

Saxon - Bug #4562

java.lang.UnsupportedOperationException relating to typing of template parameters

2020-05-28 00:41 - Peter Charles

Status:	Duplicate	Start date:	2020-05-27
Priority:	Low	Due date:	
Assignee:		% Done:	0%
Category:		Estimated time:	0:00 hour
Sprint/Milestone:		Spent time:	0:00 hour
Legacy ID:		Fix Committed on	
Applies to branch:		Branch:	
		Fixed in Maintenance	
		Release:	

Description

The following input xml and stylesheet work fine in saxon-he-9.x and 10.0, but fail in 10.1 when the param level has 1 subtracted the following error is generated:

```
java.lang.UnsupportedOperationException at
net.sf.saxon.value.UntypedAtomicValue.copyAsSubType(UntypedAtomicValue.java:46) at
net.sf.saxon.type.Converter$UpCastingConverter.convert(Converter.java:188) at
net.sf.saxon.type.Converter$UpCastingConverter.convert(Converter.java:180) at
net.sf.saxon.expr.CastExpression.doCast(CastExpression.java:376) at
net.sf.saxon.expr.CastExpression.evaluateItem(CastExpression.java:395) at
net.sf.saxon.expr.CastExpression.evaluateItem(CastExpression.java:30) at
net.sf.saxon.expr.ValueComparison.effectiveBooleanValue(ValueComparison.java:347) at
net.sf.saxon.expr.instruct.Choose.choose(Choose.java:946) at
net.sf.saxon.expr.instruct.Choose.processLeavingTail(Choose.java:920) at
net.sf.saxon.expr.instruct.Block.processLeavingTail(Block.java:736) at
net.sf.saxon.expr.instruct.TemplateRule.applyLeavingTail(TemplateRule.java:374) at
net.sf.saxon.trans.Mode.applyTemplates(Mode.java:555) at
net.sf.saxon.expr.instruct.ApplyTemplates$ApplyTemplatesPackage.processLeavingTail(ApplyTemplates.java:562) at
net.sf.saxon.trans.Mode.applyTemplates(Mode.java:473) at net.sf.saxon.trans.XsltController.applyTemplates(XsltController.java:659)
at net.sf.saxon.s9api.AbstractXsltTransformer.applyTemplatesToSource(AbstractXsltTransformer.java:360) at
net.sf.saxon.s9api.Xslt30Transformer.applyTemplates(Xslt30Transformer.java:285) at
net.sf.saxon.Transform.processFile(Transform.java:1313) at net.sf.saxon.Transform.doTransform(Transform.java:853) at
net.sf.saxon.Transform.main(Transform.java:82)
```

XML Input

```
<?xml version="1.0" encoding="UTF-8"?>
<test>
  <ol>
    <li data-list-id="0" data-list-level="0">
      <div>level one</div>
      <ol>
        <li data-list-id="1" data-list-level="0">
          <div>level two</div>
          <ol>
            <li data-list-id="1" data-list-level="1">
              <div>level three</div>
            </li>
          </ol>
        </li>
      </ol>
    </li>
  </ol>
</test>
```

STYLESHEET

```
<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform" version="3" xmlns:xs="http://www
.w3.org/2001/XMLSchema">
  <xsl:template match="/">
    <xsl:apply-templates select="descendant::li[not(ol)]"/>
  </xsl:template>
  <xsl:template match="li[not(ol)]">
    <xsl:call-template name="analyze-list">
      <xsl:with-param name="id" select="@data-list-id"/>
      <xsl:with-param name="level" select="@data-list-level"/>
      <xsl:with-param name="count">0</xsl:with-param>
    </xsl:call-template>
  </xsl:template>
  <xsl:template name="analyze-list">
    <xsl:param name="id"/>
    <xsl:param name="count"/>
    <xsl:param name="level"/>
    <xsl:apply-templates select="ancestor::li[1]" mode="analyze">
      <xsl:with-param name="level" select="@data-list-level"/>
    </xsl:apply-templates>
  </xsl:template>
  <xsl:template match="li" mode="analyze">
    <xsl:param name="level"/>
    <xsl:choose>
      <!-- works
      <xsl:when test="@data-list-level = xs:integer($level) - 1"> -->
      <!-- fails -->
      <xsl:when test="@data-list-level = ($level - 1)">
      <!-- works
      <xsl:when test="$level = (@data-list-level + 1)"> -->
      <xsl:element name="fail"/>
    </xsl:when>
    <xsl:otherwise>
      <xsl:element name="list-depth">
        <xsl:attribute name="count" select="$level+1"/>
      </xsl:element>
    </xsl:otherwise>
  </xsl:choose>
</xsl:template>
<xsl:template match="@*|node()">
  <xsl:apply-templates select="@*|node()"/>
</xsl:template>
</xsl:stylesheet>
```

History

#1 - 2020-05-28 09:35 - Michael Kay

This looks likely to be a duplicate of bug [#4556](#), but I will check.

#2 - 2020-07-26 15:42 - Michael Kay

- Status changed from New to Duplicate