

# Material for the Verb Pattern Recognition task

**Task** In a given sentence, recognize the verb usage pattern.  
 We focus only on two verbs: *cry* and *submit*.  
 Each sentence should be classified either with a pattern number, or with one of two special tags:  
 'u' ~ unclassifiable; cannot be assigned to a particular pattern  
 'x' ~ not a verb (the word *cry/submit* is occurring not as a verb)

**Objects** Sentences containing the word *cry*, or *submit*.

**Target values** verb patterns  
 -- possible values for *cry*: '1', '4', '7', 'u', 'x'  
 -- possible values for *submit*: '1', '2', '4', '5', 'u'

<b>tp</b>	<b>categorical</b>	target pattern
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**Feature vector** consists of 363 values, all are binary  
 All features are divided into four feature families.

Feature family and its subgroups	Number and type of features	Description of features
<b>MF.*</b> MF.tense_* MF.3p_* MF.2p_* MF.1p_* MF.1n_* MF.2n_* MF.3n_*	<b>59 binary features</b> 5 9 9 9 9 9 9	<b>Morphological features</b> related to the verb's tense related to the third word preceding the verb related to the second word preceding the verb related to the first word preceding the verb related to the first word following the verb related to the second word following the verb related to the third word following the verb
<b>STA.*</b> STA.GEN_* STA.LEX_*	<b>90 binary features</b> 20 70	<b>Syntactic features based on the Stanford parser</b> general syntactic features lexicalized syntactic features
<b>MST.*</b> MST.GEN_* MST.LEX_*	<b>90 binary features</b> 20 70	<b>Syntactic features based on the MST parser</b> general syntactic features lexicalized syntactic features
<b>SEM.*</b> SEM.s.* SEM.o.*	<b>124 binary features</b> 62 62	<b>Semantic features</b> related to the verb's subject(s) related to the verb's object(s)

## CRY – Pattern definitions

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<b>Pattern 1</b>	<b>[Human] cry [no object]</b>
Explanation	[[Human]] weeps usually because [[Human]] is unhappy or in pain
Example	His advice to stressful women was: `If you <b>cry</b> , do n't cry alone.

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<b>Pattern 4</b>	<b>[Human] cry [THAT-CL WH-CL QUOTE] ({out})</b>
Explanation	[[Human]] shouts ([QUOTE]) loudly typically, in order to attract attention
Example	You can hear them screaming and banging their heads, <b>crying</b> that they want to go home.

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<b>Pattern 7</b>	<b>[Entity   State] cry [{out}] [{for} Action] [no object]</b>
Explanation	[[Entity   State]] requires [[Action]] to be taken urgently
Example	Identifying areas which <b>cry</b> out for improvement or even simply areas of muddle and misunderstanding, is by no means negative -- rather a spur to action.

## SUBMIT – Pattern definitions

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<b>Pattern 1</b>	<b>[[Human 1   Institution 1] submit [[Plan Document Speech Act Proposition   {complaint demand request claim application proposal report ...}]^ [Artifact Artwork Service   {design tender bid entry dance ...}]] (({to} Human 2   Institution 2 = authority) ({for} {approval discussion  arbitration inspection designation assessment funding taxation ...}))</b>
Explanation	[[Human 1   Institution 1]] presents [[Plan   Document]] to [[Human 2   Institution 2]] for {approval discussion arbitration  inspection designation assessment taxation ...}
Example	This long list of detailed items was <b>submitted</b> to a finance committee.

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<b>Pattern 2</b>	<b>[Human   Institution] submit [THAT-CL QUOTE]</b>
Explanation	[[Human   Institution]] respectfully expresses {that [CLAUSE]} and invites listeners or readers to accept that{that [CLAUSE]} is true
Example	He has <b>submitted</b> that the money in court should not be paid out unless the court is satisfied that the interim government are indeed the Government of Somalia.

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<b>Pattern 4</b>	<b>[Human 1   Institution 1] submit (Self) ({to} Human 2   Institution 2)</b>
Explanation	[[Human 1   Institution 1]] acknowledges the superior force of [[Human 2   Institution 2]] and puts [[Self]] in the power of [[Human 2   Institution 2]]
Example	English common law holds that a woman must <b>submit</b> herself totally to her husband.

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<b>Pattern 5</b>	<b>[Human 1] submit (Self) [[{to} Eventuality = Unpleasant]^{to} Rule]]</b>
Explanation	[[Human 1]] accepts [[Rule  Eventuality = Unpleasant]] without complaining
Example	To <b>submit</b> to unemployment or slums or want, to let children go hungry or sick and old unattended, for fear of increasing the internal national debt, is to lose all sense of proportion.