

## SemEval 2015 Task 12

### Aspect Based Sentiment Analysis (ABSA)

#### Restaurant Reviews Annotation Guidelines

## 1. Introduction

The goal of this annotation task is to identify opinions expressed within restaurant reviews towards specific entities and their attributes. An entity (that is evaluated) can be the restaurant as a whole (e.g. restaurant, Saul, Red Eye Grill), its ambience and location, the food and drinks that are offered, etc.

In particular, given a restaurant review, the task of the annotator is to identify the following types of information:

- **Aspect Category (Entity and Attribute).** Identify the entity E and attribute A pair E#A towards which an opinion is expressed. E and A should be chosen from the inventory of **entity types** (e.g. restaurant, food, drinks) and **attribute labels** (e.g. prices, quality) that is described in sections 2 and 3, respectively. The identified entities should be assigned one or more attribute labels based on the context of the sentence they appear in. The E#A pair defines an aspect (category).
- **Opinion Target Expression.** An opinion target expression (OTE) is an explicit reference (mention) to the reviewed entity E of the E#A pair. This reference is uniquely identified by its starting and ending offsets.
- **Opinion Polarity.** Each identified E#A pair of a sentence has to be assigned a polarity, from a set  $P = \{\text{positive, negative, neutral}\}$ . The *neutral* label applies for *mildly positive or negative sentiment* (e.g. c), thus it does not indicate objectivity. For example, sentence d has not been assigned any polarity label, since it conveys only objective information
  - a. *We love the pink pony.* → {positive}
  - b. *Avoid this place!* → {negative}
  - c. *Food was okay, nothing great.* → {neutral}
  - d. *I went to this restaurant with a woman that I met recently.* → {}

The {E#A, OTE, P} annotations should be assigned at the sentence level taking into account the context of the whole review.

## 2. Entity labels

The entity E of an {E#A} pair can be assigned one of the following 6 labels.

- **FOOD** for opinions focusing on the food in general or in terms of specific dishes, dining options etc. Below are some examples:

- a. *Our food was great too!* → {FOOD}
  - b. *The menu is very limited - I think we counted 4 or 5 entrees.* → {FOOD}
  - c. *The food was pretty traditional but it was hot and good with large portions.*  
→ {FOOD}
  - d. *The pizza was great.* → {FOOD}
  - e. *The dinner was ok, nothing I would have again.* → {FOOD}
  - f. *They have authentic Indian at amazing prices.* → {FOOD}
  - g. *The lobster sandwich is good and the spaghetti with Scallops and Shrimp is great.* → {FOOD}
- **DRINKS** for opinions focusing on the drinks in general or in terms of specific drinks, drinking options etc. Below are some examples:
    - a. *Wonderful strawberry daiquiris as well!* → {DRINKS}
    - b. *The food is good, especially their more basic dishes, and the drinks are delicious.* → {FOOD}, {DRINKS}
    - c. *The wine list is extensive and impressive.* → {DRINKS}
    - d. *Not enough wines by the glass either.* → {DRINKS}
    - e. *The cream cheeses are out of this world and I love that coffee!!* → {FOOD}, {DRINKS}
- **SERVICE** for opinions focusing on the (customer/kitchen/counter) service, on the promptness and quality of the restaurant's service in general, the food preparation, the staff's attitude and professionalism, the wait time, the options offered (e.g. takeout), etc. Below are some examples:
    - a. *The food here is rather good, but only if you like to wait for it.* → {FOOD}, {SERVICE}
    - b. *The hostess is rude to the point of being offensive.* → {SERVICE}
    - c. *The takeout is great too since they give high quality tupperware as well.* → {SERVICE}
    - d. *I had a huge group for my birthday and we were well taken care of.* → {SERVICE}
- **AMBIENCE** for opinions focusing on the atmosphere or the environment of the restaurant's interior or exterior space (e.g. terrace, yard, garden), the décor, entertainment options, etc. Here are some examples:
    - a. *Very cozy and warm inside.....* → {AMBIENCE}
    - b. *I highly recommend Cafe St. Bart's for their food, the ambience and wonderful service.* → {FOOD}, {AMBIENCE}, {SERVICE}
    - c. *The dining room is quietly elegant with no music to shout over -- how refreshing!* → {AMBIENCE}
    - d. *Our family never expected such incredible entertainment in a restaurant.* → {AMBIENCE}
    - e. *When you're sitting in their main dining room (which has a spectacular, hand-painted high ceiling) you'd never know there was a world outside.* → {AMBIENCE}

- **LOCATION** for opinions focusing on the location of the reviewed restaurant in terms of its position, the surroundings, the view, etc. Below are some examples:
  - Conveniently located too, being right on Bedford ave.* → {LOCATION}
  - The view is spectacular, and the food is great.* → {LOCATION}, {FOOD}
- **RESTAURANT** for opinions evaluating the restaurant as whole not focusing on any of the above five entity types e.g.
  - Saul is the best restaurant on Smith Street and in Brooklyn.* → {RESTAURANT}
  - It's a little out of the way if you don't live in the neighborhood, but definitely worth the trip from wherever you are.* → {LOCATION}, {RESTAURANT}
  - Please take my advice, go and try this place.* → {RESTAURANT}

Opinions expressed towards entities that are not described above (e.g. other restaurants that the reviewer has visited) as well as comparative opinions are considered to be **out of the scope** of the SemEval 2015 ABSA task, and the corresponding sentences should be tagged accordingly. Below are some examples:

- I was in love with Pongsri on 48th, but compared to Suan it is slow in service and overpriced.* → {OutOfScope}
- It's also attached to Angel's Share, which is a cool, more romantic bar...* → {OutOfScope}
- The one on the east side is much better than the one on the west side.* → {OutOfScope}
- Anyways, if you're in the neighborhood to eat good food, I wouldn't waste my time trying to find something, rather go across the street to Tamari.* → {OutOfScope}

### 3. Attribute labels

The attribute A of an {E#A} pair can be assigned one of the following 5 labels.

- **GENERAL**. This attribute label is assigned to sentences that express general positive or negative sentiment about an entity type e.g.
  - My husband and I thought it would be great to go to the Jekyll and Hyde Pub for our anniversary, and to our surprise it was fantastic.* → {RESTAURANT#GENERAL}
  - I received prompt service with a smile.* → {SERVICE#GENERAL}
  - LOVE the atmosphere - felt like I was in Paris.* → {AMBIENCE#GENERAL}
  - The location is perfect.* → {LOCATION#GENERAL}

NOTE that the entities types **SERVICE**, **AMBIENCE** and **LOCATION**, can only be assigned the attribute label **GENERAL** for the purposes of the SemEval 2015 annotation task.

- **PRICES** for opinions that refer to the prices of the food, the drinks or the restaurant in general e.g.

- a. *But the pizza is way too expensive.* → {FOOD#PRICES}
  - b. *Drinks way overpriced.* → {DRINKS#PRICES}
  - c. *The prices are wonderfully low.* → {RESTAURANT#PRICES}
  - d. *The only fallback on this restaurant is the prices.* → {RESTAURANT#PRICES}
- **QUALITY** for opinions focusing on the taste, the freshness, the texture, the consistency, the temperature, the preparation, the authenticity, the cooking or general quality of the food and the drinks served in the restaurant e.g.
    - a. *Salads are a delicious way to begin the meal.* → {FOOD#QUALITY}
    - b. *Steamed fresh so brought hot hot hot to your table.* → {FOOD#QUALITY}
    - c. *Their bagels are fine, but they are a little overcooked, and not really a 'special' bagel experience.* → {FOOD#QUALITY}
    - d. *No gimmicks here -- the food speaks for itself in its freshness and preparation.* → {FOOD#QUALITY}
    - e. *The pizza was great.* → {FOOD#QUALITY}
    - f. *The drinks are amazing and half off till 8pm.* → {DRINKS#QUALITY}, {DRINKS#PRICES}
  - **STYLE&OPTIONS** for opinions referring to the presentation, the serving style, the portions size, the food/menu options or variety (e.g. innovative dishes/drinks, vegetarian options) of the food and of the drinks served in the restaurant e.g.
    - a. *The menu is very limited - I think we counted 4 or 5 entrees.* → {FOOD#STYLE&OPTIONS}
    - b. *The portions are small but being that the food was so good makes up for that.* → {FOOD#QUALITY}, {FOOD#STYLE&OPTIONS}
    - c. *Not enough wines by the glass either.* → {DRINKS#STYLE&OPTIONS}
  - **MISCELLANEOUS** for attributes that do not fall into any of the aforementioned cases. Below are some examples:
    - a. *Not a great place for family or general dining.* → {RESTAURANT#MISCELLANEOUS}
    - b. *Open late (well as late as I ever got there and I'm a night person)* → {RESTAURANT#MISCELLANEOUS}

#### 4. Opinion Target Expression

An opinion target expression (OTE) is an *explicit reference (mention)* to an entity E that is evaluated. This mention can be a named entity, a common noun or a multi-word term. Below are some examples:

- a. *Leon is an East Village gem.* → {RESTAURANT#GENERAL, *Leon*, positive}
- b. *The food was bland oily.* → {FOOD#GENERAL, *food*, negative}

- c. *The lobster sandwich is good and the spaghetti with Scallops and Shrimp is great.* → {FOOD#GENERAL, *lobster sandwich*, positive}, {FOOD#GENERAL, *spaghetti with Scallops and Shrimp*, positive}
  - d. *Great friendly service, Fast seating, Fast Delivery, Excellent sushi.* → {SERVICE#GENERAL, *service*, positive}, {SERVICE#GENERAL, *seating*, positive}, {SERVICE#GENERAL, *Delivery*, positive}, {FOOD#GENERAL, *sushi*, positive}
  - e. *We love the food, drinks, and atmosphere.* → {FOOD#QUALITY, *food*, positive}, {DRINKS#GENERAL, *drinks*, positive}, {AMBIENCE#GENERAL, *atmosphere*, positive}
- When a sentence contains more than one mention (e.g. nominal and pronominal) to the same entity then the *most informative* one should be annotated e.g.
 

*It's a nice place to relax and have conversation.* → {AMBIENCE#GENERAL, *place*, positive}
  - If an OTE has more than one occurrences in the same sentence, only the first one should be tagged e.g.
    - a. *Guacamole+shrimp appetizer was really great, we both had the filet, very good, didn't much like the frites that came with, but the filet was so good, neither of us cared.* → {FOOD#QUALITY, *Guacamole+shrimp appetizer*, positive}, {FOOD#QUALITY, *filet*, positive}, {FOOD#QUALITY, *frites*, negative}
    - b. *Yes, they use fancy ingredients, but even fancy ingredients don't make for good pizza unless someone knows how to get the crust right.* → {FOOD#QUALITY, *ingredients*, positive}, {FOOD#QUALITY, *pizza*, negative}, {FOOD#QUALITY, *crust*, negative}
  - When an entity E is only implicitly referred (e.g. through pronouns) or inferred in a sentence, then the OTE slot is assigned the value “NULL” e.g.
    - a. *Everything was wonderful;* → {RESTAURANT#GENERAL, NULL, positive}
    - b. *Conveniently located too, being right on Bedford ave.* → {LOCATION#GENERAL, NULL, positive}
    - c. *I've waited over one hour for food.* → {SERVICE#GENERAL, NULL, negative}
    - d. *They never brought us complimentary noodles, ignored repeated requests for sugar, and threw our dishes on the table.* → {SERVICE#GENERAL, NULL, negative}
    - e. *Prices are in line.* → {RESTAURANT#PRICES, NULL, positive}