# Annex 7

Text auxiliaries

Computer-Mediated Communication (CMC) users feel the need of conveying emotions, attitudes, non-verbal elements, like for example the facial expression, in order to satisfy this necessity, graphical text auxiliaries were incorporated in the text processing software (Jibril, & Abdullah, 2013).

The analysis of this aspect will threat the three different types of social media commenting systems, Facebook, Twitter and newspapers web sites, separately, because they are structured in very different ways.

Newspapers use Facebook Pages service for expanding their capacity of managing comments about a specific article. It makes possible for public businesses and organizations create an authentic and public presence on Facebook. According to Facebook policy only official representatives may create a Facebook page, if authenticity is not guaranteed then Facebook may remove the page. Facebook page is structured in a way that can host posts by the owner of the page, each post can be commented by Facebook users that decides to follow the page by clicking the button "like" of the page. Once user follows the page then is entitled to comment its posts.
Newspapers owning a Facebook page, post a title and a picture that embeds the original article's title and a link to the article hosted on newspaper's web site. The Facebook title may contain emoticons, which are emotional icons. The header contains also the date and the icon indicating that the post is public. The next illustration is an example.
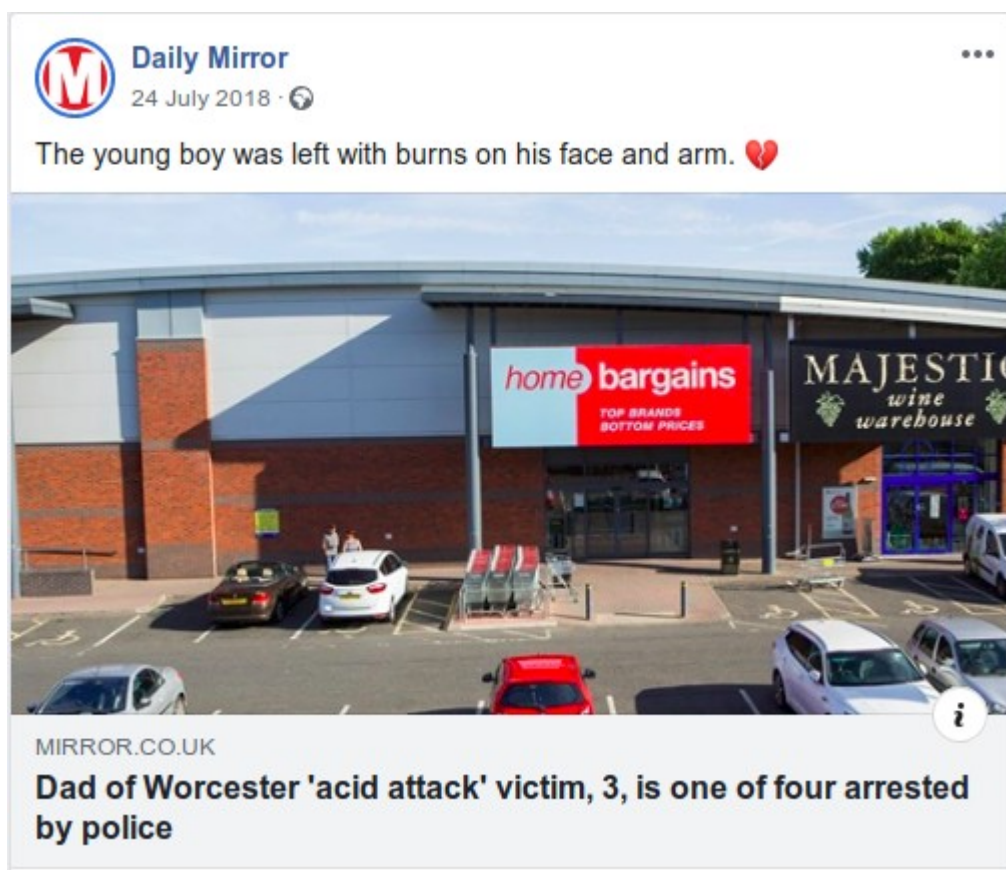
Users wishing to read the original article, they just click on the picture.
Straight from the Facebook Page posts, users may choose to inform about their feeling, comment or share the post. The next picture shows the specific area, the icon on the right is the user's avatar.
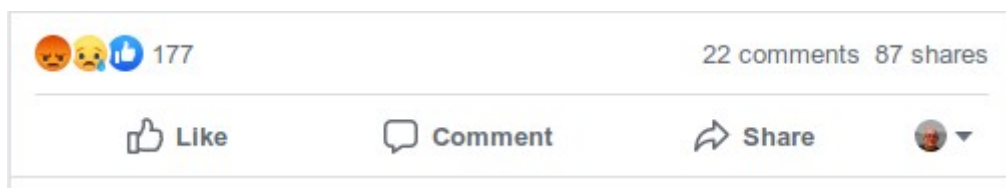
Actual "Like" button represents a development of the classic button, once clicked allow to choose among different feelings therefore indicating a more precise reaction than a simple "like". The next picture shows the options.
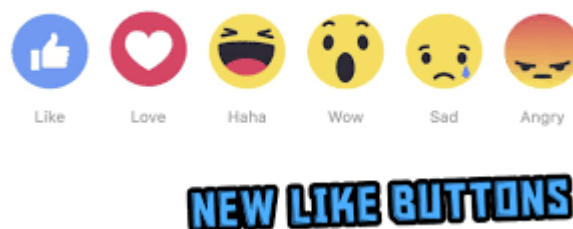

The "Share" button allows to involve other people by sending them the post's link or publishing the link on user timeline, the area that records user activity.

Users have immediate information on statistics about the described action.

A click on "Comment" button open the possibility to a deeper interaction, not limited to the post, but also with other users. This button represents the door to users network specifically created around the post that represents a newspaper's article. The access to the area dedicated to comments. In this area user may read the comments, indicate a preference to one or more comments by clicking the button "Like", comment the original article, reply to a user comment. Let analyse the details:

- Reading
  A passive action that do not involve the user with other users, but allows to get more information about opinions and feelings mainly, but sometimes is also an opportunity to know details from direct witnesses.
- Clicking like
  A light active action, it modifies other users popularity score, an action that does not require involvement. This action is significant when is part of a collective action.
- Write a comment
  A direct involvement on the article and the article's author. An opportunity to participate, to contribute to the main text.
- Write a reply
  This is a particular type of involvement because is the real interaction among users, is the action that has consequences on the network shape.

These two last actions are strongly influenced by Facebook mechanism in place, the heavy presence of text auxiliaries focuses on emotional reaction rather than pure intellectual contribution, a huge amount of emoticons, animated pictures (gifs) and stickers suggests that comments and replies may be more pictorial than textual. See following illustration for getting an idea of the concept.
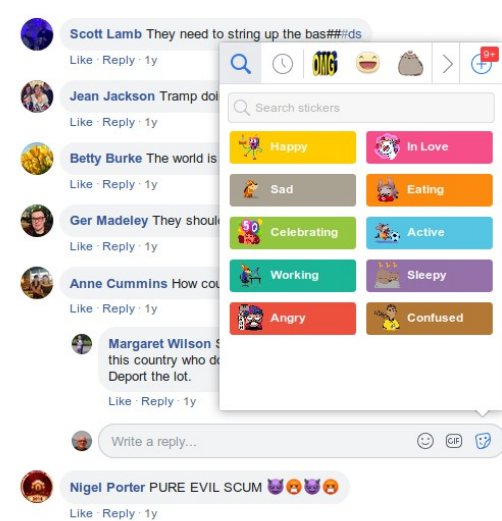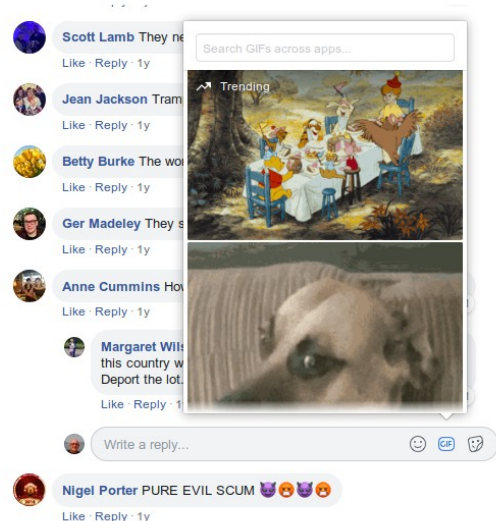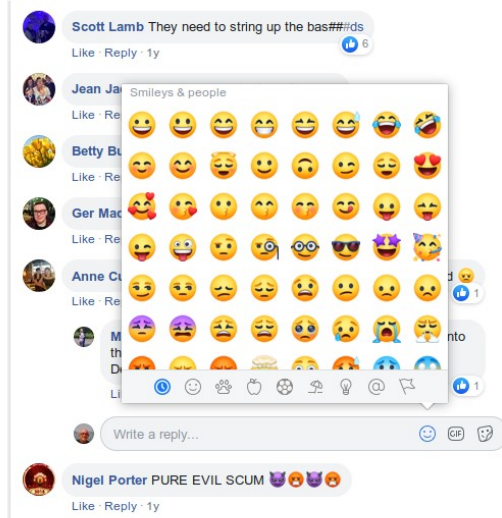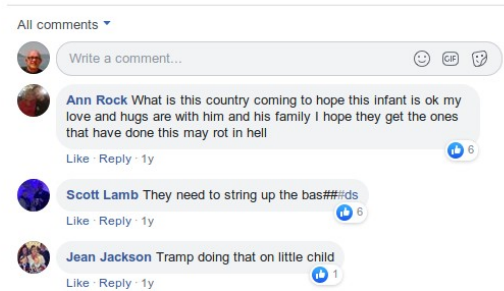
Newspapers use Twitter services for expanding their capacity of managing comments about a specific article. As already explained in previous chapter, Twitter posts are public by default, the expression of emotional state, of intimate feeling is transmitted to a wide public, not just a group of known people. This difference reflects on the tweet clickable area, it appears more formal and austere. User can choose to comment, retweet, like or send via private message, see next picture.

In the comment area the involvement is more personal, the interaction among users has to be encouraged, dynamics becomes more fluid. A rich choice of emoticons, emojis, animated gifs and even a mechanism for creating questionnaires.
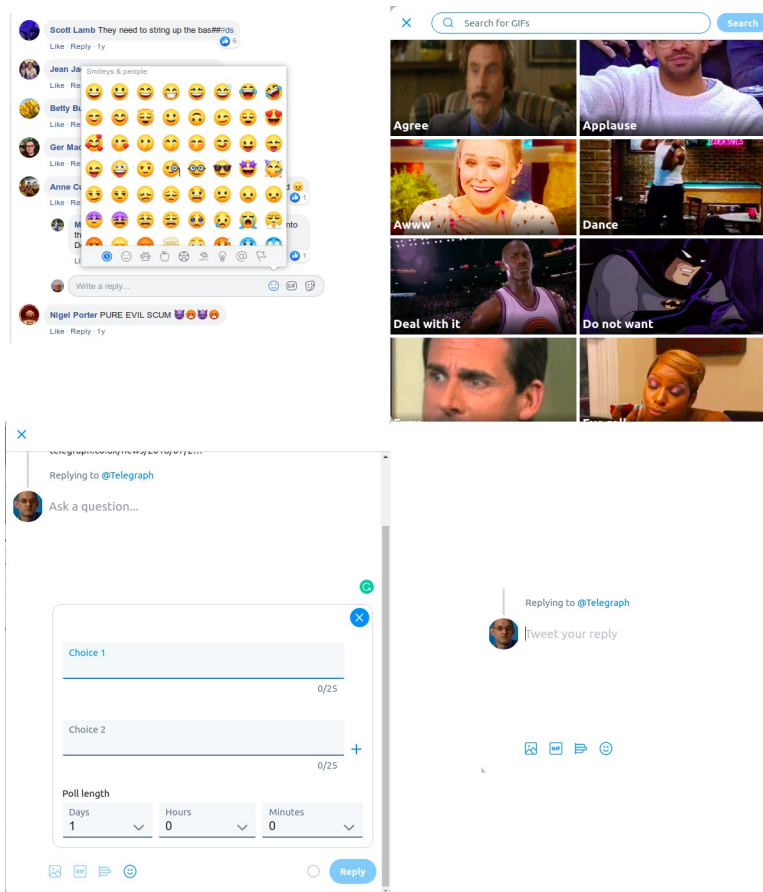
The real austere environment is the newspaper's web page, there comments and replies cannot count on pictorial emotional auxiliaries, users have to write pure text monitored by censoring activity. For instance 7% of comments related on the article n. 29 of Independent newspaper were removed. Daily Mail and Daily Express do not expose their censoring results, but they state the rights to act against inappropriate comments.

Some statistics on the subject is useful for further discussion, the next table shows the number of emoticons in the texts of the entire set of comments

Social media	Comments	Emoticons	Ratio
Newspaper web page	622	0	0.00%
Facebook page	3645	719	19.73%
Twitter	364	135	37.09%

It is also useful to learn how to extract this information from the text, the existing literature on the subject is not yet well developed and there are a lot of ongoing empirical researches. The solution here presented is very simple, based on the length of the encoded character. The next illustration shows the R programming language code for detecting emoticons and emojis inside a text.

```
library(corpus)
library(gtools

n_emo <- 0
for (ind in 1:length(files_comment)) {
    con <- file(paste0(dir_comments,files_comment[ind]))
    lines <- readLines(con)
    close(con)
    dfc <- corpus::term_stats(lines)
    dfc2 <- dfc[nchar(dfc$term) == 1,]
    dfc3 <- dfc2[ nchar(asc(dfc2$term)) > 20 ,]
    n_emo <- n_emo + sum(dfc3$count)
}
n_emo
```

References

Jibril, T.A., & Abdullah, M.H. (2013). Relevance of Emoticons in Computer-Mediated Communication Contexts: An Overview. DOI:10.5539/ass.v9n4p201