**SemEval 2015 Task 12**

**Aspect Based Sentiment Analysis (ABSA)**

**Camera Reviews Annotation Guidelines**

1. **Introduction**

The goal of this annotation task is to identify opinions expressed within camera reviews about specific entities and theirs attributes. An entity (that is evaluated) can be the whole camera (e.g. Canon 5d3, Nikon d7000), the tangible (e.g. battery, screen) and abstract parts (e.g. pixel, wifi, menu) of it, or the manufacturing company (e.g. Canon, Nikon) and the services it provides (e.g. pre- and after-sales customer support).

In particular, given a camera 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. camera, display, battery, company) and **attributes** (e.g. performance, design) that are described in sections 2 and 3, respectively. The identified entities should be assigned one or more attributes based on the context of the sentence they appear in. The E#A pair defines an aspect category.
* **Opinion Polarity**. Each identified E#A pair of a sentence has to be assigned a polarity, from a set P = {**positive**, **negative,** **neutral}***.* The *neutral* label applies for *mildly positive or mildly negative sentiment* (e.g. *c, d*)*,* thus it does not indicateobjectivity. For example, sentence *e* has not been assigned any polarity label, since it conveys only objective information

1. *手感确很舒坦。* 🡪 {*positive*}
2. *5D2夜景手持真的很吃力。*🡪 {*negative*}
3. *这台相机马马虎虎啊。* 🡪 {*neutral*}

The {E#A, P} annotations should be assigned at the sentence level taking into account the context of the whole review. For example, sentence a2 should be assigned a negative opinion about the customer support and not about the operation of the camera, as it is implied by a1. Similarly, in b1, even though the reviewer starts by saying how happy he/she was with the camera, he/she is expressing a negative opinion towards the camera as it can be inferred from b2.

1. *a1. Horrible customer support-they lost my camera for a month-got it back 3 months later*.

*a2. Camera still did not work...*

1. *b1. I was so happy with my new camera*.

*b2. For two months…*

Below we give the definitions of the entity and attribute labels that were used in this task.

1. **Entity labels**

In the context of this annotation task the entity E of an E#A pair can be assigned 21 possible labels which are described below**.**

* **camera:** This label is assigned when the reviewed entity is a specific camera as a whole. For example, in the following sentences a camera is being evaluated with regard to particular attributes such as the speed (*a*) and the control (*b*):
  1. *相机的速度很给力啊！* 🡪 {**camera**}
  2. *尼康的操控性要强些。*🡪 {**camera**}
* 11 labels that refer to single hardware components, parts or a set of components: a) **display** (=monitor, screen), b) **cpu** (=processor), c) **memory**, **battery**, d) **power supply** (*charger, charger unit, power supply cord, (power) adapter*), e) **keyboard** (*keys, numpad)*, f) **ports** (*USB, HDMI, VGA, card reader, Firewire, SD, DVI, Thunderbolt*), g) **multimedia devices** (*sound, audio, microphone, (built-in) camera, webcam, speakers, headphone*), h) **lens**, i) **photo**, j) **focus***.* Below are some examples:

1. *LCD屏幕太破了。*🡪 {**display**}
2. *洞妖的处理器应该明显快于小五的。*🡪 {**cpu**}
3. *电池续航能力很强。*🡪 {**memory, battery**}
4. *充电感觉不是很方便。*🡪 {**power supply**}
5. *60D专门设计了“Q键”。*🡪 { **keyboard**}
6. *外接接口有些太少了。* 🡪 {**ports**}
7. *视频图像也很清晰。*🡪 { **multimedia devices**}
8. *28MM镜头是不错。*🡪 {**lens**}
9. *gf系列的画质一般。*🡪 {**photo**}
10. *对焦迅速，准，狠。*🡪 {**focus**}

* A general entity label **hardware** is used for sentences that refer to the hardware in general or to hardware related entities that do not fall into one of the existing entity types e.g. *配件也要便宜一些。* 🡪 {**hardware**}
* **os**: This label applies to sentences discussing the operating system and its features (e.g. *start menu, starting up and shutdown*). e.g.
  1. *菜单界面也很友好。* 🡪 {**os**}
  2. *操作系统反映速度很慢。* 🡪 {**os**}
  3. *有时候界面操作都会有些许延时现象。*🡪 {**os**}
* **software**: This label applies for the rest of the software applications, browsers, shooting mode, as well as for sentences/reviews that refer to the software in general e.g.

1. *手持夜景模式不可调。* 🡪 {**software**}
2. *场景模式很适合街拍。* 🡪 {**software**}
3. *参数很齐全。* 🡪 {**software**}
4. *在拍摄中各种设置都很方便。* 🡪 {**software**}

Furthermore, we have the following 4 entity types that refer to the manufacturing company as a brand and to the services/products it provides:

* **warranty** that is provided by the manufacturer e.g. 在*质保期内只能免费更换很少的零件。*🡪 {**warranty**}
* **shipping** for the delivery service when the camera is bought or during repairs e.g. *相机的快递晚了将近一个礼拜。*🡪 {**shipping**}
* **Support** for pre- and after-sales customer support, customer service, repair service, product support, replacement policy and the staff e.g.

1. *我将产品问题汇报给了佳能公司，没有得到答复。*🡪 {**Support**}
2. *他们简直提供了世界上最差的服务。* 🡪 {**Support**}

* **company** for sentences that refer in general to the manufacturing company.
  1. *这将是我购买的最后一款佳能产品！* 🡪 {**company**}
  2. *我喜欢这款相机因为它是佳能的。*🡪{**company**}

Opinions expressed towards entities not described above are considered to be **out of the scope** of the SemEval 2015 ABSA task, and the corresponding sentences should be tagged accordingly. Such entities are cameras or products of the same or a competitive brand, theirs components, or other companies (e.g. competitive brands or retailers like Amazon, Best Buy, MacConnection etc.); see more examples below.

* 1. *中通快递的服务简直太差了！* 🡪 {**OutOfScope**}
  2. *苹果手机拍照效果也很好。*🡪 {**OutOfScope**}

1. **Attribute labels**

In the context of this annotation task the attribute A of an E#A pair can be assigned 9 possible labels which are described below.

* + - 1. **general.** This attribute label is used for general opinions expressed about an entity as a whole (e.g. camera, hardware, software, company) not focusing on any specific attribute etc.

1. *顺便吐槽这几个新出的Fujinon镜头。*🡪 {**lens**#**general**, negative}
2. *E16似乎是个垃圾。 🡪*{**camera**#**general**, negative}
3. *宾得的照片“更有立体感，清秀”。🡪* {**photo**#**general**, positive}
   * + 1. **price** for opinions focusing on the price (cheap or expensive)of the camera and the services provided by the manufacturer (support, shipping and warranty)e.g.
4. *价格贵不少。*🡪 {**camera**#**price**, negative }
5. *配件的维修费用高昂。* 🡪 {**support**#**price**, negative}
   * + 1. **quality** for opinions referring to the following attributes of an entity: construction/build quality, materials quality, enduring/long-lasting quality (=durability, longevity), broken components, noise, overheating problems, general feel, security (virus-resistant), screen quality (picture quality, resolution and clearness), quality of service/shipping. Here are some examples:
6. *镜头素质确实无可挑剔。*🡪 {**lens**#**quality**, positive}
7. *LCD屏幕太破了。*🡪 {**display**# **quality**, negative}
8. *这手感真是差了点。*🡪 {**camera#quality**, negative}
   * + 1. **operation & performance** for opinions that focus on the operation, the speed, the power, the stability and the responsiveness of an entity, opinions referring to freezing, crashing issues, as well as for opinions evaluating the battery life. Below are some examples:

1. *连拍的威力真的很爽。* 🡪 {**photographed function #operation\_performance***,* positive}
2. *对焦的速度上并不是很突出。*🡪 {**focus#operation\_performance***,* negative}
3. *尼康的操控性要强些。*🡪 {**camera# operation\_performance**, positive}
   * + 1. **usability** for opinions focusing on the easiness or convenience to use/ learn/ (un)install/ handle/ operate/set up/work with/navigate/update/configure/etc.*,*as well as for opinions evaluating properties like the upgradeability, and the compatibility. Here are some examples:
4. *对焦确认功能的确非常好用。🡪* {**focus** #**usability**, positive}
5. *5D3上手比较容易。🡪* {**camera**#**usability,** positive }
6. *菜单界面也很友好。🡪* {**os**#**usability,** positive}
   * + 1. **design&features** for opinions focusing on the design, the appearance (shape, color, look), the size and the weight of an entity, the placement of components, the software design*,* opinions referring to (extra/missing) features/components, as well as for opinions focusing on the duration and the terms/conditions of the warranty. Below are some examples:
7. *金属机身做工很好。*🡪 {**camera#design&features**, positive}
8. *就是那个大拨轮改的有点小。*🡪 {**hardware#design&features**, negative}
9. *制作工艺都不错。*🡪 {**camera #design&features**, positive}
   * + 1. **portability** for opinions focusing on the easiness to transfer the camera and/or use it in limited space e.g.
10. *更轻便的机身也便于携带。*🡪 {**camera***#* **portability***,* positive}
11. *但是外挂电源毕竟影会影响RX1的便携性。*🡪 {**camera#portability**, negative}
12. *NEX-5R+E24体积太大。*🡪 {**camera#portability**, negative}
    * + 1. **connectivity** for opinions referring to the ability or the easiness to connect via ports, VGA, HDMI, USB, Bluetooth to peripherals etc., as well as for opinions focusing on wireless and internet connections e.g.
13. *只有一个外置接口。*🡪{**ports #connectivity**, negative}
14. 宾得k7的PK口兼容很多老手动头。🡪{**ports #connectivity**, positive}
15. *WIFI功能很好玩。*🡪{**multimedia devices #connectivity**, positive}
    * + 1. **miscellaneous** for attributes that do not fall into any of the above cases. Such cases may be:
16. X-E1机宽容度很好。 *🡪* {**camera#miscellaneous**, positive}
17. 机器内闪GN只有6。🡪{**software#miscellaneous**, negative}