Strongly Correlated Verbs and Prepositions

Verbs such as

Strike down Shut up Tease out Work out

are tightly correlated with the preposition. There may be several hundred cases.

If there is a tightly collocated verb/preposition, there seems no need to create a prepositional chain, as it would be simpler to see the verb/preposition object and then the object of the verb. Similarly, it would be easier to collapse a participial and a preposition in a prepositional chain.

We can note the juxtaposition of verb or participle and preposition, check for a tight correlation and create a CollocatedPrepositional. When we have the verb, the CollocatedPrepositional and the object, we check that it matches the relation modelling, convert the verb and the prepositional into a verb, or turn it back into a prepositional if it does not match.

We have several cases

He struck down the statute – active verb

The statute was struck down – passive verb

He ended the case, striking down the statute in the process – present participle

The statute, struck down by the judge, was reinstated. – past participle

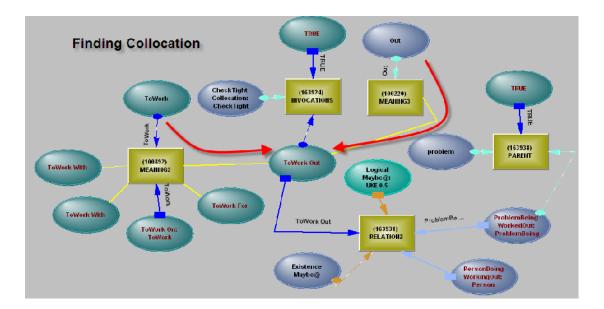
Striking down the statute was commendable. – participle as subject

We find the possibility of a collocation in the parse chain using

STRUCTURE1(CheckTightCollocation, {Participle, Preposition})

In "The person working on the problem", the structure would recognise "working" and "on" and create a CheckTightCollocation in the parse structure.

When the structure CheckTightCollocation is created, it uses the relation and preposition to look for a tight collocation. It moves up to the relation "ToWork" and the preposition "On" – the word objects in the parse chain are instantiations of the dictionary objects.



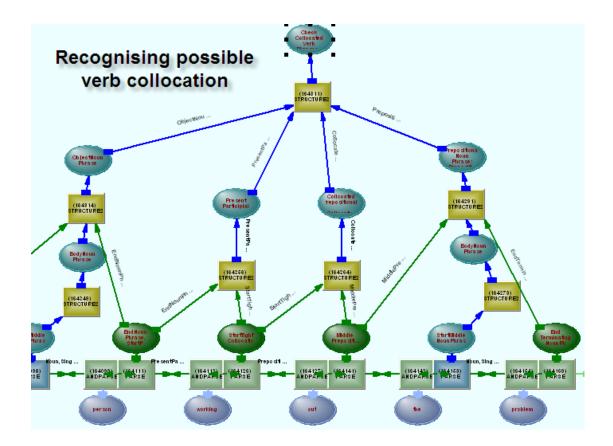
The particular collocation is an invocation of TightCollocation, so the prepositional becomes a CollocatedPrepositional – we cannot conclude it is verified until the semantic modelling around the collocation is checked, and for that we need the subject and object of the relation.

STRUCTURE1(CollocatedPrepositional, {StartTightCollocation, NOTWITH(MiddleBetweenAndPhrase, StartPrepositionalNounPhrase)})

When other structures around the collocation have been identified, a structure such as

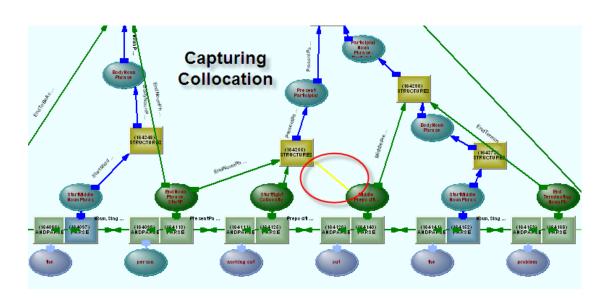
STRUCTURE1(CheckCollocatedVerbPhrase, {NounPhrase, PresentParticipial, CollocatedPrepositional, NounPhrase})

is used to check the collocation.



If the semantic modelling fails, CollocatedPrepositional is converted to Prepositional and the capture of the PrepositionalChain proceeds normally. If the modelling succeeds, then the CollocatedPrepositional is merged with the verb or participial, reducing the difficulty in later untangling the PrepositionalChain.

I



The CollocatedPreposiitonal object has been removed, and the "on" object has been merged with the PastParticipial. The PrepositionalNounPhrase has been converted to a ParticipialNounPhrase.

The example should make clear the tight integration of grammar and semantics, and the plasticity of the parse structure.

To close down

To count down

To cut down

To let down

To pull down

To run down

To set down

To shout down

To shut down

To strike down

To write down

To close up

To count up

To cut up

To face up

To free up

To freeze up

To give up

To hold up

To look up

To loosen up

To pay up

To put up

To put up with

To run up

To scale up

To seize up

To set up

To shore up

To shut up

To take up

To tee up

To throw up

To tighten up

To work up

To write up

To check out

To clear out (his desk)

To close out

To find out (clausal)

To freeze out

To give out

To hold out

To lock out

To pay out

To run out

To see out

To set out

To shout out

To shut out

To speak out

To strike out

To take out

To throw out

To try out

To turn out

To work out – (one meaning is clausal)

To write out

To give in

To lock in

To see in

To throw in

To fight over

To hold over

To start over

To run over

To take over (company)

To take over (task)

To force through

To see through

To slide through

To take through

To think through

To work through

To advise on

To go on

To take on

To wait on

To work on

To agree with

To cope with

To fight with

To work with (material)

To dispose of

To take charge of

To tire of

To see to

To be for

To find for

To fight for

To hope for To look for (the looked for gain) To seek for (the sought for benefits did not eventuate)

To be against To find against To fight against To set against

To set upon

To look after To seek after (the award was sought after by many)

Multiple Prepositions

It was disposed of by the gardener The matter was seen to without delay He tried out for the Braves The matter was taken charge of by John.