Public discourse in science: a comparison between English and Italian lectures

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1. Introduction

Since English has affirmed its role as the international language of science, Anglo-American models have tended to dominate public forms of scientific prose such as journal articles and conference presentations. Moreover, as English is used not only internationally but also intranationally in the scientific field (Maher 1986), the influence of English stylistic conventions is very strong and may affect texts produced in other languages, too. While on the one hand the international character of these linguistic conventions is an advantage, in that it facilitates communication among people from different countries belonging to the same discourse community, on the other hand it may cause problems for learners from countries with different rhetorical traditions.

In an attempt to gain further insights into the language of conference presentations, a corpus of taped recordings of lectures on similar topics given in English and Italian (about 20,000 words each) was collected and analysed by computer to detect differences and similarities in the use of a restricted number of features found in a previous study (Webber 1997) to be characteristic of oral presentations as opposed to written articles. Two further corpora of written abstracts in English and Italian (20,000 words each) were collected for purposes of comparison. The main focus of this study is on two broad areas: the use of personal deictics and of discourse markers, while imprecise quantifiers, which were found frequently in the corpus, are analysed only briefly in this paper, because of lack of space and because they have already been dealt with extensively in the literature (Dubois 1987, Channell 1994, Bertucelli Papi 1995). Many of the features examined may be considered typical of the conversational mode, but some continuative adjuncts were found to be a specific characteristic of lecture discourse.

2. The Corpus

The material under study consists of spoken communications divided into 2 mini-corpora, one English totalling 20,285 tokens and 2,624 types and one Italian, of 19,400 tokens and 2,849 types. Owing to the necessity of typing out
the tapescript by hand, the corpus is being put together very slowly and is still very small. The talks in English were given by 15 different speakers of various nationalities. The tenor of these texts is predominantly expert-to-expert.

The English presentations were given at large conferences, one of which attended by 5,000 delegates. The invited speakers therefore gave their lectures on a platform in a very large hall, but the rooms housing the workshop sessions were also quite large. No account is taken here of the nationality of the speakers or of errors made by non-native participants, although some of the L2 speakers were more competent linguistically than others. This reflects the reality of these events, where the proceedings are all in English and listeners have to adapt.

The Italian talks were all given by Italian diabetologists, mainly at a national conference in Naples, attended by about 2,000 delegates. Two of them were plenary lectures given by invited speakers, 7 were "comunicazioni in sessioni parallele" and one was a talk given to a mixed audience of doctors and patients. Here again, the inaugural and other plenary lectures were held in large halls but some of the workshop talks were in smaller rooms in a slightly more intimate atmosphere.

3. Differences between Written and Oral Presentations

Before describing the results of the study, it is necessary to consider the problem of distinguishing between written and spoken texts. Lock (1977), in comparing written articles and lectures, noted several differences in structure, content and delivery. Amongst other things, in oral presentations he found there were shorter sentences, a more informal style and much more repetition. As regards oral delivery, there is maximal adaptability to the audience and features such as an arresting introduction or jokes are desirable, whereas in writing they are usually irrelevant.

The linguistic realisations of these talks are generally a result of the need to reconcile the conflicting requirements of time constraints and conventions of politeness and acceptability in the discourse community. In fact, many texts presented here consist of an admixture of modes, because the content of the talks is not entirely transactional but contains many interactional elements as well. Most authors agree that items such as WELL (Svartvik 1980, Owen 1981, Stubbs 1983) and ANYWAY (Owen 1981) do not often occur in written text. Biber (1988) in a comparative study of spoken and written language also found that continuatives such as WELL and NOW which function as discourse markers are rare outside conversational genres. These are among those features which most native speakers will intuitively recognise as being characteristic of the spoken mode, mainly because the co-presence of the interlocutors affects their linguistic behaviour. McCarthy and Carter speak of face-to-face grammar
choices (1996). They found an 80% overlap between written and spoken discourse (personal communication), so the distinction is not clearcut. What counts is *typicality*. We may expect therefore to find a cline rather than a hard and fast distinction. This also applies to the question of formality, as it is evident that not all written texts are necessarily formal. However, there are certain features which most native speakers will associate with written academic prose, such as "namely".

It is well known that scientific prose is more abstract than spoken texts, leading to extensive use of nominalisation and condensed noun phrases consisting of adjectival and nominal modifiers acting as epithet or classifier (Halliday and Martin 1993). If we consider the following quotations taken from the corpus, we will see that they contain some features which are characteristic of academic prose, along with others which are usually associated with conversation:

**English N. 9:** I would like to leave you with two messages: first, corticosteroids play an important role in regional fat distribution in Cushing's disease, and second that it plays an important role in total body fat accumulation and storage.

**Italian N. 20:** Dunque, la metformina è una bivalente prodotta per la terapia del diabete del tipo 2 dal 19.., quindi sono ormai quasi n anni.

In each case this is the opening sentence of a lecture. It is unlikely that the same researcher in a written article would have started off in this manner. The personal deictics I and YOU would probably not have been used in this way, particularly in the opening sentence of an article, nor (presumably) would the adjunct DUNQUE have been used as the first word in a written article.

What is interesting is that, although the dividing line between spoken and written is not clearcut, from the present study it seems clear that speakers often switch from a more formal style to a more casual mode of expression, and hearers are usually aware of this, as the talk departs from the formal style of the surrounding discourse and this provides a kind of contextualization cue (Gumperz 1982) which gives an indication of speakers' intentions, such as that now they wish to say something in a lighter vein, or now they intend to be serious. The context of situation and thus the audience expectations are important in realizing how an item is taken.

4. **Results**

There is a danger in cross-linguistic studies of attempting to compare items which are not really the same. However, without wishing to imply that there is
any direct equivalence between the English and Italian items discussed here, it is considered nonetheless useful to compare features in the two languages which have similar functions.

4.1. Interpersonal Features

In both languages, there are many examples of informal and interactional features. The use of first and second person forms are a case in point, being a typical aspect of face-to-face discourse. Although the use of pronoun subjects in a pro-drop language such as Italian is different, it was clear from the verb inflections that first and second person verb forms were widely used also in Italian, as well as attitudinal adverbs such as "personalmente" and features which involve the addressee directly, such as "ecco".

In the English corpus, first and second person pronouns occur frequently. The frequencies are shown in tables 3 and 4. (Occurrences below 6 are omitted). In brief, we may note that WE accounts for 309 out of 369 of the occurrences of first person plural forms. There were also 214 occurrences of YOU and 166 of I and I'M. I collocates strongly with THINK. This frequent use of I THINK is typical of the personal character of the interaction involved. Nattinger and DeCarrico (1992) list this as one of the lexical phrases used in lectures for signalling agreement or disagreement. In a written corpus of medical abstracts downloaded from a retrieval facility and analyzed for purposes of comparison in this study, first and second person pronouns occur less frequently than in the spoken material.

Turning to the Italian, we find 33 instances of NOI and of VI used as a personal pronoun. NOSTRO and its various inflected forms is not used as much as in a written scientific corpus analysed for comparison (24 vs 45), but there are more instances of ABBIAMO (144) and of VEDETE (33). Hence, in 20,000 words of written abstracts, the only personal found frequently was NOSTRO (45 occurrences), which is often used in the introduction and discussion sections.

To take VOI as an example – one of the most frequent types in the Italian corpus here with 27.7 per 10,000 words – we may note it is more frequent in the conference talks than in written scientific abstracts, but it is not as frequent as in a corpus of general spoken Italian recently published by De Mauro et al. (1994), which found an occurrence of 54.2 per 10,000 words, as compared with 27.7 per 10,000 in this corpus. In De Mauro's corpus only one fifth of the material was taken from lectures, while the rest was from other types of language, such as conversations, interviews, telephone conversations and so on. Thus, conference discourse seems to represent a kind of 'halfway stage'.

Allowing for the different grammatical systems in the two languages, we may note therefore that personal forms are used frequently in conference talks in
both, the only marked difference being in the more widespread use of I THINK in English.

Let us consider why they are used and to what effect.

The first person is often used for hedging:

N. 2 I think we can rule out any ...
N. 9 I would suggest, and I think Steve would agree, ...
N. 16 i risultati ottenuti confermano, a nostro avviso.
N. 20 diciamo al momento di andare.
N. 21 diciamo che..
N. 24 Invece ha trovato, all'inizio direi quasi sorprendentemente.

Both first and second person forms are often found in metastatements used for orientation and to indicate the speaker's intentions:

N. 1 perhaps I can just show you.
N. 2 Let's just see what we are talking about
   Well, before coming back to that, I'll show you a few slides about macroscopy
N. 3 I want to just take a few minutes.
N. 19 cominciamo dai topi
N. 20 andiamo a osservare.
N. 23 credo di aver concluso
N. 24 Vi prego di prestare attenzione a questa diapositiva perché ...; rapidissimamente — so che il discorso è molto difficile ...;
N. 25 vorrei intrattenervi sul processo che ...;
   continuiamo questo viaggio nel tempo

The singular pronoun may also be used to develop an argument:

N. 25 Quando io studio il CA, vedo che è aumentato; non può essere x a spiegarmi ...?

At times the speaker anticipates the listeners' reactions:

N. 17 a questo punto ce la siamo giocata tutta
N. 23 La successiva: A questo punto voi potreste dire 'Beh, la relazione sulla predizione finisce qui...' Tuttavia la storia non può finire qui ...

The same applies to the aside in the example from N. 24 above.

Other cases are attitudinal, where the speaker's feelings and evaluations intrude into a text which is otherwise highly technical, inviting the audience to share the same impressions:

N. 9 I would like to say a few heartfelt words ...
N. 12 -rather exciting results-
Personals are used also because this is language in action, where speakers point to details on the slides and draw listeners' attention to them. Here are just a few samples from the Italian, but there are dozens of instances distributed evenly in both corpora:

il topo che ho fatto vedere qui; possiamo vedere sopra; Guardate qui a destra

The speaker thus addresses the audience directly and attempts to draw them into the discourse. The first person plural occurs often (see Tables 3 and 4 below), and this raises interesting questions. Which of these can be interpreted as an inclusive "we" and which are exclusive? Often it is just a case of the speaker presenting research on behalf of a team. At other times the speaker includes the listeners in the discourse as if they were also involved in the argument being developed:

N. 2 Now let's come back to this problem
N. 17 è li che dobbiamo agire
N. 18 abbiamo osservato quindi ...; ma come può l'x..? L'abbiamo detto prima, cioè ... 
N. 25 questo potrebbe spiegarsi ... (my underlining).

There is thus a simulated participation on the part of the audience.

On other occasions, it seems to refer to the profession as a whole, as in the following:

N. 9 the one we are taught to look for
N. 15 we know that that is not so
N. 23 se noi andiamo ad analizzare ...

The first person pronouns are used often in Italian where they are not grammatically required, for example, with passives:

N. 16 l'esame da noi effettuato
N. 17 i risultati da noi ottenuti.

The high number of instances of ABBIAMO (166) points to a desire, which may be unconscious, to emphasise the concept of teamwork, of competition between groups in striving to achieve results and stake claims, but also, as maintained by Myers (1989), of giving an impression of politeness. As he says, the use of the first person is not necessarily pretentious. We often find opening sentences such as:
N. 19 Ci tengo a sottolineare che i risultati fanno parte di una ricerca dell'Associazione

These and other instances of interpersonal features serve to bond members of the discourse community. Thus, the references to self and informal expressions as well as the occasional touches of humour clearly serve also to create a rapport with the audience:

N. 9 The only guy who's going to be out of a job is me. I hope you enjoyed my presentation.

This last example is from a plenary lecture, where the style is often more relaxed.

In Italian, there are more self-references in the plenary lectures than in workshop sessions, as may be seen from the following list of occurrences higher than 6:

<table>
<thead>
<tr>
<th></th>
<th>Italian</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>total occurrences</td>
<td>plenary lectures</td>
</tr>
<tr>
<td>ho</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>io</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>me/mi</td>
<td>21</td>
<td>15</td>
</tr>
<tr>
<td>mio/mia</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>vi</td>
<td>33</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>92</td>
<td>69</td>
</tr>
</tbody>
</table>

In English, the distribution across sub-genres is more uniform. In the Italian corpus, the 13 occurrences of VI are found all in the same lecture.

Apart from personal deictics, there are also other interpersonal elements. In the plenary lecture, the style is often more varied, and because of the freedom in choice of style, style switching is particularly noticeable. Thus, beside formal expressions such as "Dogma has it that ...", we may find others which are more typical of casual conversation than academic discourse. Plenary lectures often start off with a few joking remarks.

Casual features are less noticeable in the Italian data here, but there are some instances. In N. 25, in the introductory section of the inaugural lecture, we find personal references to self and to colleagues, such as:

non sono affatto una femminista, quindi non prendete questa considerazione ... devo metterla in questa prospettiva
This is followed shortly after by the following, which marks the beginning of the body of the talk: "con l'aiuto di queste persone abbiamo cercato di ricostruire il processo che sottende la microangiopatia". The introductory remarks contrast strongly with the rest of the talk, which is extremely formal and unadorned in style, especially when compared with the English speaking invited lecturers in this study.

If we are to accept McCarthy's criterion that certain features are intuitively felt to be typical of informal modes, the following may be considered informal:

N. 4 after a sluggish start; at the end of the day; they start off low and sort of pick up as ...
N. 9 I've just got a couple of things to say about x; We actually have come a long way; I'll start from MODY because it's easier to tackle
N. 15 in order to spot the gene responsible; the same goes for x

In Italian there are fewer examples:

N. 24 Non c'è niente da fare - il livello è sempre basso; un punto abbastanza dolente
N. 22 detto in soldoni; chiedo scusa se sarà un tantino difficile con beneficio d'inventario; è un serpente che si morde la coda

These regionally marked and fixed expressions serve as mitigating devices to counteract the impression of dominance on the part of the platform speaker and create rapport with the listeners, in a similar way to the vague language noted by Channell (1994) and Bertuccelli Papi (1995) in other registers.

Using Biber and Finegan's (1989) distinction between edited and interactive language, we may postulate a variation among different scientific address genres represented as follows:

<table>
<thead>
<tr>
<th>EDITED</th>
<th>INTERACTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>research</td>
<td>communication</td>
</tr>
<tr>
<td>seminar</td>
<td>poster</td>
</tr>
<tr>
<td>plenary address</td>
<td>communication to mixed audience</td>
</tr>
<tr>
<td>presentation</td>
<td></td>
</tr>
</tbody>
</table>

4.2. Discourse Markers

These include metapragmatic signalling devices in general, continuative adjuncts such as NOW or SO and questions which indicate the direction and flow of the discourse.
N. 1 Well now, based on that experience ...
N. 2 Now, after about forty days very suddenly the blood sugar rose again
N. 3 Now let's come back to this problem ...
N. 15 well, I can't answer that
    Is the disease entirely due to some virus infection? -Well, no, we know that that is not so
N. 16 Per quanto riguarda ...
    Allora, i risultati. I risultati sono stati i seguenti
N. 18 Allora, riassumendo abbiamo osservato quindi ...
N. 21 Che cosa si fa una volta individuato il soggetto a rischio? Per ora non si fa niente ...
N. 22 Questo che cosa vuol dire?
N. 24 Bene, prima di tutto ...; Quali possono essere quindi i meccanismi che ...?
N. 25 Ecco, vorrei intrattenervi sul processo che ...; Quindi, posso avere la prossima.

In the English data, NOW is by far the most frequent item used as a boundary marker. There are 50 instances of NOW in sentence-initial position. While some of these may be ambiguous, in that they might be taken literally to mean "at the present moment", others are clearly discourse signals, as in the following instance followed by a past tense:

N. 1 had pretty much disappeared. Now we then felt strongly that ...

Nattinger and DeCarrico (1992) also found many instances of NOW, which they noted was used for various functions — as qualifier (level intonation, no pause), topic shifter (falling intonation + pause), relator (level intonation, no pause). It does not seem to be used in casual conversation, but is restricted to long turns, such as story telling or giving directives, but above all in lectures. It may therefore be considered a specific structuring technique of lecture discourse rather than of casual conversation. As Nattinger and DeCarrico point out, NOW would probably sound inappropriate in casual conversation: it implies there is some relevant information about to arrive and in lectures signals another step in the argument, whereas in long conversational explanations it implies the information may be unknown to the interlocutor.

QUINDI is found frequently in the Italian corpus. However, it is rarely at the beginning of an utterance and seems to be used more as an adjunct of consequence in the reasoning process of the argument rather than as a discourse structuring technique.
4.3. Imprecise Quantifiers

These are distributed throughout the talks, although speakers who prefer a more relaxed style use them more often. They were equally frequent in both languages, which show a concurrence of precise, mathematical figures and other vague, informal expressions. The following are some examples:

- anything from 7 days to 51 days; a little bit; had pretty much disappeared;
- the rather high dropout

In accordance with Dubois (1987), it was found firstly, that imprecise quantifiers are often used to distinguish between information which the speaker considers important and are part of the main claim of the research, and data which come from other studies or which the speaker disagrees with, and secondly, that ABOUT is the most frequently used approximator, with 26 occurrences.

Here are some examples from the Italian material:

- questa mette un po' insieme tutti i risultati; la pressochè assenza di; circa 4 ore; circa 20 mg; circa 2%.

It may be seen from the examples that many items have more than one function and so operate at different levels. Further details are given in Tables 3 and 4, showing words with an occurrence of 6 or higher. Items for which more than one interpretation is possible are counted only once.

### Table 3

<table>
<thead>
<tr>
<th>Type</th>
<th>Raw Frequency</th>
<th>* Rel. Frequency</th>
<th>** Ref. Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personals</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>153</td>
<td>75.42</td>
<td>112.34</td>
</tr>
<tr>
<td>my</td>
<td>18</td>
<td>8.87</td>
<td>6.27</td>
</tr>
<tr>
<td>me</td>
<td>8</td>
<td>3.94</td>
<td>24.36</td>
</tr>
<tr>
<td>we</td>
<td>309</td>
<td>152.33</td>
<td>36.60</td>
</tr>
<tr>
<td>us</td>
<td>16</td>
<td>7.88</td>
<td>9.75</td>
</tr>
<tr>
<td>our</td>
<td>35</td>
<td>17.25</td>
<td>13.00</td>
</tr>
<tr>
<td>you</td>
<td>214</td>
<td>105.5</td>
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<tr>
<td>your</td>
<td>7</td>
<td>3.45</td>
<td>16.30</td>
</tr>
<tr>
<td><strong>Discourse Markers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>now</td>
<td>50</td>
<td>25.00</td>
<td></td>
</tr>
<tr>
<td>so</td>
<td>51</td>
<td>25.14</td>
<td></td>
</tr>
<tr>
<td>well</td>
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<td>5.91</td>
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</tr>
<tr>
<td><strong>Imprecise Quantifiers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>about</td>
<td>26</td>
<td>12.81</td>
<td></td>
</tr>
<tr>
<td>rather</td>
<td>6</td>
<td>2.95</td>
<td></td>
</tr>
<tr>
<td>a bit</td>
<td>6</td>
<td>2.95</td>
<td></td>
</tr>
<tr>
<td>approximately</td>
<td>1</td>
<td>0.49</td>
<td></td>
</tr>
</tbody>
</table>

* Relative frequency out of 10,000 words.

** 1 Frequency out of 10,000 in a reference list based on a modified version of the COBUILD listing. This is not given for types used in different senses.
In general, it was found that the politeness strategies used in the two languages were similar. There was a desire to show deference and give the impression of belonging to the same community – in expressions such as "Questo sembrerà abbastanza ovvio davanti a una platea di diabetologi", (N. 20) or "and one final intriguing point, which we as hemostasis and thrombosis experts should be concerned about" (N. 12). Speakers adopt a tone of modesty and deference (N. 4 "J.C., who taught me what little medicine I know"), and express a desire to share their experience with others of similar interests and hear what they have to say about them. In reality, of course, there is also a great deal of competition in scientific circles and, as shown by Myers (1989), certain features may be directed at insiders and others at peripheral members of the association, which is increasingly split into special interest groups.

As regards personal deictics, in both languages there are many examples of both negative and positive politeness strategies reflected in the use of first and second person forms, the most notable difference being in greater frequency of I THINK in English, which has no equivalently high counterpart in Italian (for example, the conditional used to express uncertainty which is available in Italian was found only once). However, it was clear from the data that personal and attitudinal features are widely used also in Italian. Considering the language of science is often said to be impersonal, the number of instances of NOI seems high, especially as Italian offers the option of dropping the pronoun and also the possibility of using the impersonal "si". This is confirmed by the frequency of ABBIAMO. The use of personal forms is only partly due to predictable consequences of language-in-action, such as pointing to slides. It is also largely a result of choice on the part of the speaker and evidently forms part of the
social pragmatics of this genre. Thus, many of the features described may be
ing owing to a wish to create empathy with the audience, or, as Tannen (1984) says,
to show "I'm just folks" "we're all equals". There is a desire to reduce the
distance between the speaker on the platform and the listeners.

The use of continuatives was found to be much more extensive and varied in
English. In the Italian material, there was nothing comparable to the 50 instances
of the boundary marker NOW found in the English talks. ALLORA and
QUINDI were both found 13 times as signalling devices. The latter, considered
by Zingarelli a conjunction of consequence "con valore conclusivo" is often
used, like English so, to mark the next step in an argument and hence fulfills
the two functions of concluding one phase and continuing another at the same
time, but it is used less frequently than SO in the English corpus to introduce a
new topic. Italian speakers depend more on the slides or rhetorical questions to
indicate the next step in the discourse. Italian speaker N. 8 indicates the next
step in his argument 13 times by simply saying "La prossima". Thus, the slides
become a structuring device in the discourse. The use of continuatives creates
the impression that the speakers are narrating the stages in their research. This
narrative element comes out clearly in one of the Italian lectures:

N. 18 Nel frattempo, un'altra collaborazione cominciò con un gruppo
belga. Mentre questo avveniva, un gruppo americano pubblicò un
articolo ...

Mauranen (1992) attributes the lower frequency of connectors in Finnish
scientific papers to different rhetorical traditions in some European countries,
where the use of connectors is not encouraged. This appears to apply to Italian
conventions, too. Italian speakers wish to be convincing and logical without
seeming to impose their own views too obviously or to lead the hearers by the
hand too much.

In the area of imprecise quantifiers, there was little difference to be noted
between the two languages. These seemed to be widely used, and with the same
functions. They are used in both languages for reasons similar to those
motivating the use of personal deictics, that is, for hedging and epistemic
modalization, either because the speaker is not entirely sure of the facts or how
to interpret them, or for social reasons, to relate to the listeners. As Channell
says, there may also be a question of relevance. In this case, if the figures are
shown in the slides, it would be unnecessary and tedious to read them all out.
What the audience want to hear is how they are interpreted.

It was found the short communications generally followed Anglo-American
models in structure and tenor. The time constraints leave little space for the
expression of the speaker's personality, and participants are acutely aware of
this. See, for example, N. 23 "Siccome uno dei miei compiti è di essere breve, passo alla seconda diapositiva".

There is a higher occurrence of attitudinal language and fixed expressions typical of casual conversation in the English plenaries, especially at the beginning and end of lectures. Fixed expressions are part of the common cultural store of a community and give receivers a sense of solidarity and belonging to a group. They are therefore often culture-specific and so might contribute to any divergence there may be between plenary address conventions in the two cultures. We may wonder why they are used in this international setting. However, most accomplished speakers will use them when speaking naturally without realising it. In a large international context, listeners may have to adapt to English linguistic and also cultural norms, as speakers tend to resort to common lexical phrases to express their personality and create rapport with the audience. Even in the field of technology and science, language cannot be divorced from culture.

A platform speech is, of course, in many ways quite different from spontaneous conversation. To begin with, turns are allocated, and although the speaker may apparently appeal to the audience in the course of the talk in the ways described above, after the plenary lecture listeners are not expected to intervene at all, and at workshops not until the talk is over and the chairperson invites questions from the floor. The speaker is the animator but is not always the sole principal or author of the contents, as many studies are carried out by a team of researchers. However, although there is no overt participation of the audience during the talk, there may be engagement, and this is what the speaker sets out to achieve, by using some of the features described here.

References