From GoodRelations Wiki

GoodRelations and Microdata Syntax

While many Web vocabularies are tied to a single syntax,
GoodRelations can be used in a variety of syntaxes, namely

- RDFa,
- Microdata,
- Turtle (RDF),
- RDF/XML (RDF),
- JSON,
- GData, and
- OData.

The GoodRelations Cookbook

Recipe	GoodRelations and Microdata Syntax
Description	GoodRelations and the syntaxes it can be used with
Status	mature
Level	intermediate
Tags	microdata, rdfa, rdf, xml, turtle, json, gdata, odata

For Web developers, RDFa and Microdata are the most important
ones. We do not want to enter the discussion whether one of the two is better on this page, since both can be used in similar
ways. In short one can say that

- RDFa integrates better into the larger W3C Semantic Web technology stack while
- Microdata has significant advantages from the perspective of adding meta-data to HTML markup.

Overview

The main difference between using GoodRelations in Microdata and in RDFa is that you use just the local part of a property
identifier (e.g. legalName for http://purl.org/goodrelations/v1#legalName (http://purl.org/goodrelations/v1#legalName)) when
inside the scope of a GoodRelations class as the type of a node.

When using a GoodRelations property within the scope of an external type (e.g. http://schema.org/Offer (http://schema.org
/Offer)) or when using an externally defined property within the scope of a GoodRelations type, you must use the full URI (e.g.
http://schema.org/telephone (http://schema.org/telephone)).

Microdata does not support "compact" URIs (CURIES) in the form

```
prefix:local_part
```

(e.g gr:legalName).

Example:

```html
<div itemscope itemtype="http://purl.org/goodrelations/v1#BusinessEntity">
  <span itemprop="legalName">ACME Bagel Bakery Ltd.</span>
    Contact Details:
    Tel: <span itemprop="http://schema.org/telephone">+49-89-12345678-0</span>,
</div>
```

Scenario 1: Using GoodRelations in Microdata syntax

You can use GoodRelations directly in Microdata syntax:

```html
<div itemscope itemtype="http://purl.org/goodrelations/v1#Offering" itemid="#offer">
  <div itemprop="name">Hepp Personal SCSI Controller Card</div>
  <div itemprop="description">The Hepp Personal SCSI is a 16-bit
add-on card that allows attaching up to seven SCSI devices to your computer.</div>
  <link itemprop="hasBusinessFunction"  href="http://purl.org/goodrelations/v1#Sell" />
  <div itemscope itemprop="hasPriceSpecification"
          itemtype="http://purl.org/goodrelations/v1#UnitPriceSpecification">Price:
    <meta itemprop="hasCurrency" content="USD">$
    <span itemprop="hasCurrencyValue">99.99</span>
    <time itemprop="validThrough" datetime="2012-11-30T23:59:59Z"></time>
  </div>
  Condition: <div itemprop="condition">used</div>
  EAN/UPC: <span itemprop="hasEAN_UCC-13">1234567890123</span>
  MPN: <span itemprop="hasMPN">PSCSI</span>
  Article No. <span itemprop="hasStockKeepingUnit">123-456</span>
  Availability: <span itemscope itemprop="hasInventoryLevel"
      itemtype="http://purl.org/goodrelations/v1#QuantitativeValue">
    <meta property="hasMinValue" content="1">In-stock
  </span>
</div>
```

Scenario 2: Using GoodRelations properties to extend schema.org types

You can use GoodRelations elements to extend schema.org types by details that are not covered by schema.org, e.g. shipping charges or eligible countries. In that case you have to **use the full URIs for properties** that are **provided by GoodRelations** when used to augment schema.org types. As soon as the type to which you apply the property is again from GoodRelations, you can use the local part of the property names. See the following example in which

- http://purl.org/goodrelations/v1# (http://purl.org/goodrelations/v1#)**hasBusinessFunction** is applied to the type http://schema.org/Offer (http://schema.org/Offer) and thus requires a full URI, while
- **eligibleRegions** is applied to the type http://purl.org/goodrelations/v1#DeliveryChargeSpecification (http://purl.org /goodrelations/v1#DeliveryChargeSpecification) and can thus have just the local part of the property identifier.

```
<div itemscope itemtype="http://schema.org/Offer" itemid="#offer">
   <div itemprop="name">Hepp Personal SCSI Controller Card</div>
   <div itemprop="description">The Hepp Personal SCSI is a 16-bit add-on card that allows
attaching up to seven SCSI devices to your computer.</div>
   <link itemprop="http://purl.org/goodrelations/v1#hasBusinessFunction"
         href="http://purl.org/goodrelations/v1#Sell" />
<!-- Shipment fees -->
   Delivery costs to
   <div itemscope itemprop="http://purl.org/goodrelations/v1#hasPriceSpecification"
        itemtype="http://purl.org/goodrelations/v1#DeliveryChargeSpecification">
     <meta itemprop="eligibleRegions" content="DE">Germany:
     <meta itemprop="hasCurrency" content="EUR">Euro:
     <span itemprop="hasCurrencyValue">10.00</span>
     <link itemprop="appliesToDeliveryMethod"
           href="http://purl.org/goodrelations/v1#UPS" />(via UPS)
   </div>
<!-- other offer properties follow here -->
...
</div>
```

Scenario 3: Using schema.org properties to extend GoodRelations types

You can used schema.org properties and types in combination with GoodRelations types. This is in particular recommended for attaching images, addresses, and geo-location information information, because such will then all come from a single complementing vocabulary instead of from various Web vocabularies (vCard, geo, WGS84, FOAF, ...).

```
<div itemscope itemtype="http://purl.org/goodrelations/v1#BusinessEntity">
   <span itemprop="legalName">ACME Bagel Bakery Ltd.</span>
Contact Details:
   <div itemscope itemprop="http://schema.org/address"
        itemtype="http://schema.org/PostalAddress">
     Main address:
       <span itemprop="streetAddress">Bagel Street 1234</span>
       <span itemprop="postalCode">12345</span>
       <span itemprop="addressLocality">Munich, Germany</span>
   </div>
<!-- The following properties use full URIs because they are attached
     to a **GoodRelations type** but come from schema.org -->
     Tel: <span itemprop="http://schema.org/telephone">+49-89-12345678-0</span>,
     Fax: <span itemprop="http://schema.org/faxNumber">+49-89-12345678-99</span>,
     E-mail: <span itemprop="http://schema.org/email">contact@example.org</span>
     <link itemprop="http://schema.org/url" href="http://www.acme-bagels.com/" />
</div>
```

Scenario 4: Using GoodRelations from the schema.org

Namespace

We are working with the schema.org sponsors, namely Google, Yahoo, Bing, and Yandex, on the integration of GoodRelations into the schema.org core. This will mean that you can use the full expressivity of GoodRelations directly from the schema.org namespace in Microdata syntax soon. A preview of the resulting markup is here (/Cookbook/Schema.org). Stay tuned!

Note: This will be an additional syntactical form of using GoodRelations for your site. GoodRelations will remain an independent vocabulary, and in RDFa and other RDF syntaxes, the original namespace of GoodRelations will remain the primary location.

Links:

- Public Draft (https://docs.google.com/document/pub?id=1Kx63gW9DBky1j97Jpwl3dU9k0pKPSgCT3EntTVvGjX4)
- Entry on the W3C Wiki (http://www.w3.org/wiki/WebSchemas/GoodRelations)
- Recipe in the GoodRelations Cookbook (/Cookbook/Schema.org)

Official Microdata Processing Rules

The official Microdata processing rules for GoodRelations are now part of the GoodRelations specification (http://purl.org/goodrelations/v1.html#microdata_specification).

RDF Representation of GoodRelations from Microdata Markup

If you parse GoodRelations data in Microdata syntax, the URIs for all properties should be built by **directly attaching the local part of a property** (e.g. legalName) **to the base URI of the vocabulary** (http://purl.org/goodrelations/v1# (http://purl.org/goodrelations/v1#)).

So the URI of the legalName property from the example above should be http://purl.org/goodrelations/v1#legalName (http://purl.org/goodrelations/v1#legalName).