

Welcome to the Machine:  
Making digital library collections  
findable by people and bots using  
SEO, schema.org, and HTML5  
microdata

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Montana State University Library

#html5css3

<http://pinboard.in/u:jasonclark/t:html5-amigos/>

# Overview

- What is microdata?
- Classification vocabularies ([schema.org](http://schema.org))
- Microdata and search engine optimization
- Tools for microdata

Item: **Women posing on college locomotive engine**




**Title:** Women posing on college locomotive engine  
**Creator:** unknown  
**Date:** unknown  
**Description:** Women posing on a college locomotive engine.  
**Notes:**  
**Physical Description:** Photo print - Black and White  
**Subjects:** [Locomotive](#)  
**Keywords:** locomotive  
**Photograph ID:** parc-000432

 [Higher quality/resolution](#)

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`<a title="Women posing on college locomo`

[Back to MSU Photos Homepage](#)

BM (Before Microdata)

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AM (After Microdata)

```
<dl>
<dt>Title</dt>
<dd>A River Runs Through It and Other Stories</
dd>
<dt>Author</dt>
<dd>Norman Maclean</dd>
<dt>Publication date</dt>
<dd>October 1, 2001</dd>
<dt>ID</dt>
<dd>0226500667</dd>
</dl>
```

Microdata introduces classification & metadata

Microdata helps machine-readers and search engines understand your site's content

```
<dl itemscope itemtype="http://schema.org/Book">
<dt>Title</dt>
<dd itemprop="title">A River Runs Through It and
Other Stories</dd>
<dt>Author</dt>
<dd itemprop="author">Norman Maclean</dd>
<dt>Publication date</dt>
<dd itemprop="pubdate">October 1, 2001</dd>
<dt>ID</dt>
<dd itemprop="isbn">0226500667</dd>
</dl>
```



# Schema.org

A lingua franca for web classification and markup

Google, Bing, Yahoo

# Why Microdata?

The Semantic Web

# Why Microdata?

An evolution of semantic components

Microformats

RDFa

# Why Microdata?

Refocuses visible HTML

How can machine-readable and human-readable markup work together?

# Why Microdata?

Rich Snippets

<https://sites.google.com/site/webmasterhelpforum/en/faq-rich-snippets>

# Why Microdata?

Search Results Display

[People in the library - individual results :: Montana State ...](#)

[www.lib.montana.edu/people/about.php?id=23](http://www.lib.montana.edu/people/about.php?id=23)

mobile-friendly page | skip navigation. **Montana State University** in Bozeman. Ask A Librarian ask ... People in the library - individual results. photo of **Jason Clark** ...

[Jason Clark - Libraries - Montana State University](#)

[www.lib.montana.edu/people/about.php?id=23](http://www.lib.montana.edu/people/about.php?id=23)

People in the library - individual results. photo of **Jason Clark**. **Jason Clark**. Title: Team Leader/Digital Initiatives Librarian [Associate Professor]. Department: ...

[Pravir Gupta - Senior Software Engineer | LinkedIn](#)

San Francisco Bay Area - Senior Software Engineer

View **Pravir Gupta's** (71 connections) professional profile on LinkedIn. LinkedIn is the world's largest business network, helping professionals like Pravir ...

[www.linkedin.com/pub/pravir-gupta/2/180/a70](http://www.linkedin.com/pub/pravir-gupta/2/180/a70) - [Cached](#)

# Why Microdata?

Your Website is your API

Using the microdata DOM API



```
window.addEventListener('load', function() {
    var photo = document.getItems('http://
schema.org/Photograph')[0];
    console.log('photo.properties Name: ' +
photo.properties['name'][0].textContent);
    function supports_microdata_api() {
        return !!document.getItems;
    }
    console.log(supports_microdata_api());
});
```

# Microdata in the Wild

## YouTube Markup

view-source: [www.youtube.com/watch?v=s1EGXkQtgTE&list=UUtkGqJEVc21-Coie-4kS7EA](http://www.youtube.com/watch?v=s1EGXkQtgTE&list=UUtkGqJEVc21-Coie-4kS7EA)

# Microdata in the Wild

MSU Library People App

view-source: <http://www.lib.montana.edu/people/about.php?id=23>

# Microdata in the Wild

MSU Historical Photos Collection

view-source: <http://arc.lib.montana.edu/msu-photos/item.php?id=11>

# Microdata Tools

Structured Data Testing Tool

<http://www.google.com/webmasters/tools/richsnippets>

# Microdata Tools

Schema Creator

<http://schema-creator.org/>

# Google Webmaster Tools

## Structured Data Highlighter

<https://www.google.com/webmasters/tools/>

# Lessons

- Study schema.org
- [Register](#) as a microdata provider with Google
- Get ahead of the curve
  - person, organization are currently supported



# Best Practices

- Try to mark up only human-readable visible HTML
- Check your markup with the Structured Data Testing Tool
  - Microdata must validate as HTML5
- Mark up only the main body content, not <head>
- Follow existing vocabularies (schema.org)
- Mark up as much data as is possible to help with getting picked up in Google microdata indexing

# Essential Links

schema.org

<http://schema.org/>

Structured Data Testing Tool

<http://www.google.com/webmasters/tools/richsnippets>

## About Microdata - Google

<http://support.google.com/webmasters/bin/answer.py?hl=en&answer=176035>

## schema.org FAQ

<http://support.google.com/webmasters/bin/answer.py?hl=en&answer=1211158>

## Schema Creator

<http://schema-creator.org/book.php>

## RDFa Lite

<http://dev.opera.com/articles/view/geolocation-html-api/>

# Essential Projects

Combine Drupal, HTML5, and microdata

<http://www.ibm.com/developerworks/library/x-drupalhtml5/>

Wordpress Plugin - Microdata for SEO

<http://wordpress.org/extend/plugins/microdata-for-seo-by-optimum7com/>

Questions?

# Contact

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[@jaclark](#)

# Contact

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