INTRODUCTION

Though numbers are commonly associated with precision and are a main feature of informative texts, the present paper argues that they can be used with a vague meaning and can perform more functions than just the informative one. The present analysis focuses on the discourse of advertising, where the persuasive and informative functions are often of equal importance. As will be demonstrated further in the paper, numbers are employed in different linguistic patterns when they perform certain communicative functions.

This investigation is primarily based on corpus data and makes use of one constituent part of the British National Corpus (BNC). The sub-corpus used for the investigation consists of written advertisements, which total 558,133 words. The majority of written advertisements in the BNC include travel brochures and leaflets, tourist information leaflets, leaflets advertising services, and holiday information. A significantly smaller part of the texts comprises bank leaflets, leaflets advertising goods and products, and advertisements from The Economist. Since most of the corpus data represent texts used to advertise tourist services, some additional adverts were used to compensate for the underrepresented text types. Therefore, advertisements collected from the website of Mary Kay cosmetics (www.marykay.com) were used to supplement the BNC data. To distinguish the two data sources, the examples cited from the Mary Kay homepage will be followed by the product names that they advertise, whereas corpus examples will be followed by the bracketed abbreviation ‘BNC’.

PRECISE NUMBERS WITH A VAGUE MEANING: THEORETICAL BACKGROUND

Since numbers are commonly associated with precision and objectivity, they are often stereotypically considered to be a main feature of informative, well-substantiated
and objective texts. As Scollon and Scollon (1995) observe, communication in the modern world is largely based on Utilitarian discourse, which ‘fetishises’ precise information and empirical evidence (for a similar approach, see also Zadeh 1987). Due to such an attitude to numerical information, precision has been especially prioritised and valued in the world of academia, where arguments are considered to be grounded if they are backed up with precise numbers and solid evidence.

The tendency to put special emphasis on precise numbers and precise use of language is based on the Aristotelian tradition, where a lack of specificity and precision is considered to be ‘destructive of clearness’ and must therefore be eliminated. Following Aristotle, when speaking about events we should aim at specificity, i.e. indicate exact dates, numbers, etc. (1946: 1407).

However, some recent linguistic studies have shown that precision need not be the absolute aim of communication. Besides, as has been demonstrated by some linguists, even numbers can be used with a vague meaning and can serve some important communicative functions when used imprecisely. For instance, Hurford (1987), in his study of universal principles in the formation and properties of numerals, observes that ordinal numbers without a noun are absolutely uninformative when decontextualised.

Other linguists observe that ordinal numbers can be vague even when they are fully contextualised. For instance, Channell (1994) argues that ordinal numbers can be used as approximations both when they are (1) explicitly approximated, and (2) without an explicit approximator. Numbers can be approximated with approximators (e.g. about, around, approximately) and other numbers by providing a range (e.g. from...to). Numbers that are not approximated but are still used with a vague meaning are round numbers. The significance of round numbers in our cognitive system is discussed by Rosh (1975), who observes that these numbers are of special importance since they are used as cognitive reference points. Such an approach to round numbers is further developed by Channell, who claims that ‘we understand that a number may be an approximation when it is a reference point number’ (1994: 79). She makes some important observations concerning the factors that predetermine the use of such numbers. First, she notes that ‘reference point numbers are a product of the base of the number system being used’ (e.g. 10) (Channell 1994: 79). Second, ‘what counts as “round” is partly situationally determined’ (ibid.).

Vague numerical references can serve multiple purposes in communication. For instance, in her analysis of academic texts, Channell (1990: 115) observes several major uses of vague quantities. They are used instead of more precise information (1) to give the right amount of information; (2) to persuade the reader; (3) to downgrade or highlight a piece of information; and (4) when specific information is lacking.
Persuasive uses of approximated numbers and other quantitative references are discussed by Pocheptsov (1992), who reveals how quantities can be used for manipulations. One of the many manipulative techniques that he discusses is rounding up or down, since an approximated round number (e.g. approximately 50%) is more impressive than the non-rounded number (e.g. 47%). Such ways of referring vaguely to quantities tend to be used in ideologically loaded discourses. For example, as Pocheptsov (1992) observes, they were used as a successful manipulative technique in the Soviet period by the Soviet government and media. As Pocheptsov (1992) rightly notices, the advantage of employing such numerical forms is that it is difficult to accuse the speaker of being dishonest (as will be argued later in this paper, this is very important in advertising). If the speaker uses the more impressive form ¼ instead of 25%, this does not distort the truth, but presents the same fact in a more persuasive way.

Huff (1954) presents a provocative study of numbers used for statistical reports and demonstrates how the apparently precise scientific field of statistics paradoxically enough can lie with numbers and be imprecise. According to Huff, ‘the secret language of statistics, so appealing in a fact-minded culture, is employed to sensationalize, inflate, confuse, and oversimplify’ (1954:10). He provides numerous examples which clearly demonstrate that numbers do give an impression of precision; however, they are often inexact in reality.

It is also important to note that imprecise numbers are not only a manipulative technique used for persuasion, but can also optimize comprehension since they are more easily processed (they often serve as cognitive reference points). Moxey and Sanford’s (1993, 1997) psycholinguistic studies reveal that non-specific quantifiers are more easily perceived and remembered by speakers than precise numbers. Therefore, it can be assumed that numbers with a vague meaning are also more easily perceived since they are of a lower specificity. This further suggests that an appropriate degree of vagueness and imprecision is necessary, and that it does not hinder language comprehension (also cf. Sperber and Wilson 1991, Warren 1993).

AN ANALYSIS OF NUMBERS USED IN ADVERTISEMENTS

The present analysis reveals that numbers with a vague meaning are abundant in advertisements. It has been observed that certain types of numbers dominate; the data suggest that the most prototypical numbers are used most frequently. Numbers in adverts are often explicitly approximated, or the context shows that they are implicit approximations. In both cases, vague numbers are used for special communicative purposes but most typically they have a persuasive effect.
First of all, the obtained data show that several types of numbers predominate in the discourse of advertising. The numbers used in the advertisements under investigation can be grouped into several major sets (presented here in the order of frequency):

1. tens, or round numbers (e.g. ten, fifty),
2. non-round numbers (e.g. two, four),
3. plural numbers (e.g. thousands, hundreds),
4. exaggerations, or hyperbole (e.g. million, billion, thousands),
5. ‘faded’ numbers (e.g. dozens).

The most typical numbers are round numbers, which serve as cognitive reference points; being more easily perceived than other numbers, they are a convenient way of presenting numerical information in adverts. Such information is more easily understood, remembered and interpreted.

The set of the most frequent non-round numbers includes the numbers from 1 to 10, which are also of special importance in the human cognitive system of numbers and thus may require less effort and background knowledge to be processed by the reader. The frequency of the ten most frequent numbers is presented in Table 1.

<table>
<thead>
<tr>
<th>Number</th>
<th>Freq. per mil</th>
</tr>
</thead>
<tbody>
<tr>
<td>One / 1</td>
<td>1455</td>
</tr>
<tr>
<td>Two / 2</td>
<td>1155</td>
</tr>
<tr>
<td>Three / 3</td>
<td>711</td>
</tr>
<tr>
<td>Four / 4</td>
<td>529</td>
</tr>
<tr>
<td>Five / 5</td>
<td>424</td>
</tr>
<tr>
<td>Six / 6</td>
<td>320</td>
</tr>
<tr>
<td>Ten / 10</td>
<td>276</td>
</tr>
<tr>
<td>Seven / 7</td>
<td>242</td>
</tr>
<tr>
<td>Eight / 8</td>
<td>174</td>
</tr>
<tr>
<td>Hundred / 100</td>
<td>143</td>
</tr>
</tbody>
</table>

In addition to the frequency of each number, Table 1 indicates which form of the number is preferred; it shows which numbers are most commonly written as words and which are typically written as numerals (the more frequent form is presented in bold). The data show that the numbers from 1 to 3 are most commonly written as
words: *one, two, and three*. Numbers higher than 3, meanwhile, are typically written as numerals.

Another numerous set of numbers used in advertisements is that of exaggerations, e.g. *million(s), hundred(s)*, etc. The relative frequency of exaggerated numbers is presented in Table 2.

<table>
<thead>
<tr>
<th></th>
<th>Freq. per mil</th>
</tr>
</thead>
<tbody>
<tr>
<td>million</td>
<td>108</td>
</tr>
<tr>
<td>thousands</td>
<td>54</td>
</tr>
<tr>
<td>hundreds</td>
<td>40</td>
</tr>
<tr>
<td>billion</td>
<td>33</td>
</tr>
<tr>
<td>hundred</td>
<td>30</td>
</tr>
<tr>
<td>thousand</td>
<td>24</td>
</tr>
<tr>
<td>millions</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>305</strong></td>
</tr>
</tbody>
</table>

The information in Table 2 demonstrates that the most frequent exaggeration is *million* (108 occurrences); together with its plural form it totals as many as 124 occurrences.

**Implicit and Explicit Approximations**

In the majority of cases numbers in advertisements are used without an overt approximation, but still have a vague meaning. In such instances, context helps to infer that the figures are not precise. The vague meaning of non-approximated numbers is especially evident in the cases of plural exaggerations such as *hundreds or thousands*. Some uses of non-exaggerated numbers are presented in examples (1)-(2).

(1) ...and also has a marvellous seafront promenade. Just **six** minutes away is the beautiful picturesque old village of Altea where a lovely old church... (BNC)

(2) The rural district of Ryedale in the heart of North Yorkshire covers **six** hundred square miles of dramatic scenery, with picturesque villages, purple moorland, grassy... (BNC)

In example (1) the number is an approximation since the time necessary to cover a certain distance can vary depending on numerous conditions; the statement is a generalisation about the average amount of time necessary to drive the distance. In example (2) the number is rounded since the exact number of miles is not important in a travel brochure.

Though non-approximated numbers dominate, there are numerous cases when
numbers are overtly approximated to show that quantities are not precise, as in examples (3)-(5) where the approximators are underlined:

(3) …has a bar and a pantry has ample room for more than ten people. (BNC)
(4) …of the resort is just three minutes walk, whilst the sister hotels are about six (evening meals are taken in a sister hotel). (BNC)
(5) …are surrounded by an abundance of bars and restaurants and a five to ten minute walk… (BNC)

Overt approximation is most commonly achieved via such approximators as about and approximately (as in (3) and (4)), or by indicating a range of numbers (as in example (5)).

The range of numbers can be indicated in two ways, as can be seen in the two sets of examples below:

(a) The range upwards (e.g. more than / over + N):

(6) The drama will involve a cast of over ten people and include sections of talks... (BNC)
(7) … the last four years work has been going on behind the scenes and while over six million passengers per annum used the terminal during this project, few were aware of what... (BNC)

(b) The range downwards (e.g. no more than / less than + N; nearly + N):

(8) …system means a cab in central London is usually no more than ten minutes away... (BNC)
(9) These two hotels are interconnected and lie less than ten minutes stroll from the resort centre. (BNC)

When the range upwards is provided, only the bottom line is identified; absence of the top line makes the range bigger and less limited (or even limitless). Since such a range allows for a very flexible interpretation of the number, it can be considered as a manipulative or persuasive use. The range downwards, in contrast, is a limited range since the top line is indicated. The bottom line in such cases may be ‘zero’; therefore, such a use of numbers can function as a self-distancing device in adverts, as in example (10):

(10) Firms, softens and reduces the appearance of fine lines. Hydrates for up to 10 hours. (Age-Fighting Moisturizer normal to dry)

In example (10), the limited range provides only the top line, whereas the bottom line is not specified. Therefore, it can be assumed that the bottom line is ‘zero’, which
consequently implies that the product may have no effect, thus saving the producers from possible accusations of dishonesty.

In addition, lack of precision and possible variation in numbers can be expressed by a set of enumerated numbers (usually round numbers), as can be seen in example (11):

(11) …numbers practice, most mature for much longer --; five years, ten, fifteen, sometimes more … a lingering period during which Scotland... (BNC)

However, such approximations are not numerous; they can be expected to be more characteristic of spoken discourse.

Another tendency that has been revealed by the data is that in some instances multiple means of approximation precede numbers, as in example (12):

(12) ...people’s resort of Faliraki. It’s only about a ten to fifteen minute stroll to the excellent sandy beach … (BNC)

In example (12) multiple approximation is achieved by using the approximator about together with a range of numbers.

It has already been mentioned that non-approximated numbers clearly dominate in advertisements; however, the frequency of explicitly approximated numbers is also relatively high. For example, the number ten is approximated in 22 cases out of the total number of 77, which makes 28.6% of its uses. The number six is approximated less frequently but still such instances are rather numerous; they total 17% of its uses (23 cases of approximation out of the total number of 139).

Whether approximated or not, numbers are typically used for emphatic and persuasive effects. Numbers (especially round numbers) serve as a successful persuasive technique since they sound impressively big or small, as in examples (13)-(14):

(13) Playa Del Ingles is only a ten minute walk away and the discos and general hub of nightlife only… (BNC)
(14) …the arguments against using lightweight man-made slates fall flat Anchorlite Slate. Ten years of painstaking research, of test and trial, have created… (BNC)

In example (13) the round number ten is used to emphasise the shortness of the distance, whereas in example (14) it persuasively refers to a long period of research.

Numbers have a persuasive effect in advertisements since they make them resemble academic texts. To increase the degree of their persuasiveness, advertisements employ other features of academic writing alongside numerical information. The data have revealed that advertisements that employ numbers typically use a high degree of scientific jargon, especially when advertising cosmetics, as in examples (15)-(16):
(15) Transforms your skin by restoring its moisture balance and hydrating for up to 10 hours. (Oil-Free Hydrating Gel)

(16) Dramatically minimizes the appearance of fine lines and wrinkles caused by the breakdown of collagen and elastin. Hydrates for up to 10 hours. (Age-Fighting Eye Cream)

In these examples not only the approximated numbers (presented in bold) create the impression of an academic text but also the jargon words (underlined in the examples). The usage of jargon makes the adverts sound solid and reliable, though most consumers perhaps would not even know the exact meaning of some of the terms like collagen and elastin.

CONCLUSION

The data have revealed that in advertising both approximated and non-approximated numbers do perform the informative or referential function, but primarily they perform the appellative function. They tend to be used for emphasis to make an advertisement more persuasive. Numbers in advertisements do not just specify quantities, but are used to draw attention to those quantities. Though clarity and precision seem to be synonyms of competent and successful communication, real competence is not concerned merely with information transfer. A competent language user also has to be preoccupied with accomplishing other goals (for a more detailed discussion of strategic imprecision, see Eisenberg and Phillips 1991).

The present investigation has shown that numbers with a vague meaning can be used as a useful strategy that helps to achieve certain goals, such as persuasion, self-distancing or hedging. The data have provided sufficient evidence to support the claim that numbers have persuasive effects in advertisements since numbers are often associated with science and are considered to be trustworthy. The attempts to imitate academic texts in the discourse of advertising are supported by the extensive use of jargon, which is yet another feature of academic writing.

Self-distancing and hedging are achieved through certain patterns of approximation. For instance, when a range of numbers from zero to a bigger number is referred to, the principle of honesty is observed. Hedging is especially important in advertisements since accuracy, truth and honesty are among the main ethical principles reinforced in advertising. When hedged numerical forms are used, they reduce the writer’s commitment to the stated information, and thus it becomes difficult to accuse the writer of being dishonest.
Jūratė Ruzaitė

NETIKSLIŲ SKAIČIŲ VARTOJIMAS REKLAMOSE

Santrauka

Nors skaičiai paprastai siejami su tikslumu ir informatyviaisais tekstais, šiame straipsnyje bandoma parodyti, kad jų denotacija gali būti netiksli. Tokiais atvejais skaičiai siekia ne informuoti, o įtikinti vartotoją ir paveikti skaitintoją. Tyrimo duomenys rinkti Britų nacionaliniame tekste (reklamos tekstų dalis sudaro apie pusę milijono žodžių) ir internete, Mary Kay kosmetikos tinklalapyje. Tyrimas parodė, jog reklamose vartojami keli skaičių tipai: (1) dešimtys arba suapvalinti skaičiai, (2) nesuapvalinti skaičiai, (3) daugiskaitiniai skaičiai, (4) hiperbolizuoti skaičiai ir (5) skaičiai, netekę savo tiesioginės reikšmės (pvz., *dozen*). Dažniausiai reklamose vartojami skaičiai – nuo 1 iki 10. Šiems skaičiams skiriama ypatinga vieta mūsų kognityvinėje sistemėje, jiems suprasti reikia mažiau laiko, pastangų ir papildomų žinių. Kad skaičiai reklamose yra netikslus, parodo eksplikitinės priemonės (žodeliai *maždaug, apytiksliai*). Kai kada skaičių netikslumą galima numanyti iš konteksto. Tyrimo duomenys parodė, kad skaičiai reklamose vartojami siekiant skaitintoją dėmesio, pabrėžiant kiekio svarbą, taip pat jie pasitelkiamai kaip savotiška išlyga atsitotinti nuo skelbiamos informacijos ir sumažinti gamintojo įsipareigojimus.

REFERENCES


