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<?xml version="1.0"?>
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This file contains a LIST of word entries. Each of these word entries is itself a LIST of word senses. Each word sense is a MAP of attributes, named as follows:

ReferenceType - STRING none|single|group - indicates whether this word refers, and to what

Ambiguous - BOOL true|false - refers unambiguously ('the') or ambiguously ('a')

FixedArity - BOOL true|false - does this entry have fixed or flexible arity

Arity - INT 0-2 - for a flexible arity entry, the number of arguments

LeftArity - INT 0-2 - for a fixed arity entry, the number of arguments on the left

RightArity - INT 0-2 - for a fixed arity entry, the number of arguments on the right

Composer - MAP - the composer attached to this sense

Composers can be of the following types (stored in STRING attribute with name Type), taking the following arguments:

PassThroughSemanticComposer - passes its argument through intact

BackReferenceSemanticComposer - refers back to the last object selected

OrderingSemanticComposer - orders objects, picks amongst them

Pick - STRING max|min|middle - where to find the most likely object

Dimensions - LIST of INT - the indices into the feature dimensions to use for the ordering

Feature - STRING - the name of the feature to use

ProbAttributeSemanticComposer - applies multidimensional Gaussian

Filename - STRING - file to read Normal from

SelectingSemanticComposer - tries to find the best reference at this point

ModifyingSemanticComposer - applies one of its arguments to the other

Forward - BOOL - apply argument the right to the left argument, or else the left to the right

GroupingSemanticComposer - group objects

GroupSize - INT - size of groups to look for, -1 for any size

SpatialSemanticComposer - applies Regier's AVS

SpatialFeatureIndex - INT 0-3 - specifies which element of the computed AVS to use

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<CPF>
  <MAP>
    <LIST NAME="Lexicon">
      <LIST NAME="above">
        <MAP>
          <BOOL NAME="Ambiguous" VALUE="true"/>
          <INT NAME="Arity" VALUE="0"/>
          <MAP NAME="Composer">
            <INT NAME="SpatialFeatureIndex" VALUE="0"/>
            <STRING NAME="Type" VALUE="SpatialSemanticComposer"/>
          </MAP>
          <BOOL NAME="FixedArity" VALUE="true"/>
          <INT NAME="LeftArity" VALUE="1"/>
          <STRING NAME="POS" VALUE="P"/>
          <STRING NAME="ReferenceType" VALUE="none"/>
          <INT NAME="RightArity" VALUE="1"/>
        </MAP>
      </LIST>
      <LIST NAME="after">
        <MAP>
          <BOOL NAME="Ambiguous" VALUE="true"/>
          <INT NAME="Arity" VALUE="0"/>
          <MAP NAME="Composer">
            <INT NAME="SpatialFeatureIndex" VALUE="0"/>
            <STRING NAME="Type" VALUE="SpatialSemanticComposer"/>
          </MAP>
          <BOOL NAME="FixedArity" VALUE="true"/>
          <INT NAME="LeftArity" VALUE="1"/>
          <STRING NAME="POS" VALUE="P"/>
          <STRING NAME="ReferenceType" VALUE="none"/>
          <INT NAME="RightArity" VALUE="1"/>
        </MAP>
      </LIST>
      <LIST NAME="at">
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          <INT NAME="Arity" VALUE="0"/>
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            <BOOL NAME="Forward" VALUE="false"/>
            <STRING NAME="Type" VALUE="ModifyingSemanticComposer"/>
          </MAP>
          <BOOL NAME="FixedArity" VALUE="true"/>
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          <STRING NAME="POS" VALUE="PAT"/>
          <STRING NAME="ReferenceType" VALUE="none"/>
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  </MAP>

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    <INT NAME="RightArity" VALUE="1"/>
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</LIST>
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    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
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      </LIST>
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      <STRING NAME="Pick" VALUE="max"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
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    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
        <INT VALUE="1"/>
      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="max"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>

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    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
        <INT VALUE="1"/>
      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="max"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
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    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
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      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="max"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
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  </MAP>
</LIST>
<LIST NAME="behind">
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    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
      <INT NAME="SpatialFeatureIndex" VALUE="0"/>
      <STRING NAME="Type" VALUE="SpatialSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="true"/>

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    <INT NAME="LeftArity" VALUE="1"/>
    <STRING NAME="POS" VALUE="P"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="1"/>
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</LIST>
<LIST NAME="below">
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    <BOOL NAME="Ambiguous" VALUE="true"/>
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    <MAP NAME="Composer">
      <INT NAME="SpatialFeatureIndex" VALUE="1"/>
      <STRING NAME="Type" VALUE="SpatialSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="true"/>
    <INT NAME="LeftArity" VALUE="1"/>
    <STRING NAME="POS" VALUE="P"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
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  </MAP>
</LIST>
<LIST NAME="bottom">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
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      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="min"/>
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      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
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  </MAP>
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">

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        <INT VALUE="1"/>
    </LIST>
    <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
    <STRING NAME="Pick" VALUE="min"/>
    <BOOL NAME="Relative" VALUE="true"/>
    <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
</MAP>
<BOOL NAME="FixedArity" VALUE="false"/>
<INT NAME="LeftArity" VALUE="0"/>
<STRING NAME="POS" VALUE="ADJ"/>
<STRING NAME="ReferenceType" VALUE="none"/>
<INT NAME="RightArity" VALUE="0"/>
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</LIST>
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        <INT NAME="Arity" VALUE="1"/>
        <MAP NAME="Composer">
            <LIST NAME="Dimensions">
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            </LIST>
            <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
            <STRING NAME="Pick" VALUE="min"/>
            <BOOL NAME="Relative" VALUE="true"/>
            <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
        </MAP>
        <BOOL NAME="FixedArity" VALUE="false"/>
        <INT NAME="LeftArity" VALUE="0"/>
        <STRING NAME="POS" VALUE="ADJ"/>
        <STRING NAME="ReferenceType" VALUE="none"/>
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    </MAP>
</LIST>
<LIST NAME="centre">
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        <INT NAME="Arity" VALUE="1"/>
        <MAP NAME="Composer">
            <LIST NAME="Dimensions">
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                <INT VALUE="1"/>
            </LIST>
            <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
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        <BOOL NAME="Relative" VALUE="false"/>
        <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
</MAP>
<MAP>
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    <MAP NAME="Composer">
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            <INT VALUE="1"/>
        </LIST>
        <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
        <STRING NAME="Pick" VALUE="middle"/>
        <BOOL NAME="Relative" VALUE="false"/>
        <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
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</LIST>
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    <MAP>
        <BOOL NAME="Ambiguous" VALUE="true"/>
        <INT NAME="Arity" VALUE="1"/>
        <MAP NAME="Composer">
            <LIST NAME="Dimensions">
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                <INT VALUE="1"/>
            </LIST>
            <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
            <STRING NAME="Pick" VALUE="middle"/>
            <BOOL NAME="Relative" VALUE="false"/>
            <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
        </MAP>
        <BOOL NAME="FixedArity" VALUE="false"/>
        <INT NAME="LeftArity" VALUE="0"/>

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    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
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</LIST>
<LIST NAME="centremost">
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    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
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        <INT VALUE="1"/>
      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="middle"/>
      <BOOL NAME="Relative" VALUE="false"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
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    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
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      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="min"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>

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</LIST>
<LIST NAME="column">
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      <STRING NAME="Type" VALUE="PassThroughSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
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  </MAP>
</LIST>
<LIST NAME="cone">
  <MAP>
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    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
      <STRING NAME="Type" VALUE="PassThroughSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="single"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="cones">
  <MAP>
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    <MAP NAME="Composer">
      <STRING NAME="Type" VALUE="PassThroughSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="group"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="corner">
  <MAP>

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    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <STRING NAME="Type" VALUE="PassThroughSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="east">
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    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
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      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="max"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
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  </MAP>
</LIST>
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    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
        <INT VALUE="1"/>
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      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="min"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>

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    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
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      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="min"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
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    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
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    <MAP NAME="Composer">
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      </LIST>
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      <STRING NAME="Pick" VALUE="min"/>
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      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
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    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
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  <MAP>
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    <INT NAME="Arity" VALUE="0"/>

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    <MAP NAME="Composer">
      <INT NAME="SpatialFeatureIndex" VALUE="1"/>
      <STRING NAME="Type" VALUE="SpatialSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="true"/>
    <INT NAME="LeftArity" VALUE="1"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="1"/>
  </MAP>
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    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
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      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="min"/>
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      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
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    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
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</LIST>
<LIST NAME="green">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <STRING NAME="Filename" VALUE="green.gauss"/>
      <STRING NAME="Type" VALUE="ProbAttributeSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="CAJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>

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<MAP>
  <BOOL NAME="Ambiguous" VALUE="true"/>
  <INT NAME="Arity" VALUE="0"/>
  <MAP NAME="Composer">
    <STRING NAME="Filename" VALUE="green.gauss"/>
    <STRING NAME="Type" VALUE="ProbAttributeSemanticComposer"/>
  </MAP>
  <BOOL NAME="FixedArity" VALUE="false"/>
  <INT NAME="LeftArity" VALUE="0"/>
  <STRING NAME="POS" VALUE="N"/>
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  <INT NAME="RightArity" VALUE="0"/>
</MAP>
</LIST>
<LIST NAME="greens">
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    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
      <STRING NAME="Filename" VALUE="green.gauss"/>
      <STRING NAME="Type" VALUE="ProbAttributeSemanticComposer"/>
    </MAP>
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    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="group"/>
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  </MAP>
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      <STRING NAME="Type" VALUE="GroupingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
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  </MAP>
</LIST>
<LIST NAME="in">

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<MAP>
  <BOOL NAME="Ambiguous" VALUE="true"/>
  <INT NAME="Arity" VALUE="0"/>
  <MAP NAME="Composer">
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    <STRING NAME="Type" VALUE="ModifyingSemanticComposer"/>
  </MAP>
  <BOOL NAME="FixedArity" VALUE="true"/>
  <INT NAME="LeftArity" VALUE="1"/>
  <STRING NAME="POS" VALUE="PIN"/>
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  <INT NAME="RightArity" VALUE="1"/>
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  <MAP NAME="Composer">
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    <STRING NAME="Type" VALUE="ModifyingSemanticComposer"/>
  </MAP>
  <BOOL NAME="FixedArity" VALUE="true"/>
  <INT NAME="LeftArity" VALUE="1"/>
  <STRING NAME="POS" VALUE="PIN"/>
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  <INT NAME="RightArity" VALUE="1"/>
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</LIST>
<LIST NAME="is">
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    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
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    </MAP>
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    <STRING NAME="POS" VALUE="VPRES"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
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    <INT NAME="Arity" VALUE="0"/>

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    <MAP NAME="Composer">
      <STRING NAME="Type" VALUE="BackReferenceSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
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    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="single"/>
    <INT NAME="RightArity" VALUE="0"/>
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      <BOOL NAME="Forward" VALUE="false"/>
      <STRING NAME="Type" VALUE="ModifyingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="true"/>
    <INT NAME="LeftArity" VALUE="1"/>
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  </MAP>
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    <MAP NAME="Composer">
      <STRING NAME="Type" VALUE="PassThroughSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="SPEC"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="left">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">

```

```

        <INT VALUE="0"/>
    </LIST>
    <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
    <STRING NAME="Pick" VALUE="min"/>
    <BOOL NAME="Relative" VALUE="true"/>
    <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
</MAP>
<BOOL NAME="FixedArity" VALUE="false"/>
<INT NAME="LeftArity" VALUE="0"/>
<STRING NAME="POS" VALUE="N"/>
<STRING NAME="ReferenceType" VALUE="none"/>
<INT NAME="RightArity" VALUE="0"/>
</MAP>
<MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
        <LIST NAME="Dimensions">
            <INT VALUE="0"/>
        </LIST>
        <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
        <STRING NAME="Pick" VALUE="min"/>
        <BOOL NAME="Relative" VALUE="true"/>
        <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
</MAP>
<MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
        <INT NAME="SpatialFeatureIndex" VALUE="2"/>
        <STRING NAME="Type" VALUE="SpatialSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="true"/>
    <INT NAME="LeftArity" VALUE="1"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="1"/>
</MAP>
</LIST>

```



```

<LIST NAME="leftmost">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
        <INT VALUE="0"/>
      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="min"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="lower">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
        <INT VALUE="1"/>
      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="min"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="lowest">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">

```

```

    <LIST NAME="Dimensions">
      <INT VALUE="1"/>
    </LIST>
    <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
    <STRING NAME="Pick" VALUE="min"/>
    <BOOL NAME="Relative" VALUE="true"/>
    <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
  </MAP>
  <BOOL NAME="FixedArity" VALUE="false"/>
  <INT NAME="LeftArity" VALUE="0"/>
  <STRING NAME="POS" VALUE="ADJ"/>
  <STRING NAME="ReferenceType" VALUE="none"/>
  <INT NAME="RightArity" VALUE="0"/>
</MAP>
<MAP>
  <BOOL NAME="Ambiguous" VALUE="true"/>
  <INT NAME="Arity" VALUE="1"/>
  <MAP NAME="Composer">
    <LIST NAME="Dimensions">
      <INT VALUE="1"/>
    </LIST>
    <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
    <STRING NAME="Pick" VALUE="min"/>
    <BOOL NAME="Relative" VALUE="true"/>
    <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
  </MAP>
  <BOOL NAME="FixedArity" VALUE="false"/>
  <INT NAME="LeftArity" VALUE="0"/>
  <STRING NAME="POS" VALUE="N"/>
  <STRING NAME="ReferenceType" VALUE="none"/>
  <INT NAME="RightArity" VALUE="0"/>
</MAP>
</LIST>
<LIST NAME="middle">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
        <INT VALUE="0"/>
        <INT VALUE="1"/>
      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="middle"/>
      <BOOL NAME="Relative" VALUE="false"/>

```

```

        <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
</MAP>
<MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
        <LIST NAME="Dimensions">
            <INT VALUE="0"/>
            <INT VALUE="1"/>
        </LIST>
        <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
        <STRING NAME="Pick" VALUE="middle"/>
        <BOOL NAME="Relative" VALUE="false"/>
        <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
</MAP>
</LIST>
<LIST NAME="north">
    <MAP>
        <BOOL NAME="Ambiguous" VALUE="true"/>
        <INT NAME="Arity" VALUE="1"/>
        <MAP NAME="Composer">
            <LIST NAME="Dimensions">
                <INT VALUE="1"/>
            </LIST>
            <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
            <STRING NAME="Pick" VALUE="max"/>
            <BOOL NAME="Relative" VALUE="true"/>
            <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
        </MAP>
        <BOOL NAME="FixedArity" VALUE="false"/>
        <INT NAME="LeftArity" VALUE="0"/>
        <STRING NAME="POS" VALUE="ADJ"/>
        <STRING NAME="ReferenceType" VALUE="none"/>

```

```

        <INT NAME="RightArity" VALUE="0"/>
    </MAP>
</LIST>
<LIST NAME="of">
    <MAP>
        <BOOL NAME="Ambiguous" VALUE="true"/>
        <INT NAME="Arity" VALUE="0"/>
        <MAP NAME="Composer">
            <BOOL NAME="Forward" VALUE="true"/>
            <STRING NAME="Type" VALUE="ModifyingSemanticComposer"/>
        </MAP>
        <BOOL NAME="FixedArity" VALUE="true"/>
        <INT NAME="LeftArity" VALUE="1"/>
        <STRING NAME="POS" VALUE="POF"/>
        <STRING NAME="ReferenceType" VALUE="none"/>
        <INT NAME="RightArity" VALUE="1"/>
    </MAP>
</LIST>
<LIST NAME="on">
    <MAP>
        <BOOL NAME="Ambiguous" VALUE="true"/>
        <INT NAME="Arity" VALUE="0"/>
        <MAP NAME="Composer">
            <BOOL NAME="Forward" VALUE="false"/>
            <STRING NAME="Type" VALUE="ModifyingSemanticComposer"/>
        </MAP>
        <BOOL NAME="FixedArity" VALUE="true"/>
        <INT NAME="LeftArity" VALUE="1"/>
        <STRING NAME="POS" VALUE="P"/>
        <STRING NAME="ReferenceType" VALUE="none"/>
        <INT NAME="RightArity" VALUE="1"/>
    </MAP>
</LIST>
<LIST NAME="one">
    <MAP>
        <BOOL NAME="Ambiguous" VALUE="true"/>
        <INT NAME="Arity" VALUE="0"/>
        <MAP NAME="Composer">
            <STRING NAME="Type" VALUE="PassThroughSemanticComposer"/>
        </MAP>
        <BOOL NAME="FixedArity" VALUE="false"/>
        <INT NAME="LeftArity" VALUE="0"/>
        <STRING NAME="POS" VALUE="N"/>
        <STRING NAME="ReferenceType" VALUE="single"/>
        <INT NAME="RightArity" VALUE="0"/>
    </MAP>
</LIST>

```

```

    </MAP>
</LIST>
<LIST NAME="ones">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
      <STRING NAME="Type" VALUE="PassThroughSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="group"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="pair">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <INT NAME="GroupSize" VALUE="2"/>
      <STRING NAME="Type" VALUE="GroupingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
      <INT NAME="GroupSize" VALUE="2"/>
      <STRING NAME="Type" VALUE="GroupingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="previous">

```

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<MAP>
  <BOOL NAME="Ambiguous" VALUE="true"/>
  <INT NAME="Arity" VALUE="1"/>
  <MAP NAME="Composer">
    <STRING NAME="Type" VALUE="BackReferenceSemanticComposer"/>
  </MAP>
  <BOOL NAME="FixedArity" VALUE="false"/>
  <INT NAME="LeftArity" VALUE="0"/>
  <STRING NAME="POS" VALUE="ADJ"/>
  <STRING NAME="ReferenceType" VALUE="none"/>
  <INT NAME="RightArity" VALUE="0"/>
</MAP>
</LIST>
<LIST NAME="purple">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <STRING NAME="Filename" VALUE="purple.gauss"/>
      <STRING NAME="Type" VALUE="ProbAttributeSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="CADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
      <STRING NAME="Filename" VALUE="purple.gauss"/>
      <STRING NAME="Type" VALUE="ProbAttributeSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="single"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="purples">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="0"/>

```

```

    <MAP NAME="Composer">
      <STRING NAME="Filename" VALUE="purple.gauss"/>
      <STRING NAME="Type" VALUE="ProbAttributeSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="group"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="pyramid">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
      <STRING NAME="Type" VALUE="PassThroughSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="single"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="rear">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
        <INT VALUE="1"/>
      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="max"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
<MAP>

```

```

    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
        <INT VALUE="1"/>
      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="max"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="rearmost">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
        <INT VALUE="1"/>
      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="max"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="rectangle">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
      <STRING NAME="Type" VALUE="PassThroughSemanticComposer"/>
    </MAP>
  </MAP>

```



```

        <BOOL NAME="FixedArity" VALUE="false"/>
        <INT NAME="LeftArity" VALUE="0"/>
        <STRING NAME="POS" VALUE="N"/>
        <STRING NAME="ReferenceType" VALUE="single"/>
        <INT NAME="RightArity" VALUE="0"/>
    </MAP>
</LIST>
<LIST NAME="right">
    <MAP>
        <BOOL NAME="Ambiguous" VALUE="true"/>
        <INT NAME="Arity" VALUE="1"/>
        <MAP NAME="Composer">
            <LIST NAME="Dimensions">
                <INT VALUE="0"/>
            </LIST>
            <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
            <STRING NAME="Pick" VALUE="max"/>
            <BOOL NAME="Relative" VALUE="true"/>
            <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
        </MAP>
        <BOOL NAME="FixedArity" VALUE="false"/>
        <INT NAME="LeftArity" VALUE="0"/>
        <STRING NAME="POS" VALUE="N"/>
        <STRING NAME="ReferenceType" VALUE="none"/>
        <INT NAME="RightArity" VALUE="0"/>
    </MAP>
    <MAP>
        <BOOL NAME="Ambiguous" VALUE="true"/>
        <INT NAME="Arity" VALUE="1"/>
        <MAP NAME="Composer">
            <LIST NAME="Dimensions">
                <INT VALUE="0"/>
            </LIST>
            <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
            <STRING NAME="Pick" VALUE="max"/>
            <BOOL NAME="Relative" VALUE="true"/>
            <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
        </MAP>
        <BOOL NAME="FixedArity" VALUE="false"/>
        <INT NAME="LeftArity" VALUE="0"/>
        <STRING NAME="POS" VALUE="ADJ"/>
        <STRING NAME="ReferenceType" VALUE="none"/>
        <INT NAME="RightArity" VALUE="0"/>
    </MAP>
</MAP>

```

```

    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
        <INT NAME="SpatialFeatureIndex" VALUE="3"/>
        <STRING NAME="Type" VALUE="SpatialSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="true"/>
    <INT NAME="LeftArity" VALUE="1"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="1"/>
</MAP>
<MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
        <STRING NAME="Type" VALUE="PassThroughSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="SPEC"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
</MAP>
</LIST>
<LIST NAME="rightmost">
    <MAP>
        <BOOL NAME="Ambiguous" VALUE="true"/>
        <INT NAME="Arity" VALUE="1"/>
        <MAP NAME="Composer">
            <LIST NAME="Dimensions">
                <INT VALUE="0"/>
            </LIST>
            <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
            <STRING NAME="Pick" VALUE="max"/>
            <BOOL NAME="Relative" VALUE="true"/>
            <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
        </MAP>
        <BOOL NAME="FixedArity" VALUE="false"/>
        <INT NAME="LeftArity" VALUE="0"/>
        <STRING NAME="POS" VALUE="ADJ"/>
        <STRING NAME="ReferenceType" VALUE="none"/>
        <INT NAME="RightArity" VALUE="0"/>
    </MAP>
</LIST>

```

```

<LIST NAME="row">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <STRING NAME="Type" VALUE="PassThroughSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="side">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <STRING NAME="Type" VALUE="PassThroughSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="south">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
        <INT VALUE="1"/>
      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="min"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
  </MAP>
</LIST>

```

```

    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="starboard">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
        <INT VALUE="0"/>
      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="max"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="that">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
      <BOOL NAME="Forward" VALUE="false"/>
      <STRING NAME="Type" VALUE="ModifyingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="true"/>
    <INT NAME="LeftArity" VALUE="1"/>
    <STRING NAME="POS" VALUE="REL"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="1"/>
  </MAP>
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="false"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <STRING NAME="Type" VALUE="BackReferenceSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
  </MAP>

```

```

    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="false"/>
    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
      <STRING NAME="Type" VALUE="BackReferenceSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="single"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="that's">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
      <BOOL NAME="Forward" VALUE="false"/>
      <STRING NAME="Type" VALUE="ModifyingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="true"/>
    <INT NAME="LeftArity" VALUE="1"/>
    <STRING NAME="POS" VALUE="RELVPRES"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="1"/>
  </MAP>
</LIST>
<LIST NAME="the">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="false"/>
    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
      <STRING NAME="Type" VALUE="SelectingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="true"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ART"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="1"/>
  </MAP>

```

```

<MAP>
  <BOOL NAME="Ambiguous" VALUE="true"/>
  <INT NAME="Arity" VALUE="1"/>
  <MAP NAME="Composer">
    <STRING NAME="Type" VALUE="PassThroughSemanticComposer"/>
  </MAP>
  <BOOL NAME="FixedArity" VALUE="false"/>
  <INT NAME="LeftArity" VALUE="0"/>
  <STRING NAME="POS" VALUE="SPEC"/>
  <STRING NAME="ReferenceType" VALUE="none"/>
  <INT NAME="RightArity" VALUE="0"/>
</MAP>
</LIST>
<LIST NAME="three">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <INT NAME="GroupSize" VALUE="3"/>
      <STRING NAME="Type" VALUE="GroupingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <INT NAME="GroupSize" VALUE="3"/>
      <STRING NAME="Type" VALUE="GroupingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
      <INT NAME="GroupSize" VALUE="3"/>

```

```

        <STRING NAME="Type" VALUE="GroupingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="group"/>
    <INT NAME="RightArity" VALUE="0"/>
</MAP>
</LIST>
<LIST NAME="to">
    <MAP>
        <BOOL NAME="Ambiguous" VALUE="true"/>
        <INT NAME="Arity" VALUE="0"/>
        <MAP NAME="Composer">
            <BOOL NAME="Forward" VALUE="false"/>
            <STRING NAME="Type" VALUE="ModifyingSemanticComposer"/>
        </MAP>
        <BOOL NAME="FixedArity" VALUE="true"/>
        <INT NAME="LeftArity" VALUE="1"/>
        <STRING NAME="POS" VALUE="P"/>
        <STRING NAME="ReferenceType" VALUE="none"/>
        <INT NAME="RightArity" VALUE="1"/>
    </MAP>
</LIST>
<LIST NAME="top">
    <MAP>
        <BOOL NAME="Ambiguous" VALUE="true"/>
        <INT NAME="Arity" VALUE="1"/>
        <MAP NAME="Composer">
            <LIST NAME="Dimensions">
                <INT VALUE="1"/>
            </LIST>
            <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
            <STRING NAME="Pick" VALUE="max"/>
            <BOOL NAME="Relative" VALUE="true"/>
            <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
        </MAP>
        <BOOL NAME="FixedArity" VALUE="false"/>
        <INT NAME="LeftArity" VALUE="0"/>
        <STRING NAME="POS" VALUE="ADJ"/>
        <STRING NAME="ReferenceType" VALUE="none"/>
        <INT NAME="RightArity" VALUE="0"/>
    </MAP>
    <MAP>
        <BOOL NAME="Ambiguous" VALUE="true"/>

```

```

<INT NAME="Arity" VALUE="1"/>
<MAP NAME="Composer">
  <LIST NAME="Dimensions">
    <INT VALUE="1"/>
  </LIST>
  <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
  <STRING NAME="Pick" VALUE="max"/>
  <BOOL NAME="Relative" VALUE="true"/>
  <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
</MAP>
<BOOL NAME="FixedArity" VALUE="false"/>
<INT NAME="LeftArity" VALUE="0"/>
<STRING NAME="POS" VALUE="N"/>
<STRING NAME="ReferenceType" VALUE="none"/>
<INT NAME="RightArity" VALUE="0"/>
</MAP>
</LIST>
<LIST NAME="topmost">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
        <INT VALUE="1"/>
      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="max"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="towards">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
      <BOOL NAME="Forward" VALUE="false"/>
      <STRING NAME="Type" VALUE="ModifyingSemanticComposer"/>
    </MAP>
  </MAP>

```



```

        <BOOL NAME="FixedArity" VALUE="true"/>
        <INT NAME="LeftArity" VALUE="1"/>
        <STRING NAME="POS" VALUE="P"/>
        <STRING NAME="ReferenceType" VALUE="none"/>
        <INT NAME="RightArity" VALUE="1"/>
    </MAP>
</LIST>
<LIST NAME="triangle">
    <MAP>
        <BOOL NAME="Ambiguous" VALUE="true"/>
        <INT NAME="Arity" VALUE="0"/>
        <MAP NAME="Composer">
            <STRING NAME="Type" VALUE="PassThroughSemanticComposer"/>
        </MAP>
        <BOOL NAME="FixedArity" VALUE="false"/>
        <INT NAME="LeftArity" VALUE="0"/>
        <STRING NAME="POS" VALUE="N"/>
        <STRING NAME="ReferenceType" VALUE="single"/>
        <INT NAME="RightArity" VALUE="0"/>
    </MAP>
</LIST>
<LIST NAME="two">
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        <BOOL NAME="Ambiguous" VALUE="true"/>
        <INT NAME="Arity" VALUE="1"/>
        <MAP NAME="Composer">
            <INT NAME="GroupSize" VALUE="2"/>
            <STRING NAME="Type" VALUE="GroupingSemanticComposer"/>
        </MAP>
        <BOOL NAME="FixedArity" VALUE="false"/>
        <INT NAME="LeftArity" VALUE="0"/>
        <STRING NAME="POS" VALUE="ADJ"/>
        <STRING NAME="ReferenceType" VALUE="none"/>
        <INT NAME="RightArity" VALUE="0"/>
    </MAP>
    <MAP>
        <BOOL NAME="Ambiguous" VALUE="true"/>
        <INT NAME="Arity" VALUE="1"/>
        <MAP NAME="Composer">
            <INT NAME="GroupSize" VALUE="2"/>
            <STRING NAME="Type" VALUE="GroupingSemanticComposer"/>
        </MAP>
        <BOOL NAME="FixedArity" VALUE="false"/>
        <INT NAME="LeftArity" VALUE="0"/>
        <STRING NAME="POS" VALUE="N"/>

```

```

    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="0"/>
    <MAP NAME="Composer">
      <INT NAME="GroupSize" VALUE="2"/>
      <STRING NAME="Type" VALUE="GroupingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="N"/>
    <STRING NAME="ReferenceType" VALUE="group"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="upper">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
        <INT VALUE="1"/>
      </LIST>
      <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
      <STRING NAME="Pick" VALUE="max"/>
      <BOOL NAME="Relative" VALUE="true"/>
      <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
  </MAP>
</LIST>
<LIST NAME="uppermost">
  <MAP>
    <BOOL NAME="Ambiguous" VALUE="true"/>
    <INT NAME="Arity" VALUE="1"/>
    <MAP NAME="Composer">
      <LIST NAME="Dimensions">
        <INT VALUE="1"/>
      </LIST>

```

```

        <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
        <STRING NAME="Pick" VALUE="max"/>
        <BOOL NAME="Relative" VALUE="true"/>
        <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
    </MAP>
    <BOOL NAME="FixedArity" VALUE="false"/>
    <INT NAME="LeftArity" VALUE="0"/>
    <STRING NAME="POS" VALUE="ADJ"/>
    <STRING NAME="ReferenceType" VALUE="none"/>
    <INT NAME="RightArity" VALUE="0"/>
</MAP>
</LIST>
<LIST NAME="west">
    <MAP>
        <BOOL NAME="Ambiguous" VALUE="true"/>
        <INT NAME="Arity" VALUE="1"/>
        <MAP NAME="Composer">
            <LIST NAME="Dimensions">
                <INT VALUE="0"/>
            </LIST>
            <STRING NAME="Feature" VALUE="CENTRE_OF_MASS"/>
            <STRING NAME="Pick" VALUE="min"/>
            <BOOL NAME="Relative" VALUE="true"/>
            <STRING NAME="Type" VALUE="OrderingSemanticComposer"/>
        </MAP>
        <BOOL NAME="FixedArity" VALUE="false"/>
        <INT NAME="LeftArity" VALUE="0"/>
        <STRING NAME="POS" VALUE="ADJ"/>
        <STRING NAME="ReferenceType" VALUE="none"/>
        <INT NAME="RightArity" VALUE="0"/>
    </MAP>
</LIST>
<LIST NAME="which">
    <MAP>
        <BOOL NAME="Ambiguous" VALUE="true"/>
        <INT NAME="Arity" VALUE="0"/>
        <MAP NAME="Composer">
            <BOOL NAME="Forward" VALUE="false"/>
            <STRING NAME="Type" VALUE="ModifyingSemanticComposer"/>
        </MAP>
        <BOOL NAME="FixedArity" VALUE="true"/>
        <INT NAME="LeftArity" VALUE="1"/>
        <STRING NAME="POS" VALUE="REL"/>
        <STRING NAME="ReferenceType" VALUE="none"/>
        <INT NAME="RightArity" VALUE="1"/>
    </MAP>
</LIST>

```

```
</MAP>  
</LIST>  
</LIST>  
</MAP>  
</CPF>
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