The Putative Email Style and Its Explanations: Evidence from Two Effect Studies of Dutch Direct Mail Letters and Direct Marketing Emails

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Abstract

Many emails display stylistic features of casual talk more than of formal writing. Two main explanations have been put forward for this phenomenon: It could either be the result of a hybrid of speaking and writing (the hybrid hypothesis), or the consequence of carelessness regarding the norms for the written language (the normative filter hypothesis). This study addresses the question of to what extent these explanations are plausible from the receiver’s perspective. Two experiments were conducted with a 2x2-design: messages presented in both classical letter format on paper and email format on screen versus messages presented in a manipulated style and in a style that is conventional for written Dutch. In the first experiment, the style manipulation incorporated features of the spoken language. The manipulation of the messages in the second experiment incorporated a variety of deviations from the conventions for writing– orthography, punctuation, grammar, and style – in the Dutch language.

If the hybrid hypothesis holds, in the first experiment we expect that the negative effect of the implementation of speechlike constructions will be stronger in the messages on paper than in the electronic messages. If the normative filter hypothesis holds, in the second experiment we expect that readers of the messages with deviations will be more indulgent of them when they appear in emails than in letters on paper. The results give no evidence for the hybrid hypothesis, but some evidence for the normative filter hypothesis.

Introduction

A few years after the introduction of computer-mediated communication (CMC) some researchers observed that the messages sent in CMC modes had a style that was different from the style of traditional written language. They proposed new terms for it, including “e-style” (Maynor, 1994), “electronic language” (Collot & Belmore, 1996), and “netspeak” (Crystal, 2000). Other researchers, for example Dürscheid (2004) and Herring (2007) (see also Bieswanger, 2013), were not convinced of the usefulness of generalizations like these for two reasons. First, stylistic variability across messages in electronic genres – and even the stylistic variability within messages in one genre – is too great to make the concept of a single CMC style meaningful. Second, the fact that the supposed “e-style features” are also found in other, non-electronic genres makes the concept insufficiently distinctive. The critics were right, and one hears little about e-style or its alternative terms anymore.

However, before we consider the chapter on electronic language to be closed, it should be noted that the demise of the concept capitalizes on an interpretation of it that is rather extreme: It supposes a bundle of stylistic features that is present (or more frequent) in all electronic genres and absent (or less frequent) in non-electronic genres, or vice versa. An alternative interpretation is at least conceivable, that in case of two exemplars of a genre forming a minimal pair – one conveyed electronically and the other not – the styles of the two exemplars differ significantly.
In this article I test this more modest interpretation for one genre, that of direct marketing messages. The relevant minimal pair in this genre is the electronic version of direct emails and the non-electronic version of direct mail letters. Emails and letters were chosen because they may be considered representative for their respective channels. Email is by far the most frequently used internet application in the Netherlands. In 2011, 87% of the Dutch population used the internet for sending and receiving emails (Eurostat, 2012). In that same year email was one of the two most popular online activities in the United States of America (Purcell, 2011). And although the volume of letters in general is gradually shrinking every year, more than 4700 million letters were sent in the Netherlands in 2011 (Prinsen, 2011).

It is possible to test the modest interpretation from the point of view of the writer or sender of the message. This would call for a corpus study with two subcorpora, one of direct emails and another of direct mail letters. There have been corpus studies comparing email and related non-electronic genres. For example, Collot and Belmore (1996), working in the multidimensional framework of Biber (1988), demonstrated that for most of the dimensions under study, emails posted to a bulletin board system were stylistically quite distinct from personal letters. Cho (2010) found style differences between emails and memoranda in the workplace.

Although corpus studies have been fruitful, I have chosen the reader’s perspective in the work reported here by doing effect studies. In this type of experiment, participants are presented with a message, and their evaluations are analyzed. Effect studies have two advantages. They lend themselves more to an analytical approach than corpus studies do, because in corpus studies the context of the variable under study varies inherently with the variants. As a result, the researcher cannot know for sure which aspects of the context contribute to the explanation of the presence of a variant. In an effect study using an experimental design, in contrast, the variable can be manipulated while holding the context constant. The second advantage of effect studies is that the results can add something to the results of corpus studies, which often result in a catalogue of differences between the subcorpora. Effect studies provide the opportunity to discover which of those differences are communicatively relevant. It is only the differences that are noticed implicitly or explicitly by the receiver that really make a difference for the language user.

Thus far, effect studies have been less successful than corpus studies in establishing a relation between the channel and the evaluation of a message. Hill and Monk (2000) found no difference between readers’ evaluations of a request on paper or in an email. The same result was found by Pelt (2006), who elicited the attitudes of readers of an electronic newsletter and the same newsletter on paper. Nor did Jansen and Janssen (2008) find a significant difference between attitudes towards electronic bad news messages (for example, job refusals) and those on paper.

Research Question
The review in the previous section leads to the following research question:

RQ1: Do readers evaluate direct marketing letters differently from direct emails?

This question is addressed by studying the main effect of channel on the evaluation of the messages in the two effect studies reported below.
If the evaluation of direct mail letters differs from the evaluation of direct emails, the question becomes: What would be the most probable explanation for this result? In this article two explanations are tested. The first is the hybrid hypothesis: Readers consider emails to be a mix of the written and the spoken varieties of the language. The second explanation, the normative filter hypothesis, is more general: Readers of letters on paper employ a stricter normative filter than the readers of emails. The two hypotheses, their background, and the effect studies are presented in separate sections.

The Hybrid Hypothesis: Email Style as a Mix of Writing and Speaking

Background

According to the hybrid hypothesis, the distinct style of emails can be considered an example of a semi-standardized language variety in which some variants are borrowed from speech registers and others from written registers. The most articulate version of the hybrid hypothesis is found in Baron (2000), who considers email language as a pidgin. She formats the features of email at the end of the 1990s in a bulleted list, which I rephrase here: Like speech, emails commonly are in the present tense and have contractions, their style is predominantly like speech with a low level of formality. As regards their syntax, however, emails are similar to writing, with a high type/token ratio, frequent use of disjunctions, and adverbial subordinate clauses (Baron, 2000).

The hybrid hypothesis has some prima facie validity: Language users often refer to their emails as talking and hearing. Maynor (1994) calls email “written speech.” One piece of advice Hale and Scanlon (1999) give to composers of a “wired style” is: “Write the way people talk” (p. 12).

When seeking empirical support for the hybrid hypothesis, corpus studies are the most likely candidates. Collot and Bellmore (1996) characterize the style of emails in relation to other genres along several dimensions. One of those dimensions is “dependence on situation” (extremes: omit everything that a reader can infer from context [implicit] or present in the text everything the reader needs for interpretation [explicit]). In their electronic messages, Collot and Belmore find the same average values along this dimension as for reportages and interviews; this points to something intermediate between speech and writing. As for their dimension “online informational elaboration,” they report that the values of electronic messages are comparable with professional letters and spontaneous speeches; this also points to a hybrid status. Gaines (1999) finds the same mix of speech and writing characteristics in his corpus of academic emails and Giminez (2000) in his corpus of business emails. In his comparison of workplace emails and memoranda Cho (2010), reports that the emails have more features that can be considered oral than do memoranda – for example, several types of ellipsis.

To my knowledge, the only effect study that is somewhat related to this problem is Hartley (2002). Hartley presented readers with formal and informal versions of a textbook fragment in two channels: on paper and on screen. He reports no significant main or interaction effects.

In summary, corpus studies find evidence for the hybrid hypothesis. There are no effect studies where the presence of speechlike features and the channel were conditions.
**Research Question**

The review in the previous section leads to the following research question:

RQ2: Do the results of effects studies support the oral-written hybrid hypothesis?

To test the hybrid hypothesis, both channel variants (email versus letter) are presented in two style conditions. In the zero condition the sentences in the message are written in the traditional style for written Dutch. In the experimental condition some of the sentences are transformed by implementing a construction that is perfectly normal in spoken Dutch but marked in written Dutch. The dependent variable is the evaluation of the message by the participants in the experiment.

If the hybrid hypothesis is valid, we expect to find an interaction effect on the basis of expectancy violations theory (Burgoon, Stern, & Dillman 1995, chapter 5). In the evaluations of the message on paper, we should find a large gap between the conventional style and the style with speech features, whereas in the evaluations of the electronic messages, this gap should be absent, or smaller. Furthermore, we expect that this interaction effect will particularly manifest itself in dependent variables that reflect the reader’s attitudes towards the writing style of the message.

**Method**

**Data**

*Genre: direct marketing (e)-mail.* The genre that is used as the context for the conditions is the classic direct mail letter and its electronic counterpart, the direct email (see also Dürscheid (forthcoming) for a comparison of several direct marketing (e-)genres). There are several reasons for this choice. For an experiment to be feasible, it is essential that the participants do something that they know and are used to. This is certainly the case for direct emails, which are also known as spam, but also the direct mail letter is a genre that still exists in Dutch communication culture. In addition, the fact that both direct letters and direct emails are sent to many persons makes them apt for experiments. An important requirement for experiments is that the stimulus material be exactly the same for all participants, with the difference existing only in the conditions. With direct mail and email messages, this demand can be met easily and quite naturally.

The choice of the direct mail genre as the carrier of our stimulus material presents disadvantages, as well. At first sight, it seems less prototypical of the electronic channel in general than, say, a personal note to a friend. However, about 90% of the emails that were sent in 2010 were considered spam, and thus belong to the direct email category (*NRC Handelsblad* 9-10-2011). As for the proportion of direct mail letters to personal letters, no figures are at my disposal, but the number of direct mail letters that arrive at my door is many times greater than the number of personal letters. In other words, these paper and electronic messages share a relative frequency that makes them comparable contexts for this experiment.

Another potential concern is the dubious reputation of direct (e)mails, which could have a negative influence on the attitude of the experimental participants towards the message they read. This does not seem to be a serious problem, however, as the attitude is likely equally negative for both paper marketing mail and its electronic counterpart. Nonetheless, we tried to obviate this
concern somewhat by giving the messages an idealistic undertone with an interesting subject matter, organic food.

The last potential validity problem is the possibility that readers assume that the composers of direct (e)mails are professional writers; this would make it less probable that their messages would contain deviations from traditional written Dutch. This problem, however, is relevant for the messages in both channels. Furthermore, it seems reasonable to assume that the abundance of spam emails from abroad which, given the many deviations they show, appear to have been mechanically translated into Dutch, have tempered the public’s expectations of professionalism in direct mail messages.

Independent variable: content. Two direct mail messages were composed in which two fictitious supermarkets, The Star and Bird Free, first describe the suffering of animals in the commercial food industry and then announce their attractive offers for an alternative to the traditional elaborate Christmas dinner: organic meat that is also inexpensive. The Christmas dinner theme was considered potentially attractive as the experiments were carried out around Christmas time. The only difference between the two messages was the name of the company. They were written in the style that is usual for Dutch direct mail letters, without any deviations from the syntax norms for written Dutch. The message without speech constructions contains about 340 words.

Independent variable: channel. The message was formatted and presented in two ways: as a classic direct mail letter on paper and as a direct email. The direct email popped up in the inbox of the participants, or was presented to them on a computer screen (see appendix A for an example of the message formatted as a letter on paper; for an example of a message formatted as an email, see appendix C).

Independent variable: speech constructions. The second independent variable was the occurrence of one of the following six speech constructions, syntactic constructions that are rather frequent in the speech of all types of Dutch speakers but are uncommon in written Dutch: left- and right dislocation, repetition of the tensed verb, anacoluthon, lack of concord between subject and tensed verb, and preposition stranding. The density of the speech constructions in the message was rather high (above five) in order to give the readers a good opportunity to become suspicious about the writing abilities of the sender.

Participants

A total of 420 subjects participated in the experiment. The participants were requested to participate in a variety of situations by students who functioned as experiment supervisors: for example, while they were in their homes, walking in the town, or waiting for a bus. The gender distribution was roughly balanced, with 198 (= 47%) men and 222 (= 53%) women. Participants with a higher education level (higher general secondary education or more) were overrepresented: There were 318 (= 76%) subjects with higher education and 102 (= 24%) with a lower education level. Individuals of all ages participated; the subjects’ mean age was 40 years old (standard deviation 17). All had Dutch as their mother tongue. They were not paid for their participation.
**Instrumentation**

For the dependent variables, 29 propositions were constructed that were derived from seven attitudinal dimensions (see Appendix B): style, correctness, editing, comprehensibility, attractiveness, company image, agreement/intention, and overall quality.

The homogeneity of the clusters was assessed using a reliability analysis, and it turned out to be satisfactory (see Table 1).

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Propositions</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correctness</td>
<td>24, 27</td>
<td>.93</td>
</tr>
<tr>
<td>Style</td>
<td>4, 25, 28</td>
<td>.72</td>
</tr>
<tr>
<td>Editing</td>
<td>9, 16, 26</td>
<td>.90</td>
</tr>
<tr>
<td>Attractiveness</td>
<td>1, 23</td>
<td>.70</td>
</tr>
<tr>
<td>Comprehensibility</td>
<td>2, 10, 17, 20</td>
<td>.90</td>
</tr>
<tr>
<td>Image</td>
<td>3, 7, 13, 15, 19</td>
<td>.93</td>
</tr>
<tr>
<td>Agreement</td>
<td>6, 8, 14</td>
<td>.84</td>
</tr>
</tbody>
</table>

Table 1. Reliability of the clusters of propositions. The proposition numbers refer to the questionnaire in Appendix B.

**Design**

This experiment has a 2x2x7 between subjects design. Content has two levels: message from the Star supermarket versus the Bird Free supermarket. Channel has also two levels: message presented as a letter on paper versus message presented as an email on-screen. Speech constructions has seven levels: one message without speech constructions and six messages, each containing examples of one of the six speech constructions.

There were 30 participants in each condition. Each participant read and evaluated only one message.

**Procedure**

The messages were presented to the participants on paper and on-screen. The messages on paper were presented to the participants in their individual homes. The participants were allowed to take all the time they needed to read the text. After reading, the experimenter took the text away and presented the questionnaire. The experiment took about 10 minutes of the subject’s time.

The messages in the email condition were presented on-screen in two ways: The majority were presented as a screen dump on a PC or laptop in the participant’s home. In a few other cases the messages and questionnaires were sent to the participant as an email with instructions to read the message first, then close it and open the questionnaire. After completing the questionnaire the participant had to send the attachment back. There were no differences between the results in the two procedures.

**Statistical Analysis**

First, we checked whether there were any significant interactions of the conditions channel and speech constructions with the content variable (message from the Star or from the Bird Free supermarket).
supermarket). This was not the case for all clusters (F < 1.7; p > .19), so we refrained from incorporating the content variable in the analyses. As a consequence the number of participants in each condition doubled to 60. Then we controlled with a mixed models analysis whether the results for the condition with speech constructions were the same in the six partial experiments dedicated to the respective different speech constructions. This was not the case (for all differences between individual speech construction conditions and all clusters, p > .12), so we refrain from analyzing the effects of the individual speech constructions in favor of a general condition: “speech constructions.”

Results

Regarding the demographic factors, participant gender was not significant. However, the more highly educated participants evaluated the overall quality of the text lower than those with a lesser degree of education. Moreover, we found that participants’ age had a main effect on the clusters editing, image, and agreement: The younger the participant, the lower their evaluation. There were no interactions of age with the channel or the speech constructions condition.

Information about the influence of the channels and speech constructions on the proposition clusters is presented in Table 2.

<table>
<thead>
<tr>
<th>Written Dutch</th>
<th>Spoken Dutch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td>Screen</td>
</tr>
<tr>
<td>Overall quality</td>
<td>7.0 (1.2)</td>
</tr>
<tr>
<td>Correct</td>
<td>5.0 (1.3)</td>
</tr>
<tr>
<td>Style</td>
<td>4.9 (1.2)</td>
</tr>
<tr>
<td>Comprehension</td>
<td>6.0 (1.2)</td>
</tr>
<tr>
<td>Editing</td>
<td>4.9 (1.3)</td>
</tr>
<tr>
<td>Attractive</td>
<td>4.4 (1.5)</td>
</tr>
<tr>
<td>Image</td>
<td>4.6 (1.4)</td>
</tr>
<tr>
<td>Agreement</td>
<td>3.7 (1.7)</td>
</tr>
</tbody>
</table>

Table 2. Means (and standard deviations) of the subjects’ evaluations of letters and emails with and without speech constructions. For all scales, 1=bad and 7=good, except overall quality, where 1=bad and 10=good.

The presence of speech constructions had a negative effect on attitude towards the message. We found a main effect for all clusters except attractiveness and agreement. There was no main effect of channel. Nor was there an interaction effect of speech construction and channel.

Conclusion

No channel differences were found: Letters and emails got the same evaluation. This may be considered an indication that there is no distinct style for emails. Messages with speech constructions were evaluated consistently lower than those without those constructions. This result can be interpreted as a manipulation check to the effect that the participants must have been sensitive to the presence of speech constructions. However, the gap between the evaluations of messages with and without the speech constructions is similar in both channel conditions. In other words, the prediction of the hybrid hypothesis is not borne out by the facts: The negative effect of speech constructions is not smaller in emails than in messages on paper. It is important
to note that this is the case for all proposition clusters, even for the proposition cluster style, which was designed as the most direct means to tap the subjects’ intuitions about the orality of the message. The same applies for the correctness cluster, which is most obviously related to the reader’s intuitions about deviations from the norms of the standard language.

The Normative Filter Hypothesis: The Style of Emails as a Consequence of Careless Editing

Background

The normative filter hypothesis is based on the idea that conscientious communicators traditionally monitor their written products for deviations from the norms for the written standard language. This monitoring functions like a filter that prevents those deviations from surfacing in a draft, or if the deviations appear in a draft, they are corrected during the revision process. The hypothesis holds that the normative filter functions more rigidly for messages on paper, for example letters, and less rigidly for messages on screen, for example emails. In other words, writers and readers seem to be less concerned about deviations from standard orthography, punctuation, and grammar in emails.

The idea behind the normative filter hypothesis seems to be widespread. Crystal (2001) remarks: “Misspellings, for example, are a natural feature of the body message in an e-mail” and “(…) nor is the reader going to make social judgment about the writer’s educational ability on the basis of such data [that is, messages with language errors (FJ)] – A contrast with what would happen if someone wrote a traditional letter containing such errors” (p. 111). Hale and Scanlon (1999) write in the same spirit: “No one reads an email with a red pen in hand” (p. 3). Baron (1998) observes that “most users [of email] exercise only a light editorial hand (if any at all on email messages before they are sent,” (pp. 156-157). Herring (2001) is skeptical about the normative filter hypothesis, however. She calls the idea that computer-mediated language is less correct than standard written language a “popular perception.” Probably writers make the supposed errors deliberately – to minimize production effort, mimic spoken language features, or for creative expression.

Corpus studies present a mixed picture in relation to the normative filter hypothesis. The hypothesis is supported by the results of Herring (1998), Gaines (1999), and Cho (2010). Herring (1998) studied the emails posted to a discussion list from 1975 until 1986 and reports an increase in errors and other informalities over time. Gaines (1999) finds frequent typos and other errors in his corpus of emails. Cho (2010) reports all kinds of deviations from the rules for standard written English in his email corpus. In contrast, Pérez Sabater, Turney, and Montero Fieta (2008) find in their corpus that Spanish emails contain very few misspellings, contractions, or other non-standard forms.

Experimental studies with as independent variables both channel and deviations from the norms for written language seem to be scarce. The only one I am aware of is Jessmer and Anderson (2001), who studied the effects of politeness and grammaticality (including misspelling, typing errors, missing punctuation, and fractured grammar) on perceptions of emails in two channel conditions (on screen and on paper). They find that grammaticality affected the perception of the status and competence of the sender. From the errors, the participants also concluded that the
sender’s sex was male. The authors do not report a main effect of channel or an interaction effect of channel and grammaticality. A related problem has been studied by ergonomists: Does reading from a computer screen differ from reading from paper? Dillon (1992), reviewing the empirical literature in the 1980s, observes inconsistent results: Sometimes the text on paper is read faster and more thoroughly; sometimes there is no difference between the channels. In their review of the more recent literature, Noyes and Garland (2008) are inclined to favor the “no difference” standpoint for the channel variable.

**Research Question**

The review in the previous section leads to the following research question:

**RQ3: Do the results of effect studies give support to the normative filter hypothesis?**

The design of the experiment to answer the research question is essentially the same as that of the experiment discussed in the previous section. The first independent variable, channel, is identical to the previous experiment: letters on paper and emails on screen. The second variable, influence of deviations from standard language norms, is different: Alongside the variant without any deviation we presented a manipulated version of the message containing some deviations from the rules for the orthography, punctuation, and grammar of standard Dutch. The dependent variable is the readers’ evaluation of the message. The normative filter hypothesis predicts that the effect of the deviations on the evaluations should be greater in the paper version than in the electronic version. This interaction effect should be strongest for dependent variables that tap the reader’s normative attitudes toward the standard language most directly.

**Method**

**Data**

Two direct mail messages were composed and formatted as both a classical letter on paper and as an email on screen. We took care that the wording and syntax of the messages were suitable for creating pairs that differed only in terms of deviations from the rules for the Dutch written language on the levels of orthography, punctuation, and grammar/style.

*Independent variable: content.* One message was from a fictitious wine retail company Wine World and the other from a fictitious olive oil retail company Olivio. Except for the products they offer, the differences between the letters are minimal. The first paragraph contains general information about the production of the product in Mediterranean countries. The second paragraph describes the positive qualities of the products. The third advances the commercial proposition of the companies, an invitation to attend a wine-tasting or olive oil on bread tasting session. In the last paragraph, this invitation is repeated somewhat more forcefully. The postscript contains an extra offer. The body text of the letter is segmented into five paragraphs and has a word count of 290 words. Both letters are written in the enthusiastic style that is commonly used in direct mail messages.

*Independent variable: channel.* The implementation of the paper and electronic channels was the same as in the previous experiment. See appendix C for an example of the email format.
Independent Variable: deviations from the rules of the standard language. In order to be able to generalize over a wide variety of deviation types, we conducted a series of 11 different partial experiments. In each partial experiment just one specific deviation from a rule for the spelling, punctuation, or grammar and style of standard Dutch occurred. The specific deviation categories for the spelling are: the omission of the *n* of the plural suffix *–en*, incorrect omission or addition of a *t* and *d* in verb endings, and capitalization. The deviations for punctuations are: Incorrect space between the morphemes of a compound, spacing around punctuation marks, and excessive use of exclamation marks. The deviations for grammar and style are: Lack of number concord, incorrect gender of the definite article, and tautology. As was the case in the first experiment, the density of deviations in the messages was rather high (five or more); this was done to give the readers a good opportunity to suspect that there was something structurally wrong with the writer’s mastery of the rules of written Dutch.

Instrumentation

A total of 37 Likert scale items were written, each pertaining to one of six evaluative dimensions: correctness, attractiveness, editing, customer orientation, company image and intended action. Participants expressed their opinions about the propositions by means of a seven-point scale. For the evaluation of global text quality, a scale from 1 to 10 was used.

The homogeneity of the clusters was then checked using a reliability analysis; see Table 3.

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Propositions</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correctness</td>
<td>19, 20, 24, 35</td>
<td>.72</td>
</tr>
<tr>
<td>Editing</td>
<td>15, 16, 23, 27</td>
<td>.77</td>
</tr>
<tr>
<td>Attractiveness</td>
<td>17, 26, 28</td>
<td>.81</td>
</tr>
<tr>
<td>Client oriented</td>
<td>3, 7, 13, 25</td>
<td>.74</td>
</tr>
<tr>
<td>Image</td>
<td>2, 9, 22, 33</td>
<td>.86</td>
</tr>
<tr>
<td>Agreement</td>
<td>6, 10, 11, 14</td>
<td>.58</td>
</tr>
</tbody>
</table>

Table 3. Reliability of the proposition clusters. (The numbers in the propositions column refer to the questionnaire in appendix D.)

The homogeneity of the proposition clusters was satisfactory, with the exception of the agreement cluster. Therefore, we compared the results of this cluster with the results for the proposition that taps the participant’s intention to comply with the message most directly: “I would like to go to the tasting.” As the results for this proposition turned out to be almost perfectly identical with that for the agreement cluster, it was decided to incorporate the agreement cluster in the results.

Participants

A total of 1213 persons participated in the experiment. The genders were represented more or less equally: men 539 (= 45%) and women 671 (=56%). Participants with a higher education level were overrepresented: 931 (= 86%) had a diploma from a higher general secondary school (or higher), as compared to 168 (= 14%) with an intermediate vocational education diploma or less. The mean age of the participants was 29 (SD 11).
Design
The design was 2x2x12 between subjects. As in the first experiment, the channel and content conditions had two levels. The deviation variable had 12 levels: a message without deviations, which functioned as a 0-condition, and 11 messages, each with instances of a specific deviation type, which functioned as the experimental conditions.

Each subject had to evaluate just one text. The mean number of participants for each partial experiment was 113, with a minimum of 60.

Procedure
The procedure was the same as in the first experiment. The experiment took 15 minutes of the participants’ time. The participants were not paid for their services.

Statistical Analysis
First, by analyzing possible interactions of content and both channel and deviation, we checked whether the content variant (wine versus oil) made a difference to the evaluation. This was not the case: For all clusters, F < 2.7, and p > .10. Therefore, we refrained from analyzing the wine and oil letters separately. Next, we checked whether the results of the various partial experiments were really different. As it turned out, the results of one sub-experiment — one of the two about the orthography of the tensed verb — was different from all the others, so it was excluded. The coherence of the other partial experiments was analyzed with mixed models. They turned out to belong to three clusters of experiments – orthography, punctuation, and grammar. Within the three clusters the results for the three specific deviations turned out to be similar (p > .22). Thus we refrain from analyzing the individual deviations and analyze instead the general orthography, punctuation, and grammar/style categories.

Results
An effect of gender was found. Women evaluated the message conditions more extremely on some clusters: Their evaluations of the flawless message were higher, and their evaluations of the messages with deviations were lower than those of the male participants; this was the case for both channel conditions. This effect is consistent with sociolinguistic evidence from sources other than CMC (Gordon, 1997), as well as with the result reported by Kapidzic and Herring (2011) that in an online chat site, teenagers adopted stereotypical gender roles. As there were no interaction effects of gender with the channel variable, however, we refrain from further discussion. As for age, we found only one effect for some proposition clusters; this can be summarized as “the younger the participants, the lower their evaluations.” Regarding education level, the more highly educated participants gave generally lower grades than the less educated participants.

The effects of channel and deviations on the evaluation of the message are presented in Table 4.
The main effect of deviation from the standard language on the evaluation of the message is very large. This time there is also a main effect of channel: Electronic messages are evaluated more highly than their paper counterparts.

The most general interaction effect is for overall quality; here, the evaluation gap between the messages without deviations and those with deviations is greater for messages on paper than for text on screen. This is the case for all three categories of deviations: orthography, punctuation, and grammar. This pattern is displayed in Figure 1, which shows the effects of the deviations in letters and emails (horizontal axis) on the grade assigned by the participants (vertical axis).

Apart from the interaction effect, the influence of channel on the messages with and without deviations is interesting. First, we see that the evaluations for the messages with the three types of deviations on screen are significantly higher than for those on paper. This more indulgent attitude towards deviations in electronic messages is predicted by the normative filter hypothesis. But in the case of the messages without deviations, the difference between the channels is also statistically significant. The overall quality of the electronic impeccable message is judged lower than its counterpart on paper.

### Table 4. Mean evaluations (and standard deviations) of messages with no deviations and with orthographic, punctuation, and grammatical deviations. For all scales, 1=bad and 7=good, except overall quality, where 1=bad and 10=good.

<table>
<thead>
<tr>
<th></th>
<th>0-condition</th>
<th>Orthography</th>
<th>Punctuation</th>
<th>Grammar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>paper</td>
<td>screen</td>
<td>paper</td>
<td>screen</td>
</tr>
<tr>
<td>Attractive</td>
<td>4.5 (1.1)</td>
<td>4.4 (1.0)</td>
<td>3.3 (1.1)</td>
<td>3.4 (1.1)</td>
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Figure 1. The interaction effect of channel and deviation on the evaluation of overall quality (1 = low, 10 = high evaluation)

The effect of grammar and style deviations on attractiveness displays the same pattern as Figure 1. The interaction effect of channel and both orthography and punctuation deviations on the perceived correctness of the text is different, however, as shown in Figure 2.

Figure 2 shows that the distance between the perceived correctness of the messages with and without deviations in the screen condition is not smaller but greater than in the paper condition. This is due to the high correct scores for the electronic messages without deviations; the statistical difference for these is highly significant.

Conclusions
The results of the second experiment can be considered evidence for the assumption that emails and letters are evaluated differently. We find a main effect of channel: Electronic messages are
evaluated more highly than paper messages on most dependent variables. Second, the interaction effects of channel and deviations from both orthography and punctuation rules on correctness can be interpreted as support for the normative filter hypothesis. A plausible explanation for the particularly high evaluation of electronic messages without deviations is that those messages are a positive violation of the expectancies of the participants and, therefore, a pleasant surprise. The fact that the corresponding message on paper is without deviations is simply in accordance with their expectations. It is interesting to note that these low expectations are limited to the correctness dimension, because we found that the evaluation of the overall quality of electronic messages was lower than their counterparts on paper. These results enable us to accept the normative filter hypothesis to a certain extent. The predicted effect for all types of deviations was found on the overall quality of the message and on attractiveness for deviations from grammar and style. However, the qualification “to a certain extent” has to be stressed, for the predicted effect was only found for these two dependent variables.

General Conclusion

The first research question asked: Do readers evaluate direct marketing letters differently from direct emails? The results of the second experiment give us two arguments that the presumed difference exists. The first is the main effect of channel: Readers place higher value on the email presented on screen than on its identical counterpart on paper; this may be explained by the assumption that their expectations of the electronic text were lower than for the text on paper. The second argument could be derived from the interaction effects we found for the overall quality and the attractiveness and correctness clusters. As there were no channel effects in the first experiment, the evidence is not unequivocal.

The second research question asked: Do the results of effect studies support the hypothesis that the difference in evaluation is caused by the hybridization of oral and written language? The results of the first experiment do not support this hypothesis. The predicted interaction effect does not show up in the first experiment, even for proposition clusters that are rather closely attuned to the speech constructions.

The third research question asked: Do the results of effect studies support the normative filter hypothesis in the case of direct mail messages. The answer is a qualified yes. The interaction effects that are predicted by the normative filter hypothesis show up. However, this is chiefly the case in the dependent variable that evoked the most general attitudes toward the message, its overall quality, which turned out to be sensitive to all three deviation categories, and in the attractiveness cluster. The correctness cluster that most directly evokes attitudes towards deviation from the standard language displayed a different pattern.

The experiments, especially the second one, had a broad scope and involved large numbers of participants. The hypotheses were tested not with one language feature, but with more than 10. This does not mean that the existence of a distinct email style and the normative filter explanation have been proved beyond doubt, even for the genre of direct mail messages. This is chiefly because there were only a small number of evaluative dimensions in which the predicted effects were found, and the sizes of the interaction effects are small.
This study is not without its limitations; I mention here the three most important ones. First, the ecological validity of experimental investigations such as these is questionable, as we cannot know for sure whether people will read and evaluate the messages sent to them in the same way as the participants in the experiments did. Second, this study is limited to only one language and culture. We cannot take for granted that the results in other languages and cultures would be the same. The last limitation has to do with the selection of the linguistic variables in the two experiments. Although we did a series of partial experiments with 15 specific deviations in all, the selection remains somewhat arbitrary.

In addition to these limitations a remark is in order about the level of generalization from the direct (e)mail results to other e-genres. In view of the notorious variability of email as a genre (Herring, 2007), at best the results can be generalized for direct marketing messages that are typically sent to many receivers. It would be overly speculative to generalize them, for example, to personal informal emails, let alone to other electronic genres in general.

Acknowledgements

I thank Fleur van Bockel, Irene Franken, Frank van den Heuvel, Roos Lavrijsen, Bas Lieuwma, and Charlotte Piers, who did their Bachelor’s theses on the effects of speech constructions, and Lonneke van Asperdt, Joost Bloemendal, Eline Croes, Carly ter Doest, Linda Hogenes, Robin Koning, Sanne Langelaar, Jo Luijten, Freke Nap, Lindy Odijk, Ilse Oranje, Iris Paape, Evianne Potappel, Debbie van Rijswijk, Susanne Schiffer, Melle Strikwerda, Karsten Veerman, Remke van Veelen, Eefje Vereijken, Dirk Verhoeven, Rosa Walraven, and Raoul Zonnenberg, who studied the effects of deviations from the written norm as partial fulfilment of their Master’s degree in Communication studies. I also thank Daniel Janssen, Leo Lentz, two anonymous reviewers, and especially the editor of Language@Internet for their helpful comments on an earlier version.

Notes

1. In an effect study, two or more messages are created that are identical except for the variable under study. The variants of the message are presented to readers or hearers, who are invited to give their opinion about various aspects of the message by completing a questionnaire with Likert propositions and scales. If there is a statistically significant difference between the two variants, the only explanation for this is the presence or absence of the variable.

2. See Jansen (1981) for a discussion of most of these constructions and their frequencies in a corpus of spoken Dutch and Jansen (2010) for a discussion of all the speech constructions, as well as attestation of their incidence in present-day (electronic) texts. Special care was taken that there was no alternative explanation for the presence of the speech constructions other than confusing writing with speech. Thus elliptical constructions and contractions were not included, because they can be explained by speaker economy. The lack of concord constructions in this experiment all had a complex noun phrase as a subject, consisting of a nominal head and a post modifier containing another noun functioning as a distracter.
3. Grade $F(1, 418) = 23.4$, $p < .001$, $\eta^2 = .05$; Correctness $F = 42.5$, $p < .001$, $\eta^2 = .09$; Style $F = 12.9$, $p < .001$, $\eta^2 = .06$; Comprehension $F = 27.9$, $p < .001$, $\eta^2 = .06$, Editing $F = 33.4$, $p < .001$, $\eta^2 = .08$; Attractiveness $F = 2.6$, $p > .05$; Image $F = 10.5$, $p = .001$, $\eta^2 = .03$; Agreement $F = 1.1$, $p > .05$.

4. For all clusters $F < 1.2$, $p > .05$.

5. For all clusters $F < 2.1$, $p > .05$.

6. Besides this effect study there are experimental studies on the influence of language deviations on the evaluation of electronic messages that do not incorporate a channel variable. Stephens, Houser, and Cowan (2009) report a study of the evaluation by instructors of the emails of their students. They presented the emails in an overly casual style and in a formal style and report strong negative effects of the casual style. Vignovic and Foster Thompson (2010) studied the influence of communication errors on the attributed characteristics of the sender; they also report a negative main effect of the messages with deviations. The results of both studies are indirectly relevant to the problems addressed in this paper. Their results can be considered an indication that receivers are not that tolerant of deviations in electronic documents.


8. Spacing between the morphemes of a compound may appear not to belong in the punctuation category; rather, the representation of Dutch compounds as one word is generally considered to belong to the realm of orthography. However, a categorization as deviation from punctuation is also defensible, in that presenting a compound as separate words means insertion of spaces; a space is a square of white and is regarded as one aspect of punctuation. The mixed models analysis indicated that the participants evaluated this deviation in the same way as the other deviations from punctuation, and not from orthography.

9. A general comment is in order about the relation of the text manipulations in the two studies reported here. The set of deviations from the written language includes the set of speech constructions written down. The speech construction category in the previous study is very specific: All are on the syntactic level and have only one explanation, confusing writing with speech. The deviations of the second experiment are more varied: They are both on the notational level (orthography, punctuation) and on the level of grammar and style. Furthermore, their most probable explanation is a lack of competence in the rules for written Dutch or lack of ambition to apply these rules, rather than confusion of speaking and writing. This is evident for the orthographic and punctuation categories, but also for the grammar/style deviations. All deviation types could be described as erroneous word combinations. In lack of concord, which was not motivated in this experiment by the presence of a distracter (see note 2), it is the combination of a simple subject and an adjacent tensed verb, for example “the gourmet have.” Incorrect gender is a wrong combination of the definite article with its noun: “neutral” nouns take the *het* article, other nouns the *de* article. The third deviation category is stylistic. Writers who do not know that *anno* is Latin for ‘in the year’ make the pleonastic combination *in the year anno*.
10. Deviations from orthography rules: attractive (F (1, 414) = 96.7, p < .001, $\eta^2 = .19$), editing (F = 89.5, p < .001, $\eta^2 = .18$), correct (F = 74.9, p < .001, $\eta^2 = .15$), image (F = 86.4, p < .001, $\eta^2 = .17$), client oriented (F = 75.4, p < .001, $\eta^2 = .15$), overall quality (F = 38.0, p < .001, $\eta^2 = .08$); agreement (F = 4.8, p = .030, $\eta^2 = .01$). Deviations from punctuation rules: attractive (F (1, 462) = 112.6, p < .001, $\eta^2 = .20$), editing (F = 100.2, p < .001, $\eta^2 = .18$), correct (F = 55.2, p < .001, $\eta^2 = .11$), image (F = 57.0, p < .001, $\eta^2 = .11$), client oriented (F = 41.0, p < .001, $\eta^2 = .20$), overall quality (F = 39.5, p < .001, $\eta^2 = .14$), agreement (F = 15.8, p < .001, $\eta^2 = .04$).

11. Deviations from orthography rules: editing (F (1, 414) = 9.6; p = .002, $\eta^2 = .02$), correct (F = 8.8, p = .003, $\eta^2 = .021$), image (F = 5.2, p = .024, $\eta^2 = .01$). Deviations from punctuation rules: editing (F = 8.0, p = .005, $\eta^2 = .02$), correct (F = 4.5, p = .034, $\eta^2 = .01$), image (F = 5.3, p = .021, $\eta^2 = .02$). Deviations from grammar: editing (F (1, 369) = 113.3, p < .001, $\eta^2 = .24$), correct (F = 105.8, p < .001, $\eta^2 = .22$), image (F = 97.7, p < .001, $\eta^2 = .21$), client oriented (F = 87.1, p < .001, $\eta^2 = .20$), overall quality (F = 58.4; p < .001, $\eta^2 = .14$), agreement (F = 15.8, p < .001, $\eta^2 = .04$). All other effects are not significant (p > .05).

12. Orthography: F (1, 412) = 17.5, p < .001, $\eta^2 = .04$; Punctuation: F (1, 459) = 8.6, p = .004, $\eta^2 = .02$; Grammar: F (1, 367) = 8.0, p = .005, $\eta^2 = .02$. All other clusters F < 1, p > .05.

13. Orthography: F (1,282) = 17.4, p < .001, $\eta^2 = .06$; punctuation: F (1,330) = 4.3, p = .04, $\eta^2 = .01$; grammar F (1,235) = 4.2, p = .04, $\eta^2 = .01$.

14. F (1,129) = 4.9; p = .03, $\eta^2 = .03$.

15. Grammar deviations on attractiveness F (1, 267) = 6.0, p < .001, $\eta^2 = .02$. All other clusters: F < 1, p > .05.

16. Orthography deviations on correctness: F (1,412) = 5.3, p = .022, $\eta^2 = .01$; Punctuation deviations on correctness: F (1,459) = 8.2, p = .004, $\eta^2 = .02$. All other clusters: F < 1, p > .05.

17. F (1,129) = 18.7, p < .001, $\eta^2 = .11$.

References


Pelt, M. (2006). E-mail vs. papier; het verschil in waardering van een digitale en papieren nieuwsbrief [E-mail versus paper, evaluation differences between a digital news letter and a newsletter on paper]. Master’s Thesis, Department of Communication, Utrecht University.


Appendix A. Example of a Message Formatted as a Traditional Letter on Paper in the First Experiment

Organic food with a clean conscience

Dear customer of bio supermarket The Star,

Did you know that over 95% of the animals you eat come from factory farming? A great portion of the meat on your table had a miserable life as an animal. This has been demonstrated in several studies. The animals lead a life of daily stress, boredom and pain and never go outdoors. Rabbits live in cages so small that their backs grow crooked. Castration of piglets and calves is done without anesthesia. The beaks of chickens are cut off for the greater part. Forty percent of the turkeys die prematurely due to cannibalism. The conditions in which animals live on the farm are too miserable to mention.

With Christmas coming soon, this is a good time to think about what’s on the table. Many people come together during the holidays to enjoy eating large quantities of exquisite food. Probably you have already pondered over the tasty morsels on your table. While your desire for delicacies grows, the animal is fattened over a few weeks.

Fortunately, you can do something about it! If you buy organic meat, for example pork, this will ensure in the long term that fewer pigs live in factory farms. By buying organic meat you stop these atrocities. There may be a slightly higher price tag on these products, but they are a lot better, both in terms of their taste and for your conscience. These organic products are on our shelves and are identified by the label ‘organic makes sense.’ Buying organic meat does not require any extra effort.

Bio supermarket The Star will do everything in the future to sell more organic meat. But we cannot do this alone. Help us by buying organic meat now. Because let’s face it, doesn’t everyone have a right to a good life?

Bio-Star supermarket offers you a warm welcome for your organic shopping!

Sincerely,

Veronique de Boer, PR-Assistant
Appendix B: Questionnaire for the First Experiment

Gender: male / female
Year of birth:
Highest education:
The grade of this text is: 1 2 3 4 5 6 7 8 9 10

(1) This text appeals to me
(2) The message of this text is quite clear to me
(3) The text is good publicity for the supermarket
(4) It is as if the writer personally talks to me in this text
(5) This text contains errors
(6) After reading this text I would shop in this supermarket
(7) After reading this text I feel this supermarket is reliable
(8) After reading this text I plan to buy organic meat more often
(9) The writer has spent enough time on this text
(10) When reading this text I immediately understood it
(11) This text is clearly intended to be sent by post
(12) I find a neat style very important in a text
(13) After reading this text I feel the supermarket is sincere
(14) After reading this text I am willing to pay more for organic meat
(15) After reading this text I feel the supermarket is professional
(16) The writer has taken the writing of the text seriously
(17) The text makes an easy read
(18) Correct Dutch is very important in a text
(19) After reading this text I feel the supermarket is trustworthy
(20) The text is easy to read
(21) The text is written in a sloppy way
(22) The text is meant to be sent as an email
(23) The text is attractive
(24) The author of this text has a good command of the Dutch language
(25) The phrases in the text are well connected
(26) This text was carefully checked after writing
(27) This text is written in correct Dutch
(28) This text is written in modern usage
(29) This text can be sent immediately in the format presented
Appendix C: Example of a Message Formatted as an Email in the Second Experiment

Karsten

From: Karsten [email address]
Sent: Friday March 3 2006 2:19
To: [address participant]
Subject: A fantastic offer from Wine World

Only this month: Wine World offers grand tasting of wines and ports from the ancient world!
Wine World
Nieuwe Kerkweg 12, Utrecht

Dear Sir or Madam,

The Mediterranean Sea does not only guarantee the best vacations, but it is also the area where history is brought to life again and again, thanks to the abundance of fine wines. Traditional wines are made, but also modern versions with their own character. The latter are especially interesting for the Dutch wine drinker. On our tour through Spain and Italy, these wines amazed us constantly!

How dynamic was the classical world in 2006! And how adaptive the wine producers! People in the Mediterranean pay a lot of attention to quality of the wine. Intelligent winemakers have created surprisingly full flavors. In addition, they continually improve their production techniques in order to refine the authentic taste.

During our trip through the Mediterranean, we met passionate winemakers, tasted outstanding wines and discovered that beautiful things happen in the wine production industry these days!

We also have great news from Portugal: the Vintage Port 2005 will likely exceed all expectations. The harvest has recovered well from the recent failure, although the shortages are not remedied already. This port has been compared with the legendary vintages of 1995 and 1977. If you do not believe this immediately, attend out Wine Tasting! On Friday, March 31, our experts will have a little surprise in store for you.

Do you like Spanish and Italian wines? Or Portuguese port? And don’t you want to get real value for your money? If your answer to these two questions is yes, don’t miss the tasting!

Sincerely,
P.A. Gerhards
(world of wine manager)

Offer: Pay extra attention to the Brana Vieja and Villa Marianna offer: buy three bottles and only pay for two.

Wine World puts the holiday on the table!
Appendix D: Questionnaire for the Second Experiment

(1) I think about choosing the best wine for dinner
(2) The company Wine World makes a reliable impression
(3) The writer of the letter comes across as interested
(4) I prefer to read short texts on a computer screen
(5) My friends consider me to be a wine connoisseur
(6) A dinner will also be appreciated if the wine is inexpensive
(7) I think the text is customer oriented
(8) I like to contemplate which choice of wine is the right one
(9) The company Wine World makes a favorable impression
(10) I would like to know where I can get the best wine
(11) The importance of a good wine is greatly exaggerated
(12) I finished reading the text in one turn
(13) The author of the text strikes me as friendly
(14) I would like to go to the tasting
(15) The author has taken great care with the text
(16) The writer is sloppy
(17) The text is clear
(18) The text was written by a professional
(19) The text follows the rules of written Dutch
(20) I am annoyed by the language of this letter
(21) The choice of wine keeps me busy
(22) This letter has been sent by a solid organization
(23) The letter has been checked carefully
(24) The writer knows more about wine than about writing letters
(25) The author does everything to make me his customer
(26) The letter/email is beautifully written
(27) This letter/email was obviously a rush job for the writer
(28) The text is attractive
(29) The text makes an amateurish impression
(30) This direct mail letter/direct email was actually sent recently
(31) I prefer to read short texts from paper
(32) This text was particularly suitable for sending by email
(33) The company takes its customers seriously
(34) The writer has worked efficiently
(35) The letter is full of grammatical mistakes
(36) This text is particularly suited to being sent as a letter
(37) I give this letter the following overall rating: 1 2 3 4 5 6 7 8 9 10
(38) I am a man / woman
(39) I was born in 19..
(40) For students: I am working on the following course
    For others: my highest completed training is: primary education / secondary
    education / university
(41) Knowledge of Dutch is required in my job: 0 agree 0 disagree
Biographical Note

Frank Jansen [F.Jansen1@uu.nl] is an assistant professor in the Communication Studies Unit of Utrecht University. He has lectured in grammar, dialectology, and rhetoric at several universities. His current research interests include the style and structure of electronic texts and politeness phenomena in business communication.