via the setFeature and getFeature methods (inherited from NLGElement). Features which are often set on VPPhraseSpec include
  + Modal (eg, "John eats an apple" vs "John can eat an apple")
  + Negated (eg, "John eats an apple" vs "John does not eat an apple")
  + Passive (eg, "John eats an apple" vs "An apple is eaten by John")
  + Perfect (eg, "John ate an apple" vs "John has eaten an apple")
  + Progressive (eg, "John eats an apple" vs "John is eating an apple")
  + Tense (eg, "John ate" vs "John eats" vs "John will eat")

Note that most VP features can be set on an SPhraseSpec, they will automatically be propogated to the VP VPPhraseSpec are produced by the createVerbPhrase method of a PhraseFactory  
Version: 4.1 Author: E. Reiter, University of Aberdeen.

### Constructor SummaryConstructors

|  |
| --- |
| * + Constructor and Description |
| * + [**VPPhraseSpec**](http://docs.google.com/simplenlg/phrasespec/VPPhraseSpec.html#VPPhraseSpec(simplenlg.framework.NLGFactory))([NLGFactory](http://docs.google.com/simplenlg/framework/NLGFactory.html) phraseFactory) create an empty clause |

### Method SummaryMethods

|  |  |
| --- | --- |
| * + Modifier and Type | * + Method and Description |
| * + void | * + [**addModifier**](http://docs.google.com/simplenlg/phrasespec/VPPhraseSpec.html#addModifier(java.lang.Object))(java.lang.Object modifier) Add a modifier to a verb phrase Use heuristics to decide where it goes |
| * + [NLGElement](http://docs.google.com/simplenlg/framework/NLGElement.html) | * + [**getIndirectObject**](http://docs.google.com/simplenlg/phrasespec/VPPhraseSpec.html#getIndirectObject())() Returns the indirect object of a clause (assumes there is only one) |
| * + [NLGElement](http://docs.google.com/simplenlg/framework/NLGElement.html) | * + [**getObject**](http://docs.google.com/simplenlg/phrasespec/VPPhraseSpec.html#getObject())() Returns the direct object of a clause (assumes there is only one) |
| * + [NLGElement](http://docs.google.com/simplenlg/framework/NLGElement.html) | * + [**getVerb**](http://docs.google.com/simplenlg/phrasespec/VPPhraseSpec.html#getVerb())() |
| * + void | * + [**setIndirectObject**](http://docs.google.com/simplenlg/phrasespec/VPPhraseSpec.html#setIndirectObject(java.lang.Object))(java.lang.Object indirectObject) Set the indirect object of a clause (assumes this is the only direct indirect object) |
| * + void | * + [**setObject**](http://docs.google.com/simplenlg/phrasespec/VPPhraseSpec.html#setObject(java.lang.Object))(java.lang.Object object) Sets the direct object of a clause (assumes this is the only direct object) |
| * + void | * + [**setVerb**](http://docs.google.com/simplenlg/phrasespec/VPPhraseSpec.html#setVerb(java.lang.Object))(java.lang.Object verb) sets the verb (head) of a verb phrase. |

### Methods inherited from class simplenlg.framework.[**PhraseElement**](http://docs.google.com/simplenlg/framework/PhraseElement.html)[addComplement](http://docs.google.com/simplenlg/framework/PhraseElement.html#addComplement(simplenlg.framework.NLGElement)), [addComplement](http://docs.google.com/simplenlg/framework/PhraseElement.html#addComplement(java.lang.String)), [addFrontModifier](http://docs.google.com/simplenlg/framework/PhraseElement.html#addFrontModifier(simplenlg.framework.NLGElement)), [addFrontModifier](http://docs.google.com/simplenlg/framework/PhraseElement.html#addFrontModifier(java.lang.String)), [addPostModifier](http://docs.google.com/simplenlg/framework/PhraseElement.html#addPostModifier(simplenlg.framework.NLGElement)), [addPostModifier](http://docs.google.com/simplenlg/framework/PhraseElement.html#addPostModifier(java.lang.String)), [addPreModifier](http://docs.google.com/simplenlg/framework/PhraseElement.html#addPreModifier(simplenlg.framework.NLGElement)), [addPreModifier](http://docs.google.com/simplenlg/framework/PhraseElement.html#addPreModifier(java.lang.String)), [clearComplements](http://docs.google.com/simplenlg/framework/PhraseElement.html#clearComplements()), [getChildren](http://docs.google.com/simplenlg/framework/PhraseElement.html#getChildren()), [getFrontModifiers](http://docs.google.com/simplenlg/framework/PhraseElement.html#getFrontModifiers()), [getHead](http://docs.google.com/simplenlg/framework/PhraseElement.html#getHead()), [getPostModifiers](http://docs.google.com/simplenlg/framework/PhraseElement.html#getPostModifiers()), [getPreModifiers](http://docs.google.com/simplenlg/framework/PhraseElement.html#getPreModifiers()), [printTree](http://docs.google.com/simplenlg/framework/PhraseElement.html#printTree(java.lang.String)), [setComplement](http://docs.google.com/simplenlg/framework/PhraseElement.html#setComplement(simplenlg.framework.NLGElement)), [setComplement](http://docs.google.com/simplenlg/framework/PhraseElement.html#setComplement(java.lang.String)), [setDeterminer](http://docs.google.com/simplenlg/framework/PhraseElement.html#setDeterminer(java.lang.Object)), [setFrontModifier](http://docs.google.com/simplenlg/framework/PhraseElement.html#setFrontModifier(simplenlg.framework.NLGElement)), [setFrontModifier](http://docs.google.com/simplenlg/framework/PhraseElement.html#setFrontModifier(java.lang.String)), [setHead](http://docs.google.com/simplenlg/framework/PhraseElement.html#setHead(java.lang.Object)), [setPostModifier](http://docs.google.com/simplenlg/framework/PhraseElement.html#setPostModifier(simplenlg.framework.NLGElement)), [setPostModifier](http://docs.google.com/simplenlg/framework/PhraseElement.html#setPostModifier(java.lang.String)), [setPreModifier](http://docs.google.com/simplenlg/framework/PhraseElement.html#setPreModifier(simplenlg.framework.NLGElement)), [setPreModifier](http://docs.google.com/simplenlg/framework/PhraseElement.html#setPreModifier(java.lang.String))

### Methods inherited from class simplenlg.framework.[**NLGElement**](http://docs.google.com/simplenlg/framework/NLGElement.html)[clearAllFeatures](http://docs.google.com/simplenlg/framework/NLGElement.html#clearAllFeatures()), [equals](http://docs.google.com/simplenlg/framework/NLGElement.html#equals(java.lang.Object)), [equals](http://docs.google.com/simplenlg/framework/NLGElement.html#equals(java.lang.String)), [getAllFeatureNames](http://docs.google.com/simplenlg/framework/NLGElement.html#getAllFeatureNames()), [getAllFeatures](http://docs.google.com/simplenlg/framework/NLGElement.html#getAllFeatures()), [getCategory](http://docs.google.com/simplenlg/framework/NLGElement.html#getCategory()), [getFactory](http://docs.google.com/simplenlg/framework/NLGElement.html#getFactory()), [getFeature](http://docs.google.com/simplenlg/framework/NLGElement.html#getFeature(java.lang.String)), [getFeatureAsBoolean](http://docs.google.com/simplenlg/framework/NLGElement.html#getFeatureAsBoolean(java.lang.String)), [getFeatureAsDouble](http://docs.google.com/simplenlg/framework/NLGElement.html#getFeatureAsDouble(java.lang.String)), [getFeatureAsElement](http://docs.google.com/simplenlg/framework/NLGElement.html#getFeatureAsElement(java.lang.String)), [getFeatureAsElementList](http://docs.google.com/simplenlg/framework/NLGElement.html#getFeatureAsElementList(java.lang.String)), [getFeatureAsFloat](http://docs.google.com/simplenlg/framework/NLGElement.html#getFeatureAsFloat(java.lang.String)), [getFeatureAsInteger](http://docs.google.com/simplenlg/framework/NLGElement.html#getFeatureAsInteger(java.lang.String)), [getFeatureAsList](http://docs.google.com/simplenlg/framework/NLGElement.html#getFeatureAsList(java.lang.String)), [getFeatureAsLong](http://docs.google.com/simplenlg/framework/NLGElement.html#getFeatureAsLong(java.lang.String)), [getFeatureAsString](http://docs.google.com/simplenlg/framework/NLGElement.html#getFeatureAsString(java.lang.String)), [getFeatureAsStringList](http://docs.google.com/simplenlg/framework/NLGElement.html#getFeatureAsStringList(java.lang.String)), [getParent](http://docs.google.com/simplenlg/framework/NLGElement.html#getParent()), [getRealisation](http://docs.google.com/simplenlg/framework/NLGElement.html#getRealisation()), [getTense](http://docs.google.com/simplenlg/framework/NLGElement.html#getTense()), [hasFeature](http://docs.google.com/simplenlg/framework/NLGElement.html#hasFeature(java.lang.String)), [isA](http://docs.google.com/simplenlg/framework/NLGElement.html#isA(simplenlg.framework.ElementCategory)), [isNegated](http://docs.google.com/simplenlg/framework/NLGElement.html#isNegated()), [isPlural](http://docs.google.com/simplenlg/framework/NLGElement.html#isPlural()), [removeFeature](http://docs.google.com/simplenlg/framework/NLGElement.html#removeFeature(java.lang.String)), [setCategory](http://docs.google.com/simplenlg/framework/NLGElement.html#setCategory(simplenlg.framework.ElementCategory)), [setFactory](http://docs.google.com/simplenlg/framework/NLGElement.html#setFactory(simplenlg.framework.NLGFactory)), [setFeature](http://docs.google.com/simplenlg/framework/NLGElement.html#setFeature(java.lang.String,%20boolean)), [setFeature](http://docs.google.com/simplenlg/framework/NLGElement.html#setFeature(java.lang.String,%20double)), [setFeature](http://docs.google.com/simplenlg/framework/NLGElement.html#setFeature(java.lang.String,%20float)), [setFeature](http://docs.google.com/simplenlg/framework/NLGElement.html#setFeature(java.lang.String,%20int)), [setFeature](http://docs.google.com/simplenlg/framework/NLGElement.html#setFeature(java.lang.String,%20long)), [setFeature](http://docs.google.com/simplenlg/framework/NLGElement.html#setFeature(java.lang.String,%20java.lang.Object)), [setNegated](http://docs.google.com/simplenlg/framework/NLGElement.html#setNegated(boolean)), [setParent](http://docs.google.com/simplenlg/framework/NLGElement.html#setParent(simplenlg.framework.NLGElement)), [setPlural](http://docs.google.com/simplenlg/framework/NLGElement.html#setPlural(boolean)), [setRealisation](http://docs.google.com/simplenlg/framework/NLGElement.html#setRealisation(java.lang.String)), [setTense](http://docs.google.com/simplenlg/framework/NLGElement.html#setTense(simplenlg.features.Tense)), [toString](http://docs.google.com/simplenlg/framework/NLGElement.html#toString())

### Methods inherited from class java.lang.ObjectgetClass, hashCode, notify, notifyAll, wait, wait, wait

### Constructor Detail

#### VPPhraseSpec public VPPhraseSpec([NLGFactory](http://docs.google.com/simplenlg/framework/NLGFactory.html) phraseFactory) create an empty clause

### Method Detail

#### setVerb public void setVerb(java.lang.Object verb) sets the verb (head) of a verb phrase. Extract particle from verb if necessaryParameters:verb -

#### getVerb public [NLGElement](http://docs.google.com/simplenlg/framework/NLGElement.html) getVerb()Returns:verb (head) of verb phrase

#### setObject public void setObject(java.lang.Object object) Sets the direct object of a clause (assumes this is the only direct object)Parameters:object -

#### getObject public [NLGElement](http://docs.google.com/simplenlg/framework/NLGElement.html) getObject() Returns the direct object of a clause (assumes there is only one)Returns:subject of clause (assume only one)

#### setIndirectObject public void setIndirectObject(java.lang.Object indirectObject) Set the indirect object of a clause (assumes this is the only direct indirect object)Parameters:indirectObject -

#### getIndirectObject public [NLGElement](http://docs.google.com/simplenlg/framework/NLGElement.html) getIndirectObject() Returns the indirect object of a clause (assumes there is only one)Returns:subject of clause (assume only one)

#### addModifier public void addModifier(java.lang.Object modifier) Add a modifier to a verb phrase Use heuristics to decide where it goes**Overrides:** [addModifier](http://docs.google.com/simplenlg/framework/PhraseElement.html#addModifier(java.lang.Object)) in class [PhraseElement](http://docs.google.com/simplenlg/framework/PhraseElement.html) Parameters:modifier -

* [Overview](http://docs.google.com/overview-summary.html)
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