Abstract
We present here a typology of four forms of communication between posts and comments on blogs. They are described using different kinds of indicators, combining qualitative ethnographic approaches and quantitative social network analysis, showing the diversity of ways to produce one’s social identity.

1. Introduction
Sociologists often interpret the tremendous growing of weblogging practices as a characteristic symbol of the individualisation of our society. But the rise of the blogosphere may rather be seen as an original articulation between individual and collective ways of building identities in contemporary societies where expression of the self appears as a relational technique [4, 2]. Bloggers produce specific content in order to reach others and to start a conversation with them. We hypothesize that the way people blog has a meaning effect on the shape of the relational networks of their commentators.

2. A linguistic model of weblog communication
Our typology is based on four different ways of linking people to what they publish\(^1\). For this we use the linguistic distinction between *enunciation* (the act of producing a content) and *utterance* (the content of the enunciation) [5].

I The utterance is embedded inside the enunciation, the blogger reveals to others some aspects of his/her intimate personality.

II Utterances are closely linked to the everyday life activities of the blogger (familiar, social and cultural practices, pictures of friends, etc.).

III The utterances produced are linked to specific competencies or particular interests of the blogger. They characterize one (and often only one) facet of bloggers’ identity.

IV Utterances are isolated from the person of the enunciation. They are shared public objects that are evaluated by bloggers when they suggest an opinion in the public space.

This distinction between four forms of enunciation leads to four different manners of creating links between bloggers in an appropriate communicative way. In the first configuration, bloggers are linked by mutual revelation of their inner feelings. In the second one, links between bloggers are made by mutual activities that have been done in real life. In the third one, persons link together because they share the same interest. In the last configuration, persons link together in order to discuss and oppose their views on a public issue. Of course in practice, blogs are always a mixture of these different types even if they may be closer to a particular one.

3. A panel of bloggers
For this research we’ve made sociological interviews of 27 adult bloggers. Two thirds of them are male and live in or near Paris. The average age is 29 (with age dispersion between 18 and 40). 89% are working (11% of students), but more than a third is in a precarious situation: 37% are working in informatics and 11% in journalism. However, the most significant feature of our sample is the meaningful part of single people (2/3) and the fact that our bloggers have no kids (80% of our sample). We’ve also conducted 30 interviews with young people and made an ethnographic study of the behaviour of kids in secondary school in order to have an understanding of the articulation between their real and virtual relationships [3]. With those different studies, we have a large representation of different blogging practices in the French blogosphere.

4. Ego-centered network analysis
Given a blog (let us call it *ego*), one denotes \(V_1\) the set of blogs in *ego*’s blogroll\(^2\) and \(E\) the set of oriented links between blogs

\(^1\)For a complete presentation of this analytical model inspired by the notion of speech act in pragmatic linguistics, see [1]

\(^2\)For many blogs of our sample, it is quite hard, if not just impossible, to know the blog-identity of commenters, when
of $V_1$ ($u \rightarrow v$ is in $E$ iff. $v$ is in $u$’s blogroll). One thus define the following sets of non-oriented links and of nodes:

$$
E_\rightarrow = \{ u \rightarrow v \in V_1 \times V_1 | u \rightarrow v \in E \} \\
V_\rightarrow = \{ u \in V_1 | \exists u \rightarrow v \in E_\rightarrow \} \\
E_\leftarrow = \{ u \leftarrow v \in V_1 \times V_1 | u \leftarrow v \in E \} \\
V_\leftarrow = \{ u \in V_1 | \exists u \leftarrow v \in E_\leftarrow \}
$$

An edge in $E_\rightarrow$ (picture on the left) means at least a common interest between $v_0$ and one of its neighbours.

An edge in $E_\leftarrow$ (picture on the right) means an acquaintance between two of $v_0$’s neighbours.

Note that one always has: $V_\rightarrow \subseteq V_\leftarrow \subseteq V_1$. Table 1 indicates the proportions of these sets with respect to each other.

### Table 1: Four types of production of a blog’s public

<table>
<thead>
<tr>
<th>Identity</th>
<th>Anonymous</th>
<th>Nickname</th>
<th>Pen name</th>
<th>Civil identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Intimate</td>
<td>Continuous</td>
<td>Shared</td>
<td>Public space</td>
</tr>
<tr>
<td>Relational form</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blog public</td>
<td>Anonymous</td>
<td>Circle of familiar people</td>
<td>Community of interest</td>
<td>Public space</td>
</tr>
<tr>
<td>External links</td>
<td>Few</td>
<td>Very few</td>
<td>Many</td>
<td>A lot</td>
</tr>
<tr>
<td>Type of blog</td>
<td>personal journal</td>
<td>Teenager, family, travel blogs</td>
<td>Fans, collectors, community blogs</td>
<td>Journalists, citizen, political blogs</td>
</tr>
<tr>
<td>Shape of ego-network</td>
<td>Star</td>
<td>Clan</td>
<td>Community</td>
<td>Polarized</td>
</tr>
<tr>
<td>Size</td>
<td>Very small</td>
<td>Small</td>
<td>Large</td>
<td>Very large</td>
</tr>
<tr>
<td>ego in-degree</td>
<td>High</td>
<td>High</td>
<td>Quite low</td>
<td>Low</td>
</tr>
<tr>
<td>$V_\rightarrow \subseteq V_\leftarrow \subseteq V_1$</td>
<td>$\cdot \cdot \cdot V_\rightarrow \cdot V_1$</td>
<td>$V_\rightarrow \cdot \cdot \cdot V_\rightarrow \cdot V_1$</td>
<td>$V_\rightarrow \cdot \cdot \cdot V_\rightarrow \cdot V_1$</td>
<td>$V_\rightarrow \cdot \cdot \cdot V_\rightarrow \cdot V_1$</td>
</tr>
</tbody>
</table>

5. Further developments

Our work could be extended into three main directions. First, networks of commentators could provide a more accurate view of actual communication. Second, a dynamic analysis of blog communities could help understanding the constructing process of a blog and its public. Third the analysis of weblogs networks could be greatly enriched by the comparison between the real and online communities.

Now of course the simple analysis on the few exemplar weblogs that we’ve met during our explanatory survey should be considered as a first approximation. We suggest that it could be a basis for further works on a larger scale.

### References


4 Concerning the last two directions, we have implemented a methodology to compare real and virtual relationships into a group of teenagers during a few months, see [3].

5 This research has been done in the AUTOGRAPH project http://overcrowded.anoptique.org/ProjetAutoGraph working on self-organization and Visualisation of large online networks, funded by the french national research agency (ANR/RNRT).