

Sentiment and Emotion Analysis

In Listen, gain a deeper understanding of the emotional impact of your search by viewing and adjusting the sentiment and emotion.

When results are indexed for your search, Listen will attempt to detect a sentiment and emotion for each mention. By viewing your search's insights, you can also see an overview of the sentiment and emotion for all mentions in your chosen timeframe.

How is sentiment calculated?

As mentions are indexed, Listen will determine whether the text in each mention is **positive**, **negative**, or **neutral**.

Sentiment analysis is based on cutting edge AI research in the fields of Deep Learning and Natural Language Processing (NLP). Brandwatch's data scientists are pioneering the use of Transformer Architecture Language Models (AI models famous for being able to suggest how any text should be completed) to determine sentiment in social data.

Models are pre-trained on billions of words, to have a deep general knowledge of over 100 languages before being applied to sentiment analysis, offering a more sophisticated understanding of context, slang, and dialects. Some examples of how sentiment can be indicated are listed below:

- Words (including misspellings)
- Phrases
- Sentence structure
- Emojis
- Emoticons
- Multi-word hashtags
- Negation
- Punctuation

The sentiment accuracy for most Search queries in a [supported language](#) is estimated to be between **60-75%**. While studies have shown that two humans will agree on the sentiment of posts (tweets) just 80% of the time, Listen continues to test models on the widest range of use cases possible, rather than just those which may achieve the highest level of accuracy (for example, product reviews).

How is emotion calculated?

Listen will classify mention emotion as one of six universal emotions defined by famous psychologist: **anger, disgust, fear, joy, surprise, or sadness.**

Listen's emotion analysis model is based on an in-house, custom statistical classifier using Logistic Regression. To predict the overall emotion in a text, it looks at thousands of features, including:

- Words
- Phrases
- Slang
- Emojis
- Emoticons
- Hashtags
- Negation
- Intensifiers
- Punctuation

Based on training data of over 2m posts, Listen's model weighs each feature's frequency within each mention to determine which emotion is present. The emotion accuracy for most Search queries is estimated to be between **60-70%**.

What languages are supported for sentiment and emotion?

Sentiment

Sentiment analysis is currently offered for the following languages:

European	Albanian, Bosnian, Bulgarian, Croatian, Czech, Dutch, English, French, German, Greek, Hungarian, Italian, Polish, Portuguese, Romanian, Russian, Serbian, Slovak, Slovenian, Spanish, Turkish.
Scandinavian	Danish, Norwegian, Swedish
Asian	Bengali, Chinese, Chinese Traditional, Hindi, Indonesian, Japanese, Korean, Malay, Mixed Hindi English, Thai, Vietnamese.
Australasian	Tagalog
Middle Eastern	Arabic, Farsi/Persian, Hebrew
Other	Telugu

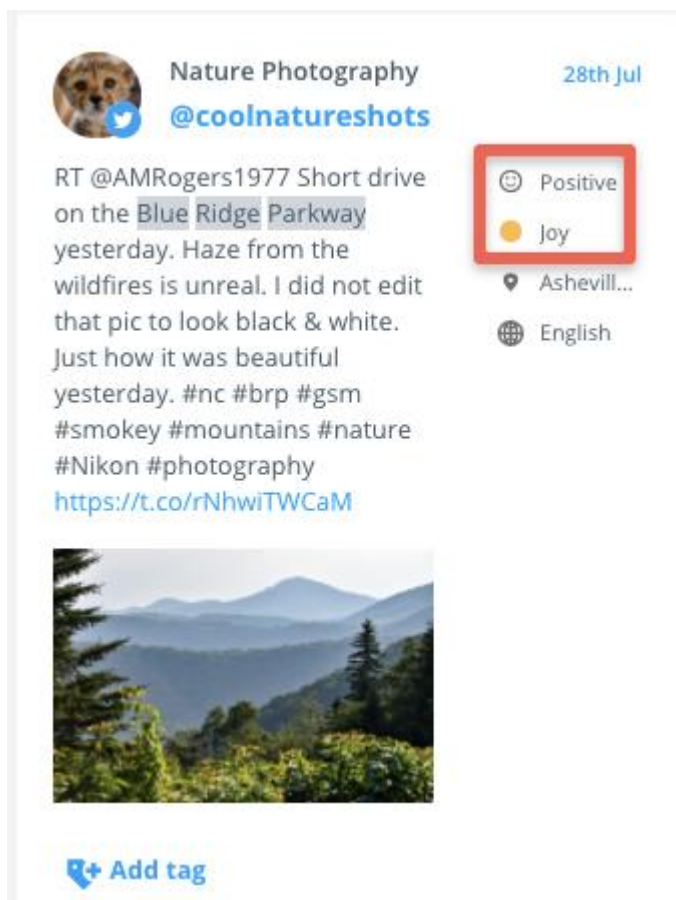
Emotion

Currently, emotion is only supported for mentions in **English**.

Viewing and analyzing sentiment and emotion

Individual mentions

In Listen, you can view the sentiment and emotion on any individual mention by opening an existing Saved Search, navigating to the Mentions module on the right, and locating the mention.



Alternatively, you can see individual mention sentiment and emotion when [viewing your mentions by tag](#). Both sentiment and emotion will also be available on [mention exports](#).

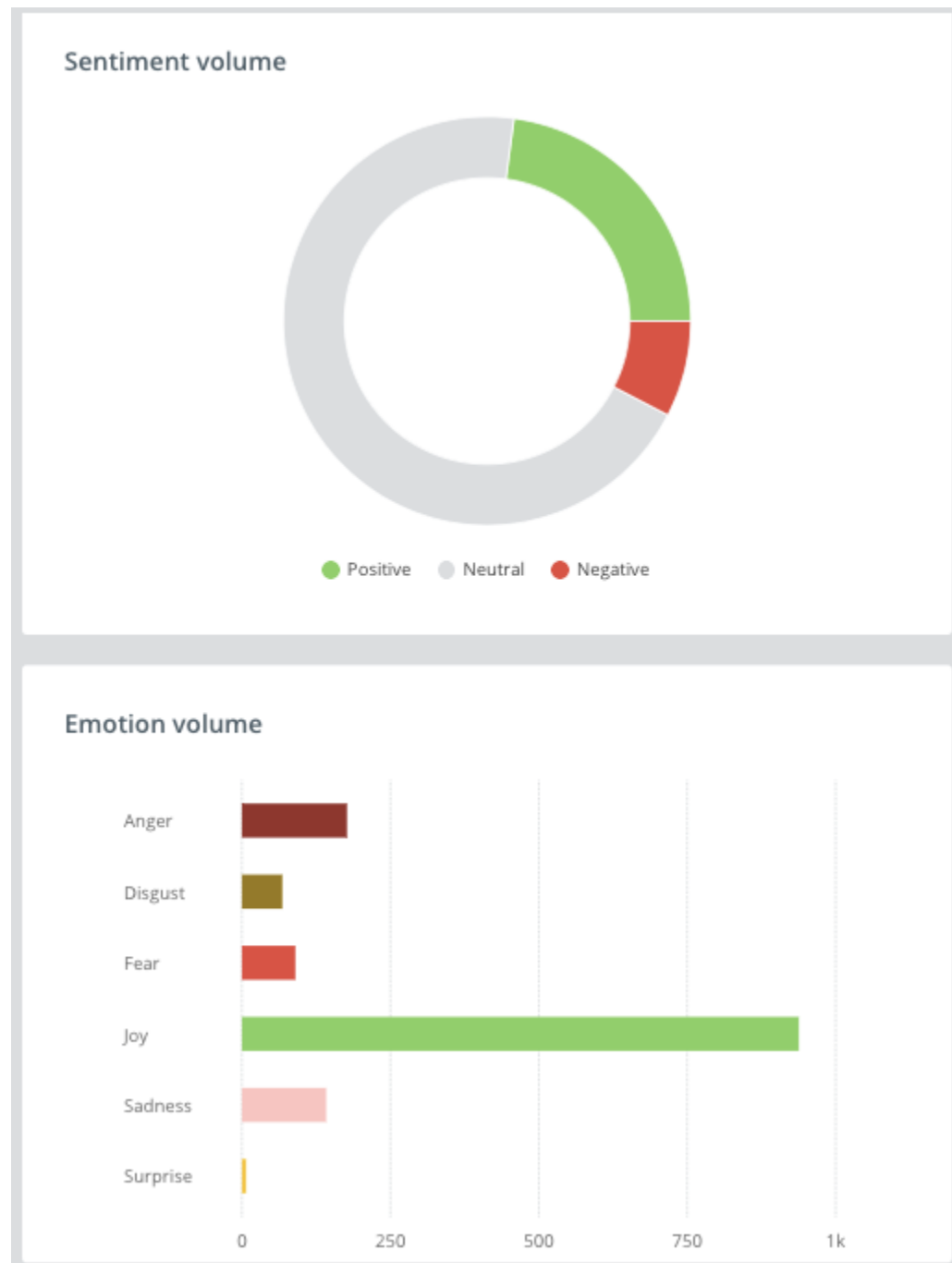
Note:

Sentiment and emotion will not be available for individual mentions in a Quick Search. You will need to [save the Search](#) to view sentiment and emotion for each mention. However, you can still view sentiment and emotion insights of all indexed mentions in a Quick Search as described below.

Viewing sentiment and emotion insights

When you create a new Quick Search or Saved Search, in the middle of the page you can view insights for the mentions indexed in your chosen timeframe. At the top of the page, click **Sentiment** or **Emotion** to auto-scroll to all available sentiment and emotion insights.

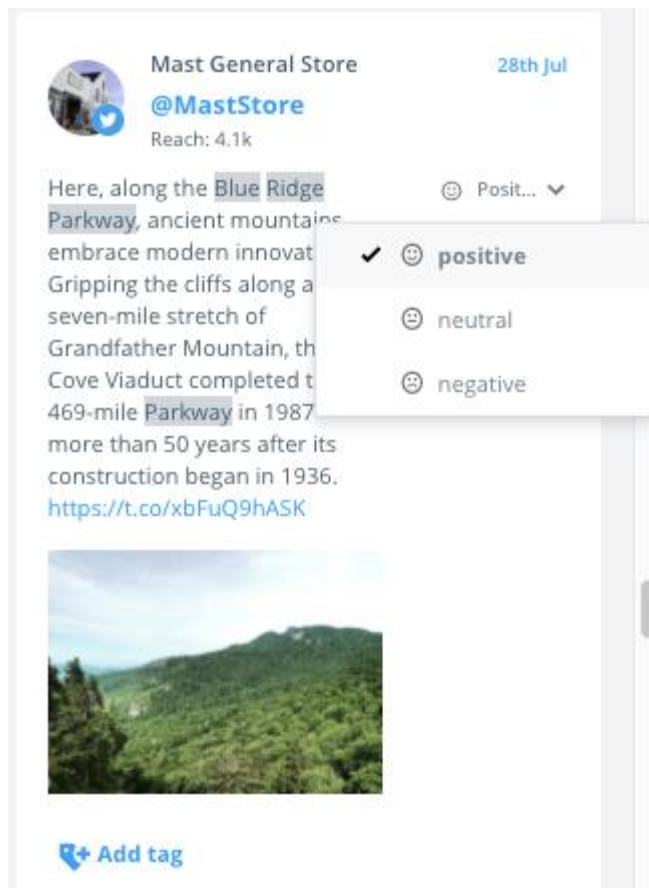
Visit the guide to [Viewing and Analyzing Listen Searches](#) to find out more about what graphs and data are available under each heading.



Changing sentiment and emotion

Both sentiment and emotion can be manually adjusted for any mention in Listen. When you're viewing individual mentions as described [above](#), you can use the **sentiment dropdown** to adjust the sentiment or the **emotion dropdown** to adjust the emotion.

Changing the sentiment or emotion will not affect how sentiment or emotion is calculated for future mentions, though it will affect your Search's insights.



Filtering by sentiment and emotion

Once you have created a Quick Search or a Saved Search, you can use the filter icon from the top left to filter your results based on many different criteria, including sentiment or emotion.

For more information and a complete guide on applying filters in Listen, please visit the Help Center guide [here](#).

Filters



► **Keyword**

► **Platform**

▼ **Sentiment**

☐ Positive

☐ Neutral

☐ Negative

▼ **Emotion**

☐ Anger

☐ Disgust

☐ Fear

☐ Joy

☐ Sadness

☐ Surprise