

hreflang: The basics

This lesson covers the basics of hreflang. First, we'll explain to you what hreflang is and why you should use it. Then, we'll dive into the different parts of hreflang and we'll tell you how hreflang works. Finally, we'll teach you how you can determine if you should use hreflang.

What is hreflang?

hreflang is an HTML attribute aimed specifically at multilingual and multi-regional implementations. hreflang is a piece of code that you show to the search engines. hreflang is supported by Google and Yandex. An hreflang implementation mainly consists of a list of hreflang attributes. We'll explore the other components of hreflang later.

The list of hreflang attributes tells Google what variations of a page are available. You can differentiate content in three different ways:

1. Content with regional variations like [en-gb](#) and [en-us](#).
2. Content in different languages like [en](#), [fr](#) and [de](#).
3. A combination of different languages and regional variations.

Google can use this information to determine what variation of a page fits the user best. It always sends the user to the most specific page that fits the user. A single hreflang tag looks like this:

```
<link rel="alternate" href="http://example.com/" hreflang="en-us" />
```

Later in this lesson, we'll explore the code and the implementation in more detail. For now, let's focus on the message it conveys. hreflang provides Google with the following information:

1. The links to alternate versions of the page Google is currently crawling.
2. What language each page variation is written in.
3. *Optionally*: what country each page is aimed at.



Let's look at a concrete example. Say you have written an article about Lego in three different languages: English, French and German. You have adapted the English article for both the British and American spellings. Obviously, you want Google to send the British users to the British page, the American users to the American page, etc. The hreflang tag list below will be part of your hreflang implementation on a page:

```
<link rel="alternate" href="http://example.com/gb/lego" hreflang="en-gb" />
<link rel="alternate" href="http://example.com/us/lego" hreflang="en-us" />
<link rel="alternate" href="http://example.com/fr/lego" hreflang="fr" />
<link rel="alternate" href="http://example.com/de/lego" hreflang="de" />
```

Here, the list specifies that there are four variations of the page. It also provides Google with each link. Moreover, each hreflang tag specifies the language the page is written in. Only the English pages also specify a region: Great Britain and the U.S.

It is important to note that the list of hreflang attributes should be present on each page. We'll come back to how exactly you do this later in this chapter and in the lesson on hreflang implementation.

When ranking the Lego article, Google goes through the following process:

1. It determines that it wants to rank the article.
2. It checks whether that URL has hreflang annotations.
3. It presents the searcher with the results with the most appropriate URL for that user.

The user's current location and his language settings determine the most appropriate URL. A user can have multiple languages in his browser's settings. The order in which these languages appear in your settings determines the most appropriate language.

“ hreflang is a piece of code that you show to the search engines. ”

By combining the information the site offers with the information the browser provides, Google can send the user to the variation of the page the user prefers. After all of this, this is what will happen:

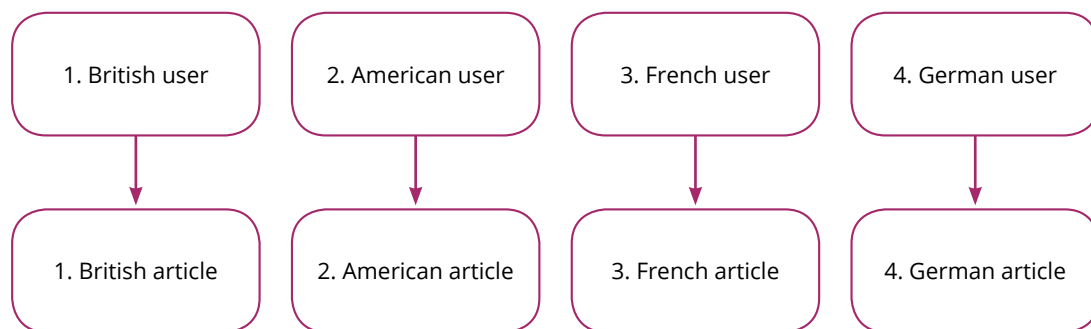


Image 1: The end result of hreflang

What is the SEO-benefit of hreflang?

So why are we even talking about hreflang? What is the SEO benefit?

There are two main reasons, from an SEO point of view, why you should implement hreflang.

First and foremost, if you have a version of a page that you have optimized for the users' language and location, you want them to land on that page. Having the right language and location dependent information improves their user experience and thus leads to fewer people bouncing back to the search results. Fewer people bouncing back to the search results leads to higher rankings.

The second reason is that hreflang prevents a duplicate content problem. You might have the same content in English on different URLs aimed at the UK, the US and Australia. The difference on these pages might be as small as a change in prices and currency. Google might not understand on its own what you're trying to do and see it as duplicate content. With hreflang you make it very clear to Google that it's (almost) the same content, just optimized for different people.

How does hreflang work?

Let's revisit a single hreflang attribute and break it down:

```
<link rel="alternate" href="http://example.com/" hreflang="en" />
```

The general message of this hreflang attribute is as follows:

*"This page has an alternate link. The link is 'http://example.com/'.
That page is written in English."*

Now, let's break down the code into three different parts.

Each part consists of a name-value pair.

```
1. link rel    = "alternate"  
2. href       = "http://example.com/"  
3. hreflang   = "en"
```

Below, we'll explain each name-value pair in detail.

1. link rel = "alternate"

The first part of the hreflang attribute is always the same. All of your hreflang attributes should start with `<link rel="alternate"`. In conclusion, the first part says: *"this page has an alternate page"*.

Counter-intuitively, one of the hreflang attributes in an implementation always has to point to itself. We'll explore this in the return and self links chapter.

2. href = "..."

The second part of the hreflang attribute consists of the name `"href"`, which means link, and the value. The value specifies the link to the page variation. In conclusion, the second part says: *"this is the link to the alternate page"*.

3. hreflang = "..."

The third part of the hreflang attribute consists of the name `"hreflang"` and the value. Here, you specify what language and what region the page is written in. The value specifies the link of the page variation. In conclusion, the third part says: *"this is the language and region the alternate page is written in and aimed at"*. The value consists of two two-letter codes: the language code and the region code.

Language code: ISO 639-1

The hreflang language code is in ISO 639-1, which is a standardized two-letter code. You can review all the language codes here:

https://en.wikipedia.org/wiki/List_of_ISO_639-1_codes.

It is very important that you enter the correct language code. If you don't, the hreflang implementation breaks. Every hreflang tag should have a language code for hreflang to work.

Regional code: ISO 3166-1 Alpha 2

The hreflang regional code is in ISO 3166-1 Alpha 2, which is also a standardized two-letter code. You can review all the regional codes here: https://en.wikipedia.org/wiki/ISO_3166-1_alpha-2

As we mentioned before, the regional code is optional. However, if you use it, it is very important that you enter the correct regional code. If you don't, the hreflang implementation breaks. Note: the correct code for the English speaking isles is `en-gb`. People often use, `en-uk`, which is not a valid implementation.

Should I use hreflang?

Based on what we've learned on what hreflang is and how it works, we can determine if you should use it. You should use it if:

- you have the same content in multiple languages;
- you have content aimed at different geographic regions, but in the same language.

It doesn't matter whether the content you have resides on one domain or multiple domains. You can implement hreflang in all of the structures we discussed in the domain structure module: subdirectories (subfolders), subdomains, or other TLDs.

Module 1.1	Module 1.2	Module 2.1	Module 2.2	Module 3.1	Module 3.2
Module 3.3	Module 4.1	Module 4.2	Module 4.3	Module 4.4	