

The Edge of Chaos: Where Syntax Ends and Interpretation Begins

Understanding where syntax ends and interpretation begins is perhaps the most important lesson to be learned when using XML. And not understanding that boundary is a common source of error. Let's take some typical examples.

XML attributes are metadata.

Is that a rule of XML or is it an interpretation of XML?

It is an interpretation. The XML specification defines attributes as: *Attributes are used to associate name-value pairs with elements.* It says nothing about attributes being metadata. Thus, it is an interpretation.

Let's take another example:

The scope of an XML attribute is from its start tag to its end tag.

Is that a rule of XML or is it an interpretation of XML?

Again, it is an interpretation. The XML specification says nothing about attributes having scope or attributes being "attached" to elements.

The rules for what are and are not well-formed XML documents are precisely specified. So precisely specified, in fact, the determination of whether a document has "the XML form" can be carried out in a mechanical process. XML is about form (syntax).

Likewise, the rules for determining whether an XML document has a form that conforms to an XML Schema (or Relax NG schema or DTD) is precisely specified. XML Schema is also about form or syntax. XML and XML Schema is a very orderly universe. There is no fuzziness.

However, once you go beyond specifying form you enter the realm of interpretation. Here humans play a key role. And humans rarely, if ever, interpret the same thing the same way. This universe is not so orderly. There is fuzziness. In fact, it is rather chaotic.

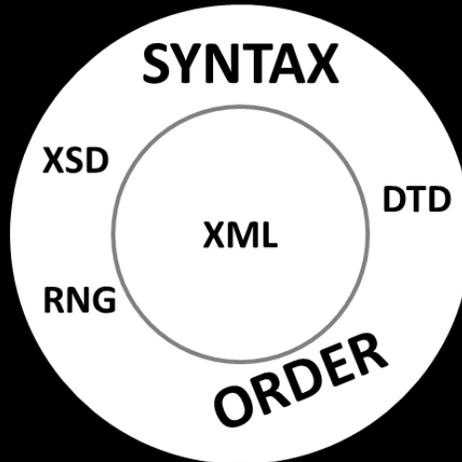
Here is a graphic to illustrate this:

INTERPRETATION

attributes mean metadata

attributes have scope

CHAOS



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