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Variations within the same genre: a comparative study of hard news and business news press releases

M. Fawaz Martini

Abstract

A press release, as a specific type of written genre, has its own feature-specific variations. These variations seem to differ accordingly with the purpose for which a press release is written and the audience to whom the press release is directed. The following study tries to explore some linguistic form-functional variations in press releases and their relation to the communicative purposes which seem to provoke such variations. Random samples have been extracted from two different types of press release: police press releases and business press releases. Both samples are analysed and compared in order to investigate the linguistic, pragmatic and stylistic variations within the press release genre. Qualitative content analysis reveals that social purpose(s) have a great impact on the linguistic, pragmatic and stylistic structure of a press release.

1. Introduction

Lassen (2006) describes a press release as ‘a vehicle for a number of different genres with different objectives’ (p, 527). Such a description indicates that a press release (PR) serves different objectives for different genres. Swales (1990), defines genre as:

‘a recognizable communicative event characterized by a set of communicative purpose(s) identified and mutually understood by the members of professional or academic community in which it regularly occurs. Most often it is highly structured and conventionalized with constraints on allowable contributions in terms of their intent, positioning, form and functional value’ (p.13).

According to this definition, the purposes and the intention of a specific speech community control their production of a specific genre. These purposes are usually served by deploying certain constrained and conventionalized stylistic and linguistic forms which incorporate certain functional values related to that specific genre. Exploring the relationship between form and function and the constraints imposed on them may offer an opportunity for understanding why members of a specialist community write the way they do, and what conventionalized constraints restrict their discoursal products (Bhatia, 1993). Studying these restrictions may be useful on both the pedagogic and the socio-cultural levels. In terms of pedagogy, such understanding may provide some useful information which can be utilized in teaching language for specific purposes (e.g. writing PRs). On the socio-cultural level, exploring the socio-cultural features of these sub-genres may shed light on the purposes which predominate the communicative behavior of a certain discourse community and on the socio-cultural outcome of such a specific communicative behavior (Bhatia, 1993).
2. A press release as a specific genre

It has been claimed that a genre is dominated by specific purposes that impose certain restrictions on the discourse that forms this genre, and a PR, as a genre, is also subject to such restrictions (Lassen, 2006). According to Jacobs (1999), Sleurs et.al, (2003) and Lassen, (2006), the main purpose that motivates the production of a PR is to provide a ready pre-formulated piece of news which is written in a news-style format. By addressing this purpose, PR writers encourage reporters to copy and retell a PR to the public almost verbatim. This tendency for having the PR reiterated could have possibly been provoked by certain social and/or communicative purpose(s) which underpin the process of producing a particular PR (Jacobs, 1999). The purpose may be attracting more investors (Pander Maat, 2007), as in the case of the business corpus in this study. The communicative purpose may be reassuring security, as in the case of the police corpus in this study. In both cases, a PR keeps its status as a device employed for pre-formulating news (Jacobs, 1999; Sleurs and Jacobs, 2005).

PR writers usually construct their PRs in a news-style format. They may do so, by assigning a suitable headline followed by a leading paragraph which contains some evaluative and elaborative moves. The writers of a PR also use certain linguistic and metapragmatic devices in order to make their PR look objective. Objectivity is one of the main characteristics of news reports (Jacobs, 1999; Sleurs & Jacobs, 2005).

Although there are some common features which may categorize PRs of various types under one genre, some differences in form and style across PRs of various types may exist. These differences can make each type representative of a different sub-genre.

Let us consider extracts (i) and (ii) below (the symbols: X, Y, and Z are used to anonymize the identity of the original institutions that have issued these PRs):

i. The investigation is being carried out by X. X is aware, but the incident is Not being treated as Y related (emphasis added)

ii. In addition, investigations are underway and will allow determining the existence of possible responsibilities (emphasis added).

At first glance, extracts (i) and (ii) may look similar. Both extracts contain information on the same topic: ‘investigations and their consequences’. But the fact is that these two
extracts are taken from PRs issued by two completely different organizations. Extract (i) is taken from a PR issued by a social service non-profit organization which is London Metropolitan Police Department, and extract (ii) is taken from a PR issued by Carrefour; an international retailer or, in other words, a profit-seeking business organization.

If names of the publishing organization were inserted in examples (i) and (ii) above, these organizations shall be recognized and one can easily predict the purpose of each example. But, it is not only names of organizations that make various text types look different from one another; the linguistic forms utilized in constructing a certain type of discourse also establish its specificity. These linguistic forms make a specific type of written text look different from other types; even from those which may belong to the same genre.

A noticeable linguistic difference between these two examples is that while only active present and future tenses are used in (ii), a passive construction, which marks aspect (progression) rather than tense is employed twice in extract (i).

The present study attempts to analyze the sub-genre-specific usage of some linguistic features and the deployment of some stylistic and pragmatic devices in both business press releases and police press release. The aim of this analysis is to find out and compare the purposes which control the production of each of these sub-genres. The analysis will also encompass a research into how these purposes are realized in the form and content of the PRs which represent these two sub-genres.

3. Methodology

3.1. Data

For the purpose of this study, nine PRs were selected randomly form London Metropolitan Police website (police corpus or PPR) and compared with eleven PRs issued by Carrefour Group’s press office (business corpus or BPR). Carrefour Group is a worldwide operating retailer. Therefore, PRs issued by this group may represent a good sample of business PRs. London Metropolitan Police is also a well-known non-profit seeking social service organization which aims at eliminating crime and assuring public security. PRs issued by London Metropolitan Police may represent the purposes and the practical orientation of similar non-profit seeking organizations. Accordingly, samples from Carrefour appear to some extent typical to the sub-genre of business news releases, and samples from London Metropolitan police appear to some extent typical to the sub-genre of hard news releases. Since the focus of the present study is comparing hard news releases to business news releases, the selected samples seem to some extent typical to the focus of this study.
Although the number of PR samples taken from each group is small (9 PPRs versus 11 BPRs), yet each sample is a whole text. Selecting whole text samples conforms with one of the principles of text and corpus analysis mentioned by Stubbs (1996). This principle implies that ‘[the] unit of study must be whole texts’ (p. 32). Whole texts are better representation of the genre or sub-genre they belong to than extracts or fragments of texts.

Although samples of PRs from both organizations are selected randomly, these samples are still homogeneous. All samples selected for this study belong to the category (PR). All business PRs belong to one organization, and all police PRs belong to one police department. Homogeneous sampling helps in ‘conducting an in-depth analysis’ and in identifying ‘common patterns in a group with similar characteristics.’(Dörnyei, 2007: p. 127).

Samples from both PPR and BPR are also selected on the basis of being comparable. Comparing two different sub-genres may reveal the significant linguistic and stylistic features which make each of these sub-genres look specific and different from the other (Stubbs, 1996). Therefore, in order to serve the purpose of this study, which is exploring variations of the same genre, samples are selected as being comparable in terms of sample text size (the mean word count for each sample text taken from PPR= 138 word per sample text, and the mean word count for BPR sample text = 162 word per sample text). Comparing linguistic features involves comparing the frequency and distribution of the lexical and grammatical features across text types (Stubbs, 1996). Therefore, samples are also selected for being comparable in terms of the number of sentences in each corpus (70 sentences in the police corpus and 67 sentences in Business corpus). A sentence is usually a combination of both lexical and grammatical structures.

3.2. Data analysis

The two sample corpora (PPR and BPR) shall be compared with respect to the overall style and organization, self-reference, and the frequency of lexical, grammatical, and pragmatic features (especially time deixis). These features shall be explored in terms of their fulfillment of the objectivity and tellability aims of a PR in general, and in terms of the specific social and contextual purposes that each of these sub-genres does serve in its relevant social context.

Qualitative content analysis is adopted as the main method of analysis in the present study. Qualitative content analysis involves both quantitative descriptive analysis and qualitative interpretative analysis of the data under focus (Dörnyei, 2007). Quantitative analysis in this study explores the distribution and frequency of the stylistic, lexical, and grammatical forms related to self-reference and time deixis in each corpus. A computer assisted analysis is conducted in order to count the frequency of the aforesaid forms (some computer programmes, such as T-LAB 7.3 and HAMLET II 3.0, can be helpful for this type of text analysis). Then, simple statistics are applied in order to show the
percentage of frequency and distribution of the aforesaid forms across the two corpora. The qualitative analysis involves interpreting the meaning and the purpose of selecting such linguistic and stylistic features. The various functional roles that these forms play within the text are explored according to their relevance to the social context, the occasion, and the purpose which motivate the selection of these forms. An example for this analysis can be found when the use of third person self-reference is explored in section (5.2.1). The analysis starts by counting the frequency of this feature in the corpus. Then, the percentage of its occurrence within the corpus is calculated by applying the following simple formula:

\[
\text{Percentage} = \frac{\text{Number of occurrences}}{\text{Number of sentences in the corpus}} \times 100
\]

Then, the frequency and distributive percentage of this feature is compared across both sub-genres. Finally, a qualitative analysis is conducted to show the textual and the socio-contextual significance of selecting such a specific distribution and frequency rate for this particular form in each sub-genre.

4. Results and discussion

4.1. Style and organization

As mentioned in section (2) above, PRs are usually written and designed in a journalistic style in order to be copied easily and literally by news reporters. Therefore, PRs are usually provided with a headline preceding a leading paragraph which contains some elaborative and evaluative rhetorical moves. This stylistic organization makes a PR look similar to a news report (Jacobs, 1999).

However, in the business corpus only five of the eleven PRs have proper news headlines, while the others have only been given the title of a ‘Press Release’. The procedure of writing a leading paragraph followed by further elaboration on its theme is followed strictly in all BPRs. Assigning no headline to the PR may give freedom to journalists to assign a headline that reflects their own interpretation. Actually, PRs without headlines in BPR are those which announce business deals, plans or studies of projects which are not yet materialized. Examples (iii, iv, v) are samples of such PRs.

iii. CARREFOUR : Press release

04/05/2011 | 12:35 pm
Regulatory News:

In 2009, Carrefour (Paris:CA) and Coop Atlantique renewed their partnership agreement for a period of three years.

The discussions that have been underway for several months between the two Groups have not resulted in an agreement being reached on the renewal of an affiliation contract.

Coop Atlantique purchases goods directly from suppliers, which did not favor the emergence of operational synergies. As a result, the fact that the affiliation contract is not being renewed will not have any significant economic impact in terms of sales or results for Carrefour.

The Carrefour Group is also looking into the effects that the decision will have on Coop Atlantique's remaining contracts with ED.

Carrefour Press Office
Tel: 33 (0) 1 57 32 89 99
E-mail: groupe@presse-carrefour.com

iv.

CARREFOUR : Press release

01/31/2011 | 10:55 am

Regulatory News:

As part of its strategy to maximize its performance and the valuation of its assets, Carrefour (Paris: CA) confirms that it is studying different projects that could lead to the listing of certain of these assets.

To date, no decision has been taken.

Of the various options being explored concerning real estate, Carrefour would retain control of Carrefour Property.

As soon as the studies are completed, they will be submitted for review to the Board of Directors.

Carrefour Press Office
Tel: 33 (0) 1 57 32 89 99
E-mail: groupe@presse-carrefour.com

v.

CARREFOUR : Press release
Regulatory News:

Yesterday, Carrefour (Paris:CA) Group announced its plans for the introduction of the Carrefour Market brand to the French market.

In the course of the conference call to analysts and media concerning this announcement, a question was asked as to whether the Group confirmed its guidance for the full year.

In response to this question, CEO Jose Luis Duran, said that we would give an update with the publication of its Second Quarter sales on July 9th.

In the light of the share price reaction today, we would like to make the following clarification:

Assuming no further deterioration in consumer spending, we are confident that we will grow sales inc-VAT and on constant exchange rates in line with last year's growth (+7.0%) and grow Activity Contribution significantly, at around the same rate as sales.

Carrefour Press Office
Tel: 33 (0) 1 57 32 89 99
E-mail: groupe@presse-carrefour.com

Another case of a PR without a headline occurs when Carrefour announces the review of business performance, audits and losses, as in (vi) and (vii) below.

vi.

**CARREFOUR : Press release**

12/17/2008 | 12:20 pm

Regulatory News:

The Board of Directors, which met today in the presence of Chief Executive José Luis Durán for the last time, reviewed Carrefour's performance and the action plan implemented by the Group over the past two months.

The Group's strengthened commercial initiatives will allow Carrefour to post sales growth at constant exchange rates of around 6.5% in 2008, broadly in line with its objective.

Carrefour (Paris: CA) will also reach its objective of generating 1.5bn euros in operational free cash flow, twice the 691m euros posted in 2007. This demonstrates the Group's financial strength.

Over the last weeks, Carrefour has observed deteriorating global consumption trends, particularly in Europe. In this context, Carrefour has chosen to continue its aggressive promotional policy to meet the needs of its customers.
This deliberate policy allowed the Group to stabilize its market share in France in November and to improve its position in Spain. In this context, the Group now expects Activity Contribution to grow slightly compared to 2007.

Fourth Quarter 2008 sales will be published on January 15, 2009.

Carrefour Press Office
Tel: 33 (0) 1 57 32 89 99
E-mail: groupe@presse-carrefour.com
Finally, a PR announcing that an executive has left Carrefour for another company is written without a headline.

viii.

CARREFOUR : Press release

02/24/2011 | 07:15 am

Regulatory News:

Vicente Trius, Carrefour (Paris: CA) Executive Director Europe and a member of the Group's Executive Board, will leave Carrefour in the coming weeks to take up the position of President of the Canadian retail company Loblaw.

Vicente Trius, who joined Carrefour in May 2010, was in charge of Carrefour's activities in Europe, excluding France.

Until the appointment of his successor, the Executive Directors of the countries reporting to Vicente Trius will be directly supervised by Lars Olofsson, Carrefour's Chief Executive Officer.

Carrefour Press Office
Tel: 33 (0) 1 57 32 89 99
E-mail: groupe@presse-carrefour.com

Conversely, PRs which are given specific headlines seem to report positive and confirmed news, such as signing an agreement or opening a new business, as in (ix), (x), and (xi).

ix.

CARREFOUR : Announces the Disposal of Its Business in Thailand

11/15/2010 | 02:35 am

Regulatory news:

Carrefour (Paris:CA) announces today the signing of an agreement with Big C, a subsidiary of Groupe Casino, for the divestment of its operations in Thailand for an enterprise value of €868 million. This valuation corresponds to 120% of the net sales of the business that is being sold and a multiple of 13.0 x EBITDA.

Carrefour's decision to sell its operations in Thailand is part of its strategy to focus its resources on markets where it holds a leadership position and optimize its capital employed. Carrefour's growth prospects in Thailand did not allow the Group to envisage occupying a leading position in this market in the medium- or long-term.

Present in Thailand since 1996, Carrefour operates 42 stores including 34 hypermarkets (7 in full ownership). Carrefour is the fifth-biggest player in organized food distribution in Thailand with
a market share of 6%, net sales of €723m and EBITDA of €67m over a twelve-month period to 30 June 2010.

Big C, a subsidiary of Groupe Casino, is the second hypermarket operator in Thailand, with a portfolio of 69 hypermarkets and net sales of €1.7bn over a twelve-month period to 30 June 2010.

The transaction is expected to close in the first quarter of 2011.

Carrefour Press Office
Tel: 33 (0) 1 57 32 89 99
E-mail: groupe@presse-carrefour.com

x.

CARREFOUR : Guyenne et Gascogne and Carrefour Partnership

11/20/2008 | 11:45 am

Regulatory News:

The Guyenne et Gascogne and Carrefour Groups (Paris:CA) today renewed their partnership agreement linked to the Guyenne et Gascogne hypermarkets and supermarkets.

On this occasion, Bertrand de Montesquiou, Chairman of Guyenne et Gascogne Management Board, and Gilles Petit, Carrefour's Executive Director for France, express their satisfaction about the extension of this partnership, which is value creative for the two companies. This confirms their longstanding relationship.

Within this context, the Champion supermarkets operated by Guyenne et Gascogne will benefit from the conversion to the Carrefour Market banner.

Carrefour Press Office
Tel: 33 (0) 1 57 32 89 99
E-mail: groupe@presse-carrefour.com

xi.

CARREFOUR : Announces the Opening of Its First Cash & Carry Store in India

12/30/2010 | 02:05 am

Regulatory News:

The Carrefour Group (Paris: CA) announces the opening of its first cash & carry store in India in New Delhi under the name "Carrefour Wholesale Cash & Carry."

With a sales area of 5200 m2, this store located east of New Delhi in the Shahadra neighborhood will offer more than 10,000 SKUs in food and non-food to professional businesses, institutions, restaurants and local retailers.
This opening is in line with the group's strategy to be present in major emerging markets that offer significant expansion and medium- and long-term growth opportunities.

Lars Olofsson, CEO of Carrefour, declared: "The opening of this first store marks Carrefour's entry into the Indian market and will be followed shortly by the opening of other Cash & Carry stores. This first step is essential to allow the Carrefour teams to fully understand the specificities of the Indian market and then build our presence in other formats."

According to Indian regulation, Cash & Carry is today the only format the foreign groups are authorized to develop solely.

Carrefour Press Office
Tel: 33 (0) 1 57 32 89 99
E-mail: groupe@presse-carrefour.com

PRs that announce a supposed positive change in the administrative hierarchy, or those which report that a new member has joined the group are also given their corresponding headlines as in examples (xii) and (xiii) below.

xii.

CARREFOUR : Changes to the articles of association of Carrefour will be proposed at an EGM that will be held in July

06/04/2008 | 02:00 am

Regulatory News:

The Supervisory Board of Carrefour (Paris: CA) has decided to modify its articles of association in order to transform it into a company with a Board of Directors. This proposition will be submitted for approval at an Extraordinary General Meeting that will be held at the end of the month of July.

The intention of the new Board of Directors which will be submitted to the vote of shareholders is to appoint Mr Amaury de Sèze as Chairman of the Board of Directors and Mr José Luis Durán as Chief Executive Officer.

Commenting on the changes to the articles of association, Mr Amaury de Sèze declared: "The simplification of our structure is a must to facilitate and speed up the decision-making process of a large Group such as ours. With the whole Board, I am happy to be able to rely on José Luis Durán to take forward together the performance of Carrefour, which is one of the greatest companies within the industry, and to improve its valuation."

Mr José Luis Durán, for his part, said: "Our objective is to reinforce our ability to perform. I am counting on the responsiveness, and the ability to deliver, of all our teams. I trust them to face up to the challenges ahead of us."

Carrefour Press Office
Tel: 33 (0) 1 57 32 89 99
E-mail: groupe@presse-carrefour.com
CARREFOUR : Pierre Bouchut Joins the Carrefour Group as Chief Financial Officer and Member of the Executive Committee

03/16/2009 | 10:01 am

Regulatory News:

Under the direction of Lars Olofsson, Chief Executive Officer of the Carrefour Group (Paris: CA), Pierre Bouchut is named Chief Financial Officer and member of the Executive Committee. His responsibilities will cover the following areas: financial management, commercial financial services, financial reporting, mergers & acquisitions, assets and development (excluding Carrefour Property), legal & fiscal affairs and IT systems.

In 2005, Pierre Bouchut joined Schneider Electric as CFO and a member of the Supervisory Board, after serving as CFO and then CEO of the Casino Group since 1990.

Eric Reiss, the current CFO responsible for finances, management and financial services for the Group, has been appointed director of the Carrefour hypermarket business unit in Brazil, under the direction of Jean-Marc Pueyo, Executive Director for Brazil and Latin America. He will be responsible for Carrefour's hypermarket banner in Brazil.

These nominations will take effect in early May.

Press service of the Carrefour Group:

Carrefour Press Office
Tel: 33 (0) 1 57 32 89 99
E-mail: groupe@presse-carrefour.com

To sum up the previous argument, it seems that positive news are given specific headlines whereas negative news and news about undetermined business are written without headlines leaving the decision, as it appears, to the reporters to assign a corresponding headline. The purpose of avoiding headlines that may announce negative business news seems to underpin the non-assignment of headlines to some BPRs.

The organization of police PRs appears to adhere strictly to the journalistic style by providing a concise headline followed by a leading paragraph which elaborates on the relevant topic. This stylistic formulation makes the PPR easier to be copied and retold verbatim. This, in turn, may not give the media full freedom to re-word or re-formulate the issued PR. Let us consider example (xiv) below.

xv.

Five arrested under Computer Misuse Act
Detectives from the Metropolitan Police Service's Police Central e-Crime Unit (PCeU) have arrested five people in connection with offences under the Computer Misuse Act 1990.

The five males aged, 15, 16, 19, 20 and 26, are being held after a series of coordinated arrests at residential addresses in the West Midlands, Northants, Herts, Surrey and London at 07:00hrs today (27 January).

The arrests are in relation to recent and ongoing 'distributed denial of service' attacks (DDoS) by an online group calling themselves 'Anonymous'.

They are part of an ongoing MPS investigation into Anonymous which began last year following criminal allegations of DDoS attacks by the group against several companies.

This investigation is being carried out in conjunction with international law enforcement agencies in Europe and the US.

All five have been taken to local police stations where they remain in custody.

Now let us compare the above press release to the same piece of news as it appears on the BBC website in example (xv).

xv.

Five arrested over 'Anonymous' web attacks

Five men have been arrested over a spate of recent web attacks carried out in support of Wikileaks.

The five males are being held after a series of arrests at residential addresses in the West Midlands, Northamptonshire, Hertfordshire, Surrey and London this morning.
The men were arrested in relation to recent and ongoing attacks by an online group that calls itself "Anonymous".

Targets included the websites of PayPal, Mastercard and Amazon.

Anonymous used a technique called "distributed denial of service" (DDoS) attacks in a bid to take the sites offline.

DDoS attacks bombard a website with data until they cannot respond, rendering them inaccessible.

Not all the group's attempts succeeded.

In December, they abandoned an attack on the online retailer Amazon after it could not muster enough people to take part.

The group used an online tool called LOIC to allow members to easily take part in the bombardments of websites.

The site from which it could be downloaded reassured people that there was "next to zero" chance that anyone who used it would be caught.

But a study found that the tool makes no attempt to hide a user's net address which would lead any investigator almost straight to an attacker.

Thousands of people are thought to have downloaded versions of the tool.

The Anonymous group maintained that they were not hackers but "average internet citizens" who felt motivated to act because of perceived injustices against the whistle-blowing website Wikileaks.

Many of the targets had withdrawn services from Wikileaks before they were attacked.

In recent weeks the group has turned its attention to targets in Tunisia and Egypt, attacking official sites in both countries in support of anti-government protests.

The five were arrested this morning at 0700 GMT in connection with offences under the Computer Misuse Act.

Three teenagers aged 15, 16 and 19, were arrested with two men, aged 20 and 26 in coordinated arrests.

This investigation by the Central e-Crime Unit was carried out in conjunction with law enforcement agencies in Europe and the US.

All five have been taken to local police stations where they remain in custody.

It is not the first arrests in relation to the attacks. In December two Dutch teenagers were taken into custody and subsequently released over allegations that they had helped coordinate them.
By comparing the highlighted sentences in both (xiv) and (xv), we can see that some sentences in the BBC news report are almost copied verbatim from the press release issued by Metropolitan London Police Department. Some rhetorical moves are also placed in the same position in both (xiv) and (xv). These moves are the headline and the leading paragraph which is talking about the arrest and what caused it:

‘The arrests are in relation to recent and ongoing 'distributed denial of service' attacks (DDoS) by an online group calling themselves 'Anonymous' (PPR).

And

‘The men were arrested in relation to recent and ongoing attacks by an online group that calls itself 'Anonymous' (BBC).

Toward the end of the report, BBC places the same moves which are placed at the end of the police press release.

PPR:

This investigation by the Central e-Crime Unit was carried out in conjunction with law enforcement agencies in Europe and the US.

All five have been taken to local police stations where they remain in custody.

BBC:

This investigation is being carried out in conjunction with international law enforcement agencies in Europe and the US.

All five have been taken to local police stations where they remain in custody.

The main difference between the two extracts is that the BBC has added more elaborative and explanatory moves to the report explaining the meanings of words and abbreviations such as, ‘Anonymous’ and ‘DDoS’.

The previous example illustrates the similarity between a PPR and a news report. This example supports the view that writers of PPRs tend to adopt a journalistic style while writing a PR in order to encourage the media to adopt it almost as it is. This gives reporters less freedom to manipulate or modify a police press release which should always reflect the accuracy and precision of the work done by police.
4.2. Linguistic and metapragmatic forms

Results from Jacobs’ study (1999), confirm that press releases tend to be deictically neutral in terms of person, time, and space reference. Jacobs attributes this neutrality to the nature of the PR which is supposed to be objective and tellable. Objectivity, neutrality, and self-distancing give the PR a sense of credibility achieved by taking the stance of both the journalist (reporter) and the reader. Tellability means that the PR should possess a certain quality that allows its reporters to re-tell its content as accurately as possible at any point within time (Jacobs, 1999). Various metapragmatic and linguistic forms are utilized in order to achieve objectivity and tellability in writing a PR. Third person self-reference is a common metapragmatic device that reflects the objectivity of a PR (Jacobs, 1999). Another linguistic technique which might be employed in order to achieve neutrality and self-distancing is the use of passive or passive-like constructions (Jacobs, 1999; Sleurs & Jacobs, 2005; van Hell et.al, 2005). Some features that may contribute to the quality of tellability in a PR are tense, aspect, and time deixis. For this study, only objectivity and tellability are explored by comparing the use of referentials, passive voice as well as tense and time deixis in the two corpora which are the focus of this study.

4.2.1. Objectivity, self-reference and self-distancing

Only one instance of first person self-reference in the form of institutional ‘we’ occurs in the PPR:

xvi.

‘The body of a man was found at the address - we are not yet in a position to confirm an approximate age.’ (emphasis added)

Institutional ‘we’ is used in the police corpus in a context which expresses uncertainty; as if it were improper to say that ‘The police are not in a position to confirm…’. Mentioning the agent ‘the police’ in this context may affect their status as a supposedly knowing and capable organization.

Four instances of institutional ‘we’ are found in the Business corpus; all in one PR:

xvii.
In response to this question, CEO Jose Luis Duran, said that we would give an update with the publication of its Second Quarter sales on July 9th.

 [...] we would like to make the following clarification:

Assuming no further deterioration in consumer spending, we are confident that we will grow sales inc-VAT

Institutional ‘we’ is used here in the reported speech form when the speaker is one of the CEOs. This shows that this CEO is talking on behalf of the whole group and as a member of this organization.

However, in both corpora, third person is the most frequently used form of self-reference. This indicates that PR writers tend to take a neutral objective stance (Jacobs, 1999). In the PPR corpus, reference to Metropolitan Police is mostly made by mentioning the same name: ‘Metropolitan Police’ or just by writing the word ‘police’. Sometimes reference to Metropolitan police is made by using the word ‘officers’.

In the BPR, the organization issuing the PRs is mostly referred to as either ‘Carrefour’, ‘Carrefour Group’, ‘the Group’, or just ‘Group’.

The difference in the frequency of using third person self-reference across the two sub-genres is noticeable. Tables (1) and (2) below may illustrate this difference:

Table (1)

<table>
<thead>
<tr>
<th></th>
<th>Metropolitan Police</th>
<th>Police</th>
<th>London (or other place) Police</th>
<th>Officers</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PPR</strong></td>
<td>2</td>
<td>9</td>
<td>5</td>
<td>8</td>
<td>24</td>
<td>34%</td>
</tr>
</tbody>
</table>

Table (2)

<table>
<thead>
<tr>
<th></th>
<th>Carrefour Group</th>
<th>Carrefour</th>
<th>The Group</th>
<th>Group</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BPR</strong></td>
<td>7</td>
<td>52</td>
<td>10</td>
<td>1</td>
<td>70</td>
<td>100%</td>
</tr>
</tbody>
</table>
In BPR corpus, reference to the organization issuing the press release is made almost in every sentence.

Since business PRs are concerned with promoting business more than just exposing facts, the recurrent reference to the organization appears as a promotional device. This technique may also help journalists in presenting almost any individual sentence as an independent piece of news (Jacobs, 1999).

Although the same device (e.g. third person self-reference) is utilized in both sub-genres, it seems to serve different communicative purposes in each. These purposes vary depending on the social role, status, and the intention of the organization which issues the PR (Jacobs, 1999, Sleurs and Jacobs 2005). While third person reference is used by the PPR writers for the purpose of distancing themselves from the hard news they are reporting, the same reference is used by BPR writers for promotional purposes.

Passive voice is another device that indicates objectivity and self-distancing (Jacobs, 1999; Sleurs & Jacobs, 2005; van Hell et.al, 2005).

Frequency of the occurrence of passive and passive-like constructions in both PPR and BPR is illustrated in table (3) below.

<table>
<thead>
<tr>
<th></th>
<th>Past passive</th>
<th>Present Passive</th>
<th>Future passive</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPR</td>
<td>31</td>
<td>14</td>
<td>3</td>
<td>48</td>
<td>69%</td>
</tr>
<tr>
<td>BPR</td>
<td>1</td>
<td>12</td>
<td>13</td>
<td>26</td>
<td>39%</td>
</tr>
</tbody>
</table>

In passive constructions the patient (the noun on which the action is applied) is foregrounded and the agent (the doer of the action) is backgrounded. Consequently, by using passive constructions, self-reference can be avoided altogether as it becomes unnecessary to mention the agent. This, in turn, helps in adopting a more neutral and objective point of view. Neutrality and objectivity are among the main requirements for writing a PR (Jacobs, 1999; van Hell et. al, 2005).

Police news is usually described as hard news (Bell, 1998). They involve arrests, charges and crimes. Therefore, self-distancing or taking a neutral stance looks more
appropriate in formulating a PR which contains hard news. Self-distancing reduces the degree of involvement of the PR writer and sometimes the organization itself (especially when reporting that someone was murdered or some offence has been committed). This may explain why passive structures are used more frequently in PPRs compared to their use in BPRs. Example (xviii), taken from PPR, may illustrate this usage.

xviii.

**Woman charged with murder**

08 March 2011

A 45-year-old woman has been charged with the murder of an 86-year-old woman in Downham.

Karen Williamson, 45 (19.01.66) of Rangefield Road, Downham was charged with the murder of 86-year old Jean Jobson in Downham on Monday 7 March.

She will appear in custody at Camberwell Green Magistrates’ Court today, Tuesday 8 March.

At approximately 20:15hrs on Sunday 20 February, police attended an address in Oakridge Road, Downham, Bromley after concerns were expressed over the welfare of the occupant.

Jean (known as Pat) Jobson, 86 (14.01.25) was found suffering from head injuries. She was pronounced dead at the scene. A post-mortem gave the cause of death as blunt force trauma to the head.

On Saturday 26 February officers arrested a 45-year old woman [A]. She was later bailed and rearrested on Sunday 6 March. She was taken to a south London police station and charged as above.

However, some passive structures are used in BPR for the sake of expressing objectivity as in the extract below.

(taken from example iii above)

Coop Atlantique purchases goods directly from suppliers, which did not favor the emergence of operational synergies. As a result, the fact that the affiliation contract is not being renewed will not have any significant economic impact in terms of sales or results for Carrefour.
But, within the corpus analyzed in this study, it appears that BPR corpus does not contain the same frequency rate of the use of passive structures as in PPR (see table 3 above).

Furthermore, the grammatical tense of the passive structures used in BPR looks different from the tense used in PPR. While in PPRs the passive is mostly in the past tense, BPRs contain only present and future passive forms. In his study, Jacobs (1999) has found that the use of past tense structures helps in achieving further degree of self-distancing while writing a PR. By deploying the past tense a PR may reflect the objectivity, neutrality, and the impersonal-involvement of its writer. This may interpret the high rate of the occurrence of past tense passive structures in police corpus; it gives deeper sense of self-distancing.

In the case of BPR corpus, passive structures are used to express future actions in order to serve as a grammatical device which gives the impression of expectation. The following extract from example (x) above shows this type of usage.

(taken from example ‘x’)

On this occasion, Bertrand de Montesquiou, Chairman of Guyenne et Gascogne Management Board, and Gilles Petit, Carrefour’s Executive Director for France, express their satisfaction about the extension of this partnership, which is value creative for the two companies. This confirms their longstanding relationship.

Within this context, the Champion supermarkets operated by Guyenne et Gascogne will benefit from the conversion to the Carrefour Market banner.

It is obvious that the same linguistic forms are used differently across both sub-genres. Each variation of the same linguistic form is implemented in a way to serve the sub-genre-specific purpose(s). Past passive structures are used in the PPR for expressing self-distancing, therefore, reducing involvement of both the organization and the author in the piece of hard news to be released. On the other hand, the passive voice structure is used in BPR as a hedging device that may provoke the sense of expectation or give the impression of less future reliability. Passive voice, however, seems to serve the common purpose of objectifying points of views in both sub-genres. Objectifying points of view together with self-distancing are among the main features that characterize the writing of a PR (Jacobs, 1999; Lassen, 2006; Sleurs & Jacobs, 2005).

### 4.2.2. Tellability, referentials and time deixis

A press release is expected to report an event which can be retold easily and accurately by the journalists (Jacobs, 1999; p. 217). This means that even if the PR shifts from its original writer to the journalist, person, place and time references included in the PR should remain fixed (Jacobs, 1999). One strategy that helps in fixing referentiality is the use of third person-self reference and the proper name of the organization as illustrated
in section (5.2.1) and tables (1 and 2) above. This usage keeps referentials in the PR invariable and unaffected by further editing processes when the PR is being retold.

Another type of reference which should be kept accurate and easy to be retold is time-reference. Lexical and grammatical time deictics can be implemented as time referentials. Implementing these referentials helps in formulating a tellable and retellable piece of news that serves the specific intentions of the organization that has issued the PR. Lexical deictics are words that refer to indefinite time such as: now, today and yesterday. Grammatical or syntactic deictics are formulated by tense and aspect constructions (Grundy, 2008).

Table (4) shows the use of some selected time referentials and lexical deictics, and table (5) shows the use of some grammatical deictics in both PPR and BPR corpora.

Table (4)

<table>
<thead>
<tr>
<th>Date reference</th>
<th>Today</th>
<th>yesterday</th>
<th>‘Last’ constructions: Last week, last year, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>dd/mm/yyyy or similar date constructions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPR</td>
<td>31</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>BPR</td>
<td>26</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

Table (5)

<table>
<thead>
<tr>
<th></th>
<th>Simple Past</th>
<th>Present Perfect</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPR</td>
<td>42</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>BPR</td>
<td>31</td>
<td>6</td>
<td>25</td>
</tr>
</tbody>
</table>

Table (4) shows no significant difference in using time referentials and lexical deictics. The use of the exact date format is the most frequent in both corpora. Such a format fixes the time of the event that is going to be reiterated by either the journalists or the readers. The use of ‘today’ is sometimes justified by the fact that the word ‘today’ gives the information provided by the PR its news worthiness (Jacobs, 1999). Any statement that refers to an event as ‘happening just today’ indicates that this event is worthy of being considered as news. Conversely, the least frequent time adverbials used in both corpora appear to be those which refer to the past: ‘yesterday’ and ‘last’. Even when
they are used, past-time deictics refer to actions that have an impact on the present as in (xix) and (xx) below.

xix. (from BPR)
    Yesterday, Carrefour (Paris: CA) Group announced its plans for the introduction of the Carrefour Market brand to the French market.

xx. (from PPR)
    Anthony was last seen on Tuesday, 22 March.

Nevertheless, it is noticeable that when past-time deictics are used in PPRs they are immediately backed up with the exact date. This may reflect the organization’s inclination toward producing an accurate and tellable form of news. It is the same case even with using the word ‘today’:

xxi.
    Weeting team have today (5 April 2011) arrested two men.

Date time-referential in (xx) cannot be altered and can be traced back precisely whenever this PR is retold.

The most significant difference that appears in table (5) is that while writers of PPRs use the simple past and the present perfect, the simple past and the future tenses are the most frequent in BPRs.

The simple past tense is usually used in BPRs to introduce an evidence on the organization’s ongoing business and achievements as in (xxii) below:

xxii.
    Carrefour (Paris:CA) and Coop Atlantique renewed their partnership agreement for a period of three years.

Future time-reference is usually used by business PR writers as a promotional device (McLaren-Hankin, 2008). Reporting future prospects has the impact of attracting investors and boosting business. The following extract from BPR (see example ‘vi’ above) illustrates this usage.

(taken from example vi above)
    The Group's strengthened commercial initiatives will allow Carrefour to post sales growth at constant exchange rates of around 6.5% in 2008, broadly in line with its objective.
Carrefour (Paris: CA) will also reach its objective of generating 1.5bn euros in operational free cash flow, twice the 691m euros posted in 2007. This demonstrates the Group's financial strength.

Simple Past tense in English is described as an evidential reference (Ritz, 2010). Therefore, simple past tense is used in PPRs for introducing an evidence that justifies the cause which has prompted police officers to arrest and/or charge someone with a crime or an offence. This usage is clear in examples (xxiii) and (xxiv) below.

xxiii.

**Woman charged after fatal fire**

07 February 2011

Police investigating a fire at Marine Tower, Abinger Grove, SE8, in which two women died on Friday 4 February, have charged a woman over the incident. Sandra Clarke, 49 (11/10/61), of Marine Tower, Abinger Grove, has been charged with manslaughter, arson with intent to endanger life and arson, reckless as to whether life was endangered.

Her first appearance will be via virtual court this morning, 7 February.

Shortly before 14:50hrs on Friday 4 February police were alerted to a fire at Marine Tower, Abinger Grove, SE8. Officers, London Fire Brigade (LFB) and London Ambulance Service (LAS) attended.

Two women, one aged 42, and another aged 59, were pronounced dead at the scene by LAS. Next-of-kin have been informed. Whilst officers believe they know who the victims are, they await formal identification.

Post mortem examinations at Greenwich Mortuary Saturday, 5 February confirmed that both women died as a result of the fire.

A 49-year-old woman was arrested on 4 February in connection with the investigation and subsequently charged as above

xxiv.

**Woman arrested by Olympic Site Support Unit**

31 March 2011
On Tuesday 29 March acting on information received police stopped and spoke to a woman in a car park off Pudding Mill Lane.

Her vehicle was searched and the 40-year-old woman was arrested on suspicion of possession of an explosive substance and class A drugs. She is in custody at an east London police station.

Police recovered a very small amount of a substance which is being forensically examined.

The arrest was made by the officers from the Olympic Site Support Unit following information received.

Another car was stopped and searched by the OSSU on the M11. Nothing was found in the car, and the driver was not arrested.

Searches were carried out at residential addresses in Kent and London, no further substances were found.

The investigation is being carried out by Newham CID. The Counter Terrorism Command is aware but the incident is NOT being treated as terrorist related.

This incident did not represent a threat to the safety and security of the Olympic site.

The present perfect tense seems to be used mostly in the leading paragraphs in PPRs for the purpose of reporting the event of arresting someone (xxv).

xxv.

Dozens arrested in raids

30 March 2011

Dozens of suspected offenders have been arrested today, Wednesday 30 March, during a series of dawn raids across the capital in Operation Connect - a major new initiative launched by the Metropolitan Police to crack down on violence driven by gang culture.

The present perfect tense is used rarely in BPR. When used, it is usually for reporting decisions as in examples (xxvi) and (xxvii).
CARREFOUR: Changes to the articles of association of Carrefour will be proposed at an EGM that will be held in July

06/04/2008 | 02:00 am

Regulatory News:

The Supervisory Board of Carrefour (Paris: CA) has decided to modify its articles of association in order to transform it into a company with a Board of Directors. This proposition will be submitted for approval at an Extraordinary General Meeting that will be held at the end of the month of July.

Over the last weeks, Carrefour has observed deteriorating global consumption trends, particularly in Europe. In this context, Carrefour has chosen to continue its aggressive promotional policy to meet the needs of its customers.

The present perfect expresses non-definite time reference. Therefore, sentences in the present perfect can be retold without being limited to time restrictions. Hence, the implementation of this grammatical feature enhances the text’s tellability.

Once again, we can notice that although the same linguistic and metapragmatic features are used variably across these two sub-genres of PRs, they still serve the general purpose(s) which control the production of a written text that belongs to the major genre of a press release, such as objectivity and tellability.

5. Conclusion

The former analysis has shed light on some common features that characterize PR writing as one major genre. This type of genre possesses its own linguistic and communicative idiosyncrasies. Although the use of these communicative and linguistic features may vary between PPR and BPR, some common features, like objectivity and tellability, remain the same across these types of sub-genre. Understanding both genre-common and sub-genre-specific features may provide a resource for teaching language for the specific purpose of writing PRs (Bhatia, 1993). It may also provide an understanding of the sociocultural conventions that restrict the form and content of a PR. Business PRs should be promotional and looking at a better future in order to attract investors. Conversely, police PRs look more at the accomplishment of the social service required from police officers. PPRs also look at the past in order to provide evidence
and justification for arrests and prosecution. While business press releases sometimes appear without headlines, police press releases are restricted to have specific headlines and a journalistic style; this kind of restriction prompts the media to reiterate the press release almost verbatim. Police officers usually deal with very sensitive issues. Any slight alteration of a police press release may affect the public interpretation of this press release. Any misinterpretation of a police press release may discredit the social status of this organization.

Accordingly, producing a press release is not only a process of writing a piece of news, it is a conventionalized process which establishes and preserves the social face\textsuperscript{1} of the press releasing organization.

6. Generalizability, limitations, and suggestions for further research.

Due to the fact that a small corpus (only 9 samples from PPR versus 11 samples from BPR) and only two sub-genres are analyzed in this study, results are unlikely to be generalizable. More samples and types of PRs should be studied in order to validate the findings of this study and to explore variations within genres more deeply. In addition, expert consultancy is absent in this study, expert consultancy provides deeper understanding of the guidelines which restrict the production of a specific PR (Bhatia, 1993).

Acknowledgment

I would like to thank Dr Bojana Petrić for her support and encouragement. Also, I’d like to thank Miss Danielle Cudby for her help in proofreading this paper.

References


\textsuperscript{1} The term ‘face’ is adopted from Goffman (1955)


**Online Resources**


Modification in the Pronunciation by Native Speakers of English as an Effect of Social Networks with Japanese Speakers of English

Keiko Hirano

Abstract

The present study aims to investigate linguistic changes induced by frequent face-to-face interaction with speakers of different dialects and to illustrate the impact of social networks on speakers. Applying accommodation theory and social network analysis, the study focuses on a community in which speakers do not have close-knit social networks but instead have short- to medium-term loose-knit networks with speakers of different dialects and varieties. Loose-knit networks are believed to be susceptible to linguistic influences originating from outside the network (L. Milroy 2002: 562). Focusing on a community of native speakers of English (NSsE) who work and reside in Japan only for a few years, this paper examines the impact of social network ties, particularly with non-NSsE, on the English of native speakers. In this longitudinal study of linguistic change, data were gathered at two points in time one year apart to analyse differences in individual modification in pronunciation of postvocalic (/t/) (e.g., about, neatly). All informants were language instructors from England, the United States, and New Zealand living in Japan. A slight shift away from glottal stop and a shift towards alveolar stop were found among American speakers as an effect of their high degree of contact with Japanese speakers of English.

1 Introduction

The mechanisms of dialect change in dialect contact situations have been uncovered by a number of studies that have explored communities of people who were transplanted to a new linguistic environment in which they resided for a substantial period of time. However, the mechanisms of dialect change in communities of people who are socially and geographically highly mobile, and have short- to medium-term interactions with speakers of different dialects and varieties, have yet to be fully explored. This paper examines the linguistic change caused by dialect contact in a community where speakers do not have close-knit social networks, but instead have short- to medium-term contact with the people with whom they interact. Furthermore, it attempts to illustrate the impact of social networks on speakers with regard to linguistic variation and change. This research focuses on a particular type of community—an Anglophone community in Japan—and attempts to demonstrate the extent to which linguistic modification

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2 This paper was originally presented at the 18th Sociolinguistics Symposium at Southampton, UK, on the 3rd of September, 2010.
actually occurs among speakers. Anglophones are often highly socially and geographically mobile in a place where English is not the primary language, but is used as a medium of international communication and/or taught as a foreign language. As such people often go to foreign countries only for relatively short periods of time and as non-permanent residents, they are constantly being replaced by new arrivals. Thus, their social relationships are often established on a short-term basis. Their social networks are therefore loose-knit and weak, with little density. This type of network is believed to be susceptible to linguistic influences originating from outside the network (L. Milroy 2002: 562).

This research investigates the linguistic changes in individual NSsE who come to Japan as English teachers from England, the United States (US), and New Zealand (NZ), and focuses on the effects of social networks on their linguistic changes. The linguistic changes observed in the Anglophone community of Japan are considered to be the consequence of frequent face-to-face interaction with NSsE of the same or different dialects and non-NSsE, and frequent accommodation to the linguistic features of the people with whom the speakers have close contact. The argument of the present research is mainly based on accommodation theory (Giles 1973; Giles & Powesland 1975)—in particular, long-term accommodation in a dialect contact situation (Trudgill 1986)—as well as social network theory (L. Milroy 1980). Hirano’s (2005, 2008, 2010, 2011) previous studies of the Anglophone community in Japan found that long-term accommodation among NSsE was taking place with regard to speakers of different English dialects and varieties, especially regarding /-t,d/ deletion, intervocalic (t) and the TRAP and BATH vowels, and that their social networks had strong effects on their modified pronunciation. In the present research, the variation and modification in the informants’ pronunciation of postvocalic (t) are observed over a period of one year from arrival in Japan. The results reveal evidence of the strong impact of a speaker’s social networks with non-NSsE on his/her modification of postvocalic (t), although the linguistic shifts are subtle and small. No significant impact of social networks with NSsE of different varieties of English was found. The discussion below, therefore, will place emphasis on the social networks of members of the Anglophone community in Japan with non-NSsE.
2 The Anglophone Community in Japan

There is strong demand for native-speaking English teachers in Japan, as English is the first foreign language taught at almost all secondary schools and universities in the country. The majority of those who come to Japan as teachers of English at state schools are participants in the Japan Exchange and Teaching (JET) Programme. Started in 1987, the programme is sponsored by Japanese ministries and initially included 848 participants from the US, the United Kingdom (UK), Australia and NZ, and the number of participants and participating countries has since continued to increase (Council of Local Authorities for International Relations [CLAIR] 2010). In 2010–2011, 4,334 university graduates from over 36 countries worked as JET participants in Japan. Over 90% of the JET participants are employed as Assistant Language Teachers (ALTs) whose primary task is to assist Japanese teachers of foreign languages in the classrooms of state schools. Private language schools also provide demand for English teachers.

While both JET participants and teachers at private language schools spend a considerable amount of time using English to communicate with other NSsE who come from a variety of countries, there are many opportunities for interacting with their Japanese students and colleagues at school and other Japanese people outside of work. Some of them may be keen on taking lessons in various aspects of Japanese art and culture, such as flower arranging and tea ceremony participation, while others may enjoy practicing Japanese martial arts such as karate, judo or kendo. The NSsE would use both English and Japanese according to the English proficiency of the Japanese people they interact with and their own Japanese ability. Thus, they are likely to have many opportunities to interact with non-NSsE as well as NSsE, and be exposed to the linguistic influences of the different varieties of English spoken by both NSsE and non-NSsE.

The members of the Anglophone community under investigation in the present study come to Japan for no more than a few years and are continuously replaced by new arrivals. Their community is not, therefore, suitable for the establishment of long-standing relationships or the development of close-knit social networks. The networks of their community, therefore, tend to be loosely knit and weak, despite the fact that they might have close-knit networks in their respective home countries.
3 Theoretical Backgrounds and Previous Research

This chapter reviews theoretical issues and studies in accommodation, contact with non-NSsE, and social networks.

3.1 Accommodation Theory and Studies in Dialect Accommodation

The notion of accommodation developed out of the work of social psychologist Howard Giles and his colleagues (Giles 1973; Giles & Powesland 1975). ‘Speech accommodation theory’ (SAT) (Giles & Powesland 1975), which was later renamed ‘communication accommodation theory’ (CAT) (Giles & Coupland 1991), suggests that an individual adjusts his/her speech style according to the interlocutor. According to the theory, “an individual can induce another to evaluate him more favourably by reducing dissimilarities between them” (Giles & Powesland 1975: 157). This is known as ‘convergence’ (156). In contrast, ‘divergence’ is the way in which individuals accentuate speech differences between themselves and others (Giles & Coupland 1991: 65). SAT/CAT has been applied widely in studies of communication between different social groups, in different contexts and through different media (Giles & Ogay 2010).

Accommodation can be classified into two types according to duration: ‘short-term accommodation’ and ‘long-term accommodation’ (Trudgill 1986: chap. 1). Short-term accommodation occurs with a particular interlocutor in a particular setting, and this linguistic adjustment is only transitory behaviour (Bell 1984; Coupland 1988). However, if accommodation takes place frequently enough and over a longer period of time, modifications may become non-transitory behaviour and occur regardless of the interlocutor or setting. This type of accommodation is called long-term accommodation.3 Long-term accommodation can often be observed when speakers of different regional varieties come in contact (Trudgill 1986: 3). In this case, regionally mobile individuals or minority groups accommodate to the non-mobile majority that they have come to live amongst, and this dialect modification is maintained by the

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3 While Trudgill (1986) equates the processes of long-term accommodation with those of dialect acquisition, Chambers (1992) distinguishes accommodation and acquisition, and uses the term ‘dialect acquisition’ for his research of the linguistic change experienced by Canadian children who moved to Britain.
speaker in all transactions in the contact area. Studies of long-term accommodation in adults have commonly found that people who move from one dialect region to another seem to shift their accent towards that of their adopted region, partially acquiring the phonological features of a new dialect (Evans & Iverson 2007; Kerswill 1993; Nycz 2011; Omdal 1994; Shockey 1984; Stanford 2008), although both the speed and degree of accommodation are much lower in adults than children (Trudgill 1986: 31).

3.2 Contact with Non-native Speakers of English

It is well documented that native speakers (NSs) adjust their speech style when they communicate with people who are non-NSs (Ellis 1985; Ferguson 1975). The use of such adjustments towards non-NSs who have a limited command of the language is called ‘foreigner talk’: the concept of which was developed by Ferguson (1975). A distinct type of foreigner talk used by teachers in the classroom is called ‘teacher talk.’ Some studies have demonstrated that NSs make linguistic adjustments when talking to non-NSs in order to accommodate their comprehension (Henzl 1979; Smith 2007). For example, comparing the language used by foreign language teachers when talking to NSs and when teaching students of different proficiency levels, Henzl (1979) observed that they manipulated linguistic variables in lexicon, grammar and phonology. In adjusting pronunciation, for example, the teachers used a more standardised pronunciation with foreign language learners than with NSs. The released final stop is an example of more careful pronunciation (Ellis 1985: 135). Henzl (1979: 164) found that foreign language teachers used a considerably higher frequency of unreduced consonantal clusters when talking to foreign language students than they did when talking to NSs. Trudgill (1995: 144) states that “fast-speech phenomena make things easier for the native speaker”, but, “crucially, they also make life much more difficult for outsiders, who do not share information with insiders, as well as for non-native speakers, who lack close familiarity with the particular linguistic system, by reducing the amount of phonetic information available for processing”.

32
3.3 Social Network Analysis

Social network analysis “is concerned with understanding the linkages among social entities and the implications of these linkages” (Wasserman and Faust 1994: 17). The idea of the social network as an analytic concept has been used by a number of sociolinguists (Eckert 1988; Gal 1978; Lippi-Green 1989; Li Wei 1994; Matsumoto 2010; J. Milroy & L. Milroy 1978; L. Milroy & Li Wei 1995). A number of studies into the relationship between language and social networks focus on small-scale communities of people who tend to have strong-network ties. In general, strong networks within the community function to retain the local vernacular variant of the linguistic variable (Cheshire 1982; Labov 1972a; L. Milroy 1980). The importance of a social network with close-knit ties in enforcing the localised linguistic norms was demonstrated by L. Milroy’s (1980) Belfast study in Northern Ireland. She illustrated that the stronger the ties with the local community were, the more likely speakers are to retain the local vernacular variant of the linguistic variable and resist change from outside.

Some studies (Bortoni-Ricardo 1985; Hirano 2008, 2010, 2011; J. Milroy & L. Milroy 1985; L. Milroy & J. Milroy 1992) focus on communities of people who do not necessarily have such ties. Granovetter (1973) demonstrated that weak ties act as bridges across which innovation and influence flow from one close-knit group to another. With regard to linguistic innovation, “linguistic innovators are likely to be individuals who are in a position to contract many weak ties” (L. Milroy 2002: 563). L. Milroy (2002: 563–564) suggests that the weak-tie model can account for some of the dialect changes taking place in the English-speaking world, for example, the ‘Northern Cities Shift’ in the US and the adoption by young speakers of a merger between /ɹ/ ~ /θ/ and /v/ ~ /ð/ in urban cities in the UK. L. Milroy (2002: 564) assumes that “the conduits of innovation are the multiple weak ties of everyday urban interaction in the neutral areas outside close-knit community territories”. She states that “mobile individuals who have contracted many weak ties, but occupy a position marginal to any given cohesive group, are in a favourable position to diffuse innovation (p. 565).

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4 See Labov (1994: 177-201) for a full account of Northern Cities Shift.
4 Hypothesis

For the purpose of exploring the linguistic behaviour of NSsE in Japan and the influence of their social networks, this study proposes the following hypothesis: The NSsE’s linguistic behaviour and change are strongly correlated to their non-NSsE networks in the Anglophone community in Japan, that is to say, the greater the strength of their non-NSsE networks is, the more they will shift away from their vernacular features and/or adopt features of standardised English. One of the basic assumptions underlying this hypothesis reflects support for social network theory (L. Milroy 1980). The hypothesis suggests that linguistic changes observed in an individual speaker are induced and influenced by the members of his/her social network, which consists of people with whom he/she has close and frequent face-to-face contact on a regular basis. The hypothesis is also based on the concept of weak-network ties as proposed by Granovetter (1973), which claims that such ties are important for the transmission of information and innovation from one network to another. J. Milroy and L. Milroy (1978: 23) suggest that while a close-knit network tends to be linguistically homogeneous in a way that maintains the group’s localised linguistic norms and resists changes originating from outside the network, a loose-knit network tends to be susceptible to such changes.

The Anglophone community investigated for the present study is linguistically heterogeneous, their networks are loosely knit and weak, and, therefore, they tend to be susceptible to the linguistic influences of different dialects and varieties of English. In particular, those who have many network ties with speakers of a different English variety are more susceptible to linguistic influences than those who have no such networks. The current research advocates Bortoni-Ricardo’s (1985) proposition that linguistic changes are likely to occur in communities of people who are socially and geographically mobile and whose network ties are not dense and multiplex.

Another basic assumption underlying this hypothesis reflects support for accommodation theory (Giles 1973; Giles & Powesland 1975), which posits that speakers tend to adjust their linguistic behaviour in order to increase their similarity to those people with whom they interact. Long-term accommodation occurs if this adjustment in linguistic behaviour takes place frequently enough and over a lengthy
period of time (Trudgill 1986: 40). Supporting the ‘change by accommodation’ model, which “essentially relies on frequency of (direct) interaction, and on the adaptation of the behavior of one person to that of another co-present speaker” (Auer & Hinskens 2005: 337), this paper will demonstrate that long-term linguistic accommodation can occur in an Anglophone community of Japan.

NSsE who come to Japan as language teachers are very likely to use some forms of foreigner talk or teacher talk when talking to non-NSsE. They are expected by the public to speak more standardised English, especially when they are in a classroom with their students. For example, the participants in the JET Programme, who represent the main body of informants for the present study, are actually required to have “excellent pronunciation, rhythm, intonation and voice projection skills in the designated language, in addition to other standard language skills”, according to the eligibility criteria published on the official JET homepage (CLAIR 2010). Intelligibility seems to be an important motivation for NSsE making linguistic adjustments to aid non-NSsE. In the process of accommodation, Shockey (1984) suggests that, apart from the desire to conform linguistically to the target variety in order to receive a favourable evaluation from its speakers, intelligibility is an important factor that encourages accommodation. The NSsE presumably try to speak in a style more associated with slow and careful speech. After using more careful speech repeatedly through their stay in Japan, this modification may be retained in conversation with NSsE. Thus, the ephemeral tendency might become a semi-permanent feature of the NSs’ linguistic behaviour as a consequence of their long-term adoption of a modified style of speech directed at non-NSsE.

The hypothesis suggests that an increase in the amount and/or intensity of an individual’s social relations with non-NSsE will facilitate his/her use of variants that are more commonly or typically used in standardised English and/or suppress the use of his/her vernacular or characteristic features. Despite the fact that NSsE only have short to medium term temporary contact with non-NSsE, this research expects to observe some subtle linguistic changes that are more durable than short-term accommodation but not permanent adaptations as in the case of dialect acquisition.
5 Linguistic Variable

The present study examines postvocalic (t) as the linguistic variable, which is preceded by a vowel or /t/ and followed by a pause or a non-vowel segment. It is commonly found in word-final position (e.g., about and start) or at a morpheme boundary (e.g., neatly and partly). /t/ in this position is often subject to glottalisation (Wells 1982: 261). In England the use of the glottal stop is “rapidly spreading in contemporary urban British English” (J. Milroy, L. Milroy, Hartley & Walshaw 1994: 351). T Glottalling used to be associated with low prestige (Trudgill, 1974), but now glottal stop is “quite regularly to be expected in RP in syllable-final position” and is well known in non-RP accents of England (Upton, 2004: 228). The use of the glottal stop has been widely reported in England by Docherty & Foulkes (1999) in Derby and Newcastle; Fabricius (2002) in RP; J. Milroy et al. (1994) in Tyneside; and Trudgill (1974) in Norwich, among others. Wells (1982: 323) states that the recent geographical spread of the glottal stop in Britain is considered to result at least in part from the influence of London English, where the glottal stop is commonly used. There is, however, evidence that it emerged in East Anglia at the same time—if not before—London. This is highlighted in the Survey of English Dialects (Orton, Halliday & Barry 1962–1971,5 cited in Trudgill 1974: 80) and in the Origins of New Zealand English Project (Trudgill 2004: 80–81).

Word-final postvocalic /t/ in New Zealand English (NZE) is “very often simply a glottal stop”, according to Hay, Maclagan & Gordon (2008: 19). Similarly, Bauer (1986: 229) says that it is “frequently glottalised, and may also be unreleased”. Bayard (1990), Docherty, Hay & Walker (2006) and Holmes (1995) all found that postvocalic /t/ in NZE is increasingly realised as a glottal stop. Holmes’s (1995) study in NZE has illustrated that glottal stops occur more often in relaxed conversation than in an interview context; more often in the speech of working class speakers than in that of middle class speakers; and, more often in the speech of younger speakers than in that of older speakers. Holmes states that young women seem to be leading the change in this feature.

T Glottalling has not been well researched in North America (Roberts 2006: 227). Wells (1982: 261) says that he does not know of any systematic investigation of T Glottalling, but states that “T Glottalling is clearly to be observed in the speech of some Americans”, when /t/ appears in a postvocalic position. Roberts’s study (2006) in Vermont has demonstrated that the glottal stop is favoured when /t/ is preceded by a vowel and followed by a consonant.

6 Methodology

The target community of the present study is an Anglophone community in Japan, which is defined in this paper as a community of NSsE from English-speaking countries who are living temporarily in Japan as language instructors employed by local governments or private institutions, and does not incorporate the community of all Anglophones living in Japan including those, for example, who are in Japan for business or sightseeing, or those who are permanent residents. Since the current study reuses the data collected for previous studies in examining other linguistic variables (Hirano 2005, 2008, 2010, 2011), the description of the methodology will be brief and limited to the main points.

6.1 Informants and Collecting Linguistic Data

The data for this study were collected from the same informants on two separate occasions a year apart. The first dataset was collected in the autumn of 2000, immediately after the informants arrived in Japan. The second dataset was collected during the summer–autumn of 2001, about one year after the informants initially arrived in Japan. This method of collecting data was employed specifically to conduct a longitudinal study in order to compare and contrast the results of the two sets of data and to trace the course of changes in real time. The informants were chosen from three nationalities: English, American and NZ nationals. A total of 39 NSsE (15 English, 11 Americans and 13 New Zealanders), all of whom arrived in Japan in the summer of 2000, participated in both the first and second data collections in three different prefectures of Kyushu: Fukuoka, Saga and Kumamoto. The 39 participants included 36 ALTs on the JET Programme and three English conversation instructors working for
private companies. The average age of the informants was 24.7 years at the time of the first data collection. All the informants had undergone higher education and some even had postgraduate degrees.

The linguistic data for this research consists of natural, spontaneous conversation between two NSsE from the same country. The interviewer was not present while the informants were being recorded, in order to lessen the possibility of inducing psychological pressure or speech modification resulting from the presence of a non-NSE. In this way, it can be assured that a more naturally occurring conversation was obtainable. The problem of the ‘observer’s paradox’ (Labov 1972b: 209) can be avoided, but the possibility of an ‘audience design’ effect (Bell 1984) might remain, as all participants knew that the researcher was going to listen to their recorded conversation later. Given the situation, however, this could not be avoided.

In both the first and second sessions, casual conversations were recorded for 45 minutes for each pair. The two people in each pair were friends in most cases, or at least knew each other previous to data collection. The informants were paired with someone from the same country to reduce any possibility of short-term accommodation, which might have occurred if they had been paired with someone from a different country who had a different English dialect and accent. 6 Thus, it was possible to minimise the risk that changes were caused by the conversation partner at the time of data collection. What cannot be avoided, of course, is the possibility that these particular interactions may trigger short-term accommodation between the two interlocutors in the conversations. The fact that the interlocutors were the same for both the first and second sessions in most cases helped to minimise this possibility, as well as any difference in degree of short-term accommodation between the first session and the second session that perhaps took place.

6 There is one exception. One NZ informant had an Australian partner whose data is not used in this study.
6.2 Analysing Linguistic Data

The total duration of conversational data was approximately 34 hours. Since postvocalic (t) occurs very frequently, each 45-minute conversation was divided into two sections, each consisting of 22.5 minutes. Only the latter half of the conversation was used to extract tokens. Tokens of word-final /t/ (e.g., about and start) or morpheme boundary /t/ (e.g., neatly and partly) when preceded by a vowel or /r/ and followed by a pause or a non-vowel segment were extracted.\(^7\) Morpheme boundary /t/ also includes /t/ followed by a plural -s (e.g., lots), a possessive -s (e.g., Kate’s) and a third person singular -s (e.g., meets). The study involves a total of 9,269 cases of postvocalic (t), providing approximately 238 tokens per person. The phonetic realisations of the target segment were categorised impressionistically into three variants: flap [ɾ], glottal stop [ʔ] and alveolar stop [t].\(^8\) In order to test the reliability of the researcher’s auditory judgments, a randomly selected portion of the tokens were judged by an experienced native-speaker dialectologist of English in the UK. The two sets of judgments had 100% agreement. This indicates the reliability of the judgments for the present study. The number of tokens for each variant of postvocalic (t) in the first and second datasets obtained from informants from England, the US and NZ is shown in Table 1.\(^9\)

<table>
<thead>
<tr>
<th>Informants</th>
<th>Data</th>
<th>Flap</th>
<th>Glottal stop</th>
<th>Alveolar stop</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>1(^{st}) dataset</td>
<td>9 (0.5%)</td>
<td>1767 (90.8%)</td>
<td>170 (8.7%)</td>
<td>1946</td>
</tr>
<tr>
<td></td>
<td>2(^{nd}) dataset</td>
<td>1 (0.1%)</td>
<td>1809 (93.2%)</td>
<td>132 (6.8%)</td>
<td>1942</td>
</tr>
<tr>
<td>American</td>
<td>1(^{st}) dataset</td>
<td>20 (1.5%)</td>
<td>1194 (90.6%)</td>
<td>104 (7.9%)</td>
<td>1318</td>
</tr>
<tr>
<td></td>
<td>2(^{nd}) dataset</td>
<td>32 (2.5%)</td>
<td>1166 (90.5%)</td>
<td>90 (7.0%)</td>
<td>1288</td>
</tr>
<tr>
<td>NZ</td>
<td>1(^{st}) dataset</td>
<td>27 (1.9%)</td>
<td>1200 (85.0%)</td>
<td>184 (13.0%)</td>
<td>1411</td>
</tr>
<tr>
<td></td>
<td>2(^{nd}) dataset</td>
<td>32 (2.3%)</td>
<td>1188 (87.1%)</td>
<td>144 (10.6%)</td>
<td>1364</td>
</tr>
</tbody>
</table>

1\(^{st}\) dataset: immediately after arrival; 2\(^{nd}\) dataset: a year after arrival

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\(^7\) The following tokens were excluded from the data: the pronoun ‘it’; /t/ followed by a contracted form of ‘has’, ‘is’, ‘us’ or ‘will’ (what’s); /t/ followed by /t/ (at ten) or an interjection (gettin).

\(^8\) [ɾ] includes voiced or unvoiced flap or tap. [ʔ] includes only glottal stop. Preglottalisation is not included in this category. [t] includes alveolar stop ranging from [t] to heavily aspirated [tʰ].

\(^9\) The percentage shown with the token number is simply calculated from the total number of tokens obtained from all the informants from each country.
7 Informants’ Social Networks in Japan

Each informant was briefly interviewed after recording the conversation with a partner during the second data collection stage. The interview was designed to collect information about people with whom the informants maintain close relationships and regular contact in their daily life in Japan. The present study uses the egocentric network approach, concerning only direct links, in order to identify what kind of network the informants have. A set of eleven questions was prepared to elicit information about the informants’ social networks.10

Q1. Names or initials of close friends
Q2. Sex of each person
Q3. Frequency of meetings with each person
Q4. Frequency of telephone calls with each person
Q5. Relationship with each person (friend, colleague or neighbour)
Q6. Whether or not each person is an English teacher in Japan
Q7. Nationality of each person
Q8. Years spent in Japan by each person (for non-Japanese only)
Q9. Main language used with each person
Q10. Interconnecting close ties with one another
Q11. Ranking of these relationships

The term ‘social network,’ as used in the present study, refers to a group of relationships an individual person forms in the society he/she lives in with other people whom he/she meets on a regular basis, feels close to, and is connected to by some kind of social relationship. The current study considers that the closeness and the frequency of contact are important elements in determining the strength of the relationship with each person. The degree of closeness and the frequency of contact were, therefore, used to calculate the strength score of individual relationships. A score for each relationship was calculated using the rank order of closeness and the frequency of meetings and telephone calls with the person as follows:

\[
\text{Score for each relationship} = \text{rank order score} \times (\text{score for meeting frequency} + \text{score for telephone call frequency})
\]

10 For the actual questioning phrases, see Hirano (2011: 246).
11 See Hirano (2008, 2011) for the scoring of the rank order and for the frequency of meetings and telephone calls.
Each score for each relationship was then totalled to provide a total network index score for each informant. A network index score represents the strength of the individual social network of the informant.\(^{12}\) First of all, the social network of each informant was grouped into two sub-networks: a network with NSsE and a network with non-NSsE. Networks with NSsE, were divided into three sub-networks: British, North American and Australasian networks.\(^{13}\) Networks with non-NSsE are the groups of network ties with Japanese people and other nationals whose first language is not English. The Japanese networks were divided into two sub-networks: a network with Japanese people who use Japanese as their main language in speaking with the informant (JJML) and a network with Japanese people who use English as their main language in speaking with the informant (JEML). Network index scores with Japanese teachers of English (JTE)\(^ {14}\) were also created. Non-NSsE other than Japanese are included in the non-NSsE network together with Japanese nationals. The index scores of these networks,\(^ {15}\) except JJML, are used to examine relationships with informants’ changes in the choice of variants of postvocalic (t).

8 Results

Focusing on the effects of the informants’ social networks, this chapter presents the results of linguistic data analysis. The following statistical tests and methods of SPSS were performed in this chapter: Kolmogorov-Smirnov statistics, paired-samples t-test, Pearson correlation, scatter plots and multiple regression analysis.

8.1 Changes in the Choice of Variants of Postvocalic (t)

The mean percentage use and standard deviation (S.D.) of each variant of postvocalic (t) in individual informants from England, the US and NZ in the first and second datasets are shown in Table 2. The mean percentage use is calculated from the percentage use by individual informants based on the token numbers of each variant by those individual

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\(^{12}\) Note that ‘a network with a high network index score’ in the current study does not mean a close-knit network, a term used by L. Milroy (1980) to describe a dense and multiplex network.


\(^{14}\) Members who belong to this network overlap with members who belong to JJML or JEML networks.

\(^{15}\) The informants’ average index scores of sub-networks for both NSsE and non-NSsE are shown in Table A in Appendix.
Informants from all three countries use glottal stops to a very great extent both shortly after arrival in Japan and a year later. A paired-samples t-test shows that the use of this variant even increases significantly among English informants after a year in Japan. NZ informants also increase their use of glottal stops after a year, although this change does not show statistical significance. The informants from all three countries decrease their use of alveolar stops slightly after a year. Flaps occur at very low rates among informants of all nationalities, since they tend to occur only before certain phonological environments, particularly before /h/. In this case, the /h/ is occasionally deleted, but mostly retained. Example (1) shows instances of an English informant using glottal stop [ʔ] and flap [ɾ]. Examples (2) and (3) show instances of an American informant and a NZ informant using glottal stops [ʔ] and alveolar stops [t].

(1) Eng.: the rest of the class understood **immediately** what he said. [ʔ] [ɾ] (R&N2, R1656)
(2) US: yeah **not** … **greatly** but they’re heading more in **that** direction. [ʔ] [t] [ʔ] [ʔ] (T&K2, K1275)
(3) NZ: so he kind of comes **out** with things that aren’t **appropriate**? [ʔ] [t] (B&T2, B1278)

Table 2: Mean % use and standard deviation of each variant of postvocalic (t)

<table>
<thead>
<tr>
<th>Informants</th>
<th>Data</th>
<th>Flaps Mean %</th>
<th>S.D.</th>
<th>Glottal stops Mean %</th>
<th>S.D.</th>
<th>Alveolar stops Mean %</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>1st dataset</td>
<td>(0.5)</td>
<td>.98</td>
<td>90.3*</td>
<td>6.55</td>
<td>9.2</td>
<td>6.27</td>
</tr>
<tr>
<td></td>
<td>2nd dataset</td>
<td>(0.1)</td>
<td>.21</td>
<td>93.2*</td>
<td>4.24</td>
<td>6.8</td>
<td>4.26</td>
</tr>
<tr>
<td>American</td>
<td>1st dataset</td>
<td>1.6</td>
<td>1.54</td>
<td>90.6</td>
<td>3.08</td>
<td>7.8</td>
<td>2.61</td>
</tr>
<tr>
<td></td>
<td>2nd dataset</td>
<td>2.5</td>
<td>1.97</td>
<td>90.1</td>
<td>3.87</td>
<td>7.4</td>
<td>3.54</td>
</tr>
<tr>
<td>NZ</td>
<td>1st dataset</td>
<td>2.0</td>
<td>2.23</td>
<td>85.4</td>
<td>5.81</td>
<td>12.6</td>
<td>6.39</td>
</tr>
<tr>
<td></td>
<td>2nd dataset</td>
<td>2.3</td>
<td>1.91</td>
<td>87.7</td>
<td>3.90</td>
<td>10.0</td>
<td>4.06</td>
</tr>
</tbody>
</table>

1st dataset: immediately after arrival; 2nd dataset: a year after arrival.
K-S statistics indicate that scores that appear in brackets are not normally distributed. Paired-samples t-test (2-tailed): *significant at P < .05.

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16 The mean percentage does not necessarily agree with the percentage calculated from the total token numbers of each variant obtained from all informants of each nationality.
17 Flapping /t/ can occur before /h/ (Shockey 1984: 89).
18 Kolmogorov-Smirnov statistics are used to test scores of each variant by nationality because paired-samples t-tests, and Pearson correlation and multiple regression analyses require that the distribution of scores on the dependent variable is ‘normal’ (Pallant 2005: 53–58).
8.2 Social Network Effect on Postvocalic (t)

This section focuses on the effect of social networks on linguistic changes. The social network strengths of each informant are considered along with the extent of change in the use of each variant of the linguistic variable. The percentage scores for data collected at the time of arrival in Japan (1st dataset) and a year later (2nd dataset) were put into a formula which calculated the extent of change in the use of each variant of postvocalic (t) by each informant between the first and the second datasets:

\[
\text{Percentage change} = \% \text{ score of the 2nd dataset} - \% \text{ score of the 1st dataset}.
\]

Informants who reduced their use of a particular variant after a year have a negative quantity as their score and those who increased the use after a year have a positive quantity. The percentage of change for individual informants, then, was statistically tested with their social network index scores.

Firstly, Pearson correlations\(^{19}\) of the change in use of each variant with social network strengths with NSsE and non-NSsE were tested for the informants from England, the US and NZ, respectively.\(^{20}\) Pearson correlation analysis found significant correlations between some of the changes in the variants of postvocalic (t) and some of the non-NSsE social networks for American informants.\(^{21}\) These correlations will be looked at more closely below.

\begin{table}[h]
\centering
\caption{Correlations of each variant of postvocalic (t) in American informants with NSsE networks—British, North American and Australasian—and non-NSsE social networks for the informants from England, the US and NZ, respectively.}
\end{table}

\(^{19}\) Pearson correlation analysis is used when one wants to describe the strength and direction of the linear relationship between two variables (Pallant 2005: 121).

\(^{20}\) It should be noted that significant changes among the mean percentage use of variants shown in the Table 2 are not necessarily reflected in the results of Pearson correlations since Pearson correlation analysis examines the correlation between the amount and direction of change of the variants of the individual informants and the strength of their social networks.

\(^{21}\) Pearson correlation analysis carried out for English informants has found a strong correlation between changes in the use of flaps for postvocalic (t) and their Australasian networks. The distribution of scores for the change in the use of flaps, however, is not normal and also the number of tokens that carry this variant is very small in both the first and the second datasets. Pearson correlation analysis carried out for NZ informants showed that there are no significant correlations. Multiple regression has not found any strong predictors, either.

\(^{22}\) A Pearson correlation value that is .50 or more, or –.50 or less, indicates that the strength of relationship is large (Pallant 2005: 126).

\(^{23}\) The standard deviations of the change in the percentage use of each variant are as follows: flap 2.32; glottal stop 5.25; and, alveolar stop 4.07.
non-NSsE networks—Japanese, JEML, and JTE. No strong correlations were found with any of the three NSsE networks, but strong correlations were found between two of the variants and all of the non-NSsE networks. The change in the use of glottal stop usage is significantly and negatively correlated with the JEML network (Pearson $r=-.711$, $p=.014$), and the JTE network (Pearson $r=-.743$, $p=.009$). The change in alveolar stops is significantly and positively correlated with the Japanese network (Pearson $r=.628$, $p=.039$), the JEML network (Pearson $r=.706$, $p=.015$), and the JTE network (Pearson $r=.719$, $p=.013$). Since the JTE network shows the strongest correlations, these correlations will be examined in more detail below.

Table 3: Pearson correlations for postvocalic (t) in American informants with their social networks

<table>
<thead>
<tr>
<th>Social network</th>
<th>Pearson Correlation</th>
<th>Flap</th>
<th>Glottal stop</th>
<th>Alveolar stop</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSsE networks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>British network</td>
<td>Pearson r</td>
<td>.058</td>
<td>-.240</td>
<td>.278</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.865</td>
<td>.476</td>
<td>.408</td>
</tr>
<tr>
<td>North American network</td>
<td>Pearson r</td>
<td>.303</td>
<td>-.167</td>
<td>.044</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.364</td>
<td>.624</td>
<td>.899</td>
</tr>
<tr>
<td>Australasian network</td>
<td>Pearson r</td>
<td>.025</td>
<td>.099</td>
<td>-.143</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.942</td>
<td>.771</td>
<td>.674</td>
</tr>
<tr>
<td>Non-NSsE networks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japanese network</td>
<td>Pearson r</td>
<td>.169</td>
<td>-.563</td>
<td>.628*</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.620</td>
<td>.071</td>
<td>.039</td>
</tr>
<tr>
<td>JEML network</td>
<td>Pearson r</td>
<td>.368</td>
<td>-.711*</td>
<td>.706*</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.266</td>
<td>.014</td>
<td>.015</td>
</tr>
<tr>
<td>JTE network</td>
<td>Pearson r</td>
<td>.420</td>
<td>-.743**</td>
<td>.719*</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.199</td>
<td>.009</td>
<td>.013</td>
</tr>
</tbody>
</table>

Correlation (2-tailed): *significant at $P < .05$, **significant at $P < .01$.

8.2.1 American informants’ use of glottal stops for postvocalic (t)

The JTE network index scores by individual American informants, the percentage use of glottal stops for postvocalic (t) in the first and second datasets respectively, and the percentage of change between the two datasets are shown in Figure 1. A scatter plot which shows a correlation of the change in the percentage use of glottal stops by American informants between the first and second datasets with their JTE network is shown in Figure 2, with a regression line showing the best fit between the data points. It indicates that the higher JTE network index score informants have, the more they tend to decrease their use of glottal stops.

24 Since none of the American informants has networks with non-Japanese whose first language is not English, the non-NSsE network is omitted from the table.
Hierarchical multiple regression analysis was performed between the change in the percentage use of glottal stops for postvocalic (t) in American informants as the dependent variable and their social network strengths with NSsE and JTE as independent variables as illustrated in Table 4. Multiple regression can predict which of the networks is influencing the linguistic change. The effect of the JTE network strength on the use of glottal stops was tested after the effect of social network strengths with NSsE is controlled for. In Model 1, none of the three networks with NSsE is a statistically significant predictor. In Model 2, the JTE network is a significant negative predictor (Beta=−.827, p=.012) influencing the use of glottal stops. The adjusted R² value increases from .308 for Model 1 to .508 for Model 2, indicating that Model 2 with the JTE network predicts the variability in change in the use of glottal stops better than Model 1 with the three NSsE network strengths alone. The significance p value of .012 indicates that it is making a significant unique contribution to the prediction.

![Diagram of percentage use of glottal stops for postvocalic (t) in individual American informants and their JTE networks]

Figure 1: The % use of glottal stops for postvocalic (t) in individual American informants and their JTE networks

25 Multiple regression analysis was also run for the networks with Japanese and JEML, but found that the effects of those two networks were not as strong as the effects of the JTE network.
Table 4: Hierarchical multiple regression for the use of glottal stops for postvocalic (t) in American informants

<table>
<thead>
<tr>
<th>Model</th>
<th>Adjusted $R^2$; $F$; Sig.</th>
<th>Predictor Variable</th>
<th>Beta</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Adjusted $R^2=−.308$; $F_{3,7}=.216$; $p=.883$</td>
<td>Networks with NSsE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>British network</td>
<td>−.240</td>
<td>.532</td>
</tr>
<tr>
<td></td>
<td></td>
<td>North American network</td>
<td>−.147</td>
<td>.765</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Australasian network</td>
<td>.024</td>
<td>.961</td>
</tr>
<tr>
<td>2</td>
<td>Adjusted $R^2=.508$; $F_{4,6}=3.583$; $p=.080$</td>
<td>JTE network</td>
<td>−.827</td>
<td>.012</td>
</tr>
</tbody>
</table>

8.2.2 American informants’ use of alveolar stops for postvocalic (t)

The individual American informants’ JTE network index scores, their percentage use of alveolar stops in the first and second datasets respectively, and the percentage of change between the two datasets are shown in Figure 3. Only four out of eleven informants, Alice, Pam, Ken and Tom, increased their use of alveolar stops after a year, and most informants show a decrease in such usage. As for the change in the use of glottal stops, these four informants are precisely those with extensive JTE networks.

Figure 4 is a scatter plot that shows a correlation of the change in the percentage use of alveolar stops by American informants between the first and second datasets with their JTE network. The higher JTE network index score informants have, the more they tend to increase their use of alveolar stops. The results of a hierarchical multiple regression of the use of alveolar stops for postvocalic (t) provided in Table 5 reinforce the existence of a correlation. The effect of JTE network strength on the use of alveolar stops.
stops was tested after the effect of social network strengths with NSsE was controlled for. In Model 1, none of the three networks with NSsE is a statistically significant predictor. In Model 2, the JTE network is a significant positive predictor (Beta=.758, \( p = .027 \)) influencing the use of alveolar stops. The adjusted \( R^2 \) value increases from .267 for Model 1 to .389 for Model 2, indicating that Model 2 with the JTE network predicts the variability in the change in the use of alveolar stops better than Model 1 with the three NSsE social network strengths alone.

![Figure 3: The % use of alveolar stops for postvocalic (t) in individual American informants and their JTE networks](image1)

![Figure 4: Correlation between the change in the % use of alveolar stops for postvocalic (t) and JTE networks in American informants](image2)
Table 5: Hierarchical multiple regression for the use of alveolar stops for postvocalic (t) in American informants

<table>
<thead>
<tr>
<th>Model</th>
<th>Adjusted $R^2$; F; Sig.</th>
<th>Predictor Variable</th>
<th>Beta</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Adjusted $R^2$=.267; $F_{3,7}=.297$; $p=.827$</td>
<td>Networks with NSsE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>British network</td>
<td>.300</td>
<td>.431</td>
</tr>
<tr>
<td></td>
<td></td>
<td>North American network</td>
<td>-.118</td>
<td>.808</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Australasian network</td>
<td>-.243</td>
<td>.619</td>
</tr>
<tr>
<td>2</td>
<td>Adjusted $R^2$=.389; $F_{4,6}=1.592$; $p=.143$</td>
<td>JTE network</td>
<td>.758</td>
<td>.027</td>
</tr>
</tbody>
</table>

8.2.3 All informants’ use of glottal stops and alveolar stops for postvocalic (t)

As informants from all three countries showed a similar use of variants for postvocalic (t), it seems worthwhile to combine the data of all informants together and run Pearson correlation and multiple regression analyses to assess whether there are correlations between their linguistic change and the strength of any of their social networks relating to non-NSsE. The analyses, however, showed there were no significant correlations between them.

9 Discussion and Conclusions

American informant data have shown that those who have a high JTE network index score tend to decrease their use of glottal stops and instead increase their use of alveolar stops for postvocalic (t). As the statistical analysis indicates, this linguistic modification by American informants for postvocalic (t) seems to be the result of frequent contact with non-NSsE—particularly JTE—and not with NSsE of different dialects. It is, therefore, safe to emphasise that this finding verifies the hypothesis, at least with regard to American informants. The use of alveolar stops for postvocalic (t) is considered to be a more standard form than the use of glottal stops. The JTE are all non-NSsE. They teach English to English learners at schools and are supposed to use and teach the standard grammatical and phonological forms of English. The JTE are likely to use more alveolar stops and fewer glottal stops for postvocalic (t) when they speak to NSsE as well as their students. The NSsE presumably accommodate in turn the non-NSsE, who are more familiar with the standard pronunciation of English, when they talk with them. After doing so repeatedly throughout their year-long stay in Japan, this modification is retained in conversation with other NSsE. In consequence, the
short-term adjustment might have become a semi-durable feature of the NS’s linguistic behaviour.

The NSsE who participated in the present study all teach English, and most of them are teaching English to Japanese students for the first time. It would not be so surprising, then, if they were to adjust their speech style in classrooms. Intelligibility is the key to promoting communication between NSsE and non-NSsE. Shockey (1984) states that intelligibility is an important factor that encourages accommodation, apart from the desire to conform linguistically to the target variety in order to receive a favourable evaluation from the speakers there. In Hirano’s 2005 study, the network effects due to non-NSsE were also observed in the decrease of /-t,d/ deletion at the word-final consonant cluster among informants of all three nationalities. They all showed either the strong JTE or JEML network effect on the use of /-t,d/ deletion. Reducing /-t,d/ deletion marks a decrease in the use of fast-speech processes that reduce the amount of phonetic information available for processing. The fast-speech phenomena make things more difficult for non-NSs, who do not share the information of the particular linguistic system with NSs (Trudgill 1995: 144). The non-NSsE network effects on both linguistic variables, postvocalic (t) and /-t,d/ deletion, are supposed to promote intelligibility for non-NSsE. Thus, NSsE who have greater strength of non-NSsE networks are more likely to adjust their pronunciation of certain linguistic variables towards a more standardised or familiar verbal style for the non-NSsE than those who have less strength in such networks.

In terms of English and NZ informants, the average percentage use of glottal stops for postvocalic (t) noticeably increased without showing any strong social network effects. A possible explanation might be that their non-NSsE network index scores are, on average, much lower than that of American informants, whereas their NSsE network index scores are, on average, much higher than that of American informants. The fact that the English and NZ informants have much less contact with non-NSsE and much more contact with NSsE might have induced their increased use of a nonstandard form of postvocalic (t). The nonstandard nature of the glottal stop might not be recognised by

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26 See Table A in Appendix for the average scores of NSsE and non-NSsE networks.
NSsE as easily as /-t,d/ deletion in consonant clusters. This issue, however, needs further examination before firm conclusions can be drawn.

This paper attempted, from the point of view of social network effects, to demonstrate dialect contact processes of accommodation in a highly mobile speech community which is in flux and where there is little social stability. The key condition of the dialect contact situation under study is that these NSsE do not have strong, dense, close-knit social networks, but have short- to medium-term contact with speakers of different dialects and varieties of English. The current study explored the linguistic susceptibility of NSsE in the Anglophone community in Japan, and illustrated the impact of social network dynamics on linguistic variation and change. Understanding the social mechanisms involved in linguistic behaviour in the Anglophone community in Japan, however, requires further investigation and more detailed and complex methods of social network analysis.

References


Appendix

Table A: Average index scores of sub-networks according to informant nationality

<table>
<thead>
<tr>
<th>Social networks with NSsE</th>
<th>English</th>
<th>American</th>
<th>NZ</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>British</td>
<td>34.7</td>
<td>8.7</td>
<td>18.5</td>
<td>20.6</td>
</tr>
<tr>
<td>North American</td>
<td>25.2</td>
<td>38.4</td>
<td>31.8</td>
<td>31.8</td>
</tr>
<tr>
<td>Australasian</td>
<td>10.7</td>
<td>2.3</td>
<td>19.1</td>
<td>10.7</td>
</tr>
<tr>
<td>Other NSsE</td>
<td>1.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.4</td>
</tr>
<tr>
<td>(NS English teachers)</td>
<td>(70.6)</td>
<td>(44.3)</td>
<td>(66.5)</td>
<td>60.5</td>
</tr>
<tr>
<td>Subtotal</td>
<td>71.8</td>
<td>49.4</td>
<td>69.4</td>
<td>63.5</td>
</tr>
<tr>
<td>Networks with non-NSsE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JJML</td>
<td>16.2</td>
<td>19.5</td>
<td>14.1</td>
<td>16.6</td>
</tr>
<tr>
<td>JEMEL</td>
<td>13.4</td>
<td>35.0</td>
<td>15.8</td>
<td>21.4</td>
</tr>
<tr>
<td>Other non-NSsE</td>
<td>1.5</td>
<td>0.0</td>
<td>2.3</td>
<td>1.3</td>
</tr>
<tr>
<td>(Japanese teachers of English)</td>
<td>(10.5)</td>
<td>(22.0)</td>
<td>(5.7)</td>
<td>12.7</td>
</tr>
<tr>
<td>Subtotal</td>
<td>31.1</td>
<td>54.5</td>
<td>32.3</td>
<td>39.3</td>
</tr>
<tr>
<td>Total network score</td>
<td>102.8</td>
<td>103.9</td>
<td>101.7</td>
<td>102.8</td>
</tr>
</tbody>
</table>

53
A Discussion of the Structure of Japanese Causatives*

Eiki Ono

Abstract
In this paper, I will discuss the structure of the causative construction in Japanese. Manning et al. (1999) claim in the framework of HPSG that the construction consists of a single clause, presenting two types of evidence: subject honorification and the double-ο constraint. I will show, however, that these phenomena cannot serve as genuine evidence to support their mono-clausal analysis. I will alternatively defend the bi-clausal analysis, originally proposed by Kuroda (1965), Kuno (1973), Shibatani (1973) and others, by providing two pieces of evidence: adverbial modifications and soo s- substitution, which indicate that the causative construction has an embedded clause.

1 Introduction

The causative construction in Japanese has the following properties:

(1) a. Causative predicates are produced by adding the causative morpheme -sase to a verbal root.
   b. The causer NP is marked with the nominative particle ga.
   c. The causee NP is marked with the dative particle ni (or optionally the accusative particle o if the root is intransitive).

(2) Taro-ga Hanako-ni hon-o yom-ase-ta.
    Taro-Nom Hanako-Dat book-Acc read-Cause-Past
    ‘Taro made/had Hanako read a book’.

In the typical example in (2), it is shown that the causative predicate is yom-ase-ta (the causative morpheme -sase is here changed into -ase by the consonant deletion after the consonant root), and that the causer is ga-marked NP Taro and the causee is ni-marked NP Hanako.

It has been generally assumed in generative grammar that the structure of Japanese causatives

* I would like to express my sincere gratitude to Ken-ichi Takami for his helpful comments, suggestions and constant support, and to Arthur Rutson-Griffiths for reading an earlier version of this paper and for providing me with informative and invaluable comments. Special thanks also go to anonymous reviewers, whose comments were an enormous help to me.
is “bi-clausal” (i.e. consisting of two clauses) (see Kuroda, 1965; Kuno, 1973; Harada, 1973; Shibatani, 1973; among others). This assumption analyses the syntactic structure of (2) as in the following:

(3) \[ [S \text{Taro-ga Hanako}-ni [S PRO}_i \text{ hon-o yom] sase-ta}. \]

In the syntactic representation above, the causative sentence is described as having two S nodes; the higher is the matrix clause and the lower is the embedded clause. The subject of the embedded clause is a PRO whose referent is controlled by the dative object in the matrix clause.

Manning et al. (1999), who discuss Japanese causatives in the framework of Head-Driven Phrase Structure Grammar (abbreviated as HPSG henceforth: see Pollard and Sag, 1987; 1994), argue against this bi-clausal view in mainstream generative grammar and they present the following two assertions:

(4) a. The Japanese causative construction is “mono-clausal” (i.e. consisting of a single clause) and the predicate is a single verbal form with the complex morphological structure.

b. The complex construal of the causative construction can be explained by means of hierarchical lexical argument structures.

In this paper, I will discuss the structure of Japanese causatives and draw the conclusion that it is bi-clausal, contrary to Manning et al.’s assumption. First, in Section 2, I will overview Manning et al.’s mono-clausal analysis. Next, in Section 3, I will point out that their
mono-clausal analysis is based on untrustworthy evidence. Finally, in Section 4, I will present two types of evidence to indicate that the structure of Japanese causatives is bi-clausal.

2 Manning et al. (1999)

2.1 Evidence of Mono-clausality

In most work in generative grammar, as already seen in (3), the causative morpheme -sase is regarded as a kind of independent verb. Manning et al. (1999) argue, however, that it must be treated just as an affix; in other words, the causative complex predicate (i.e. V-sase) is assumed to be a single word, whose assumption leads to the mono-clausality of the Japanese causative construction. To enhance this argument, Manning et al. present various types of evidence, including allomorphy, reduplication, subject honorification, the double-o constraint, nominalization, question-answer pairs, negative polarity items and others (see Manning et al., 1999: Section 2, 40-53). Since the present paper focuses on the structure of the construction in question, let us here take two pieces of syntactic evidence concerning “subject honorification” and “double-o constraint”, which both seem supportive of the mono-clausal analysis.¹

2.1.1 Subject Honorification

In Japanese, when the subject referent is a socially higher-ranked person than the speaker, the verb bears the subject honorification form o-V-ninar (see Harada, 1976). For instance, the verb yom ‘read’ becomes the sequence o-yomi ninar.

Manning et al. adopt subject honorification as a piece of evidence to support their assumption that the causative predicate is a single word. They note that a causative verb as a whole can become the subject honorification form (i.e. o-V-sase-ninar), whereas the causative

¹ As I will take up just two out of pieces of evidence offered by Manning et al. (1999), I must acknowledge that the nature of the following discussion is somewhat limited. But the criticisms in Section 3 explicitly reveal that Manning et al.’s arguments on the two pieces of evidence are empirically problematic and that their attempt to generalise from these two facts is indefensible.
morpheme -sase cannot by itself (i.e. *o-sase-ninar). Observe the following examples, taken from Manning et al. (1999: 42) (“SH” in the gloss stands for “subject honorification”, which corresponds to the honorific predicate form o-V-ninar):

   Prof. Tanaka-Nom Suzuki-Dat book-Acc read-Cause-SH-Past
   ‘Prof. Tanaka made/had Suzuki read a book’.

   Prof. Tanaka-Nom Suzuki-Dat book-Acc read Cause-SH-Past
   ‘Prof. Tanaka made/had Suzuki read a book’.

According to Manning et al., the acceptability of (5a) shows that the causative predicate V-sase functions as a single verb; on the other hand, the unacceptability of (5b) indicates that the causative morpheme -sase cannot be treated as an independent verb. For this reason, Manning et al. argue against the bi-clausal view, and claim that a causative predicate is a single verb with the complex morphological structure and that the causative construction is mono-clausal.

2.1.2 The Double-o Constraint

The double-o constraint, originally hypothesised by Harada (1973: 138), has been widely accepted in Japanese syntax. This constraint stipulates, in brief, that a clause is prevented from having two NPs marked with the accusative particle o. With this constraint in mind, let us take the double object construction for example (Manning et al., 1999: 43):

(6) Taroo-ga Ziroo-*o/ni e-o age-ta.
   Taro-Nom Ziro-Acc/Dat picture-Acc give-Past
   ‘Taro gave a picture to Ziro’.

In (6), Manning et al. consider that the indirect object Ziroo cannot be marked with the accusative particle o as it violates the double-o constraint.
Manning et al. point out that the case marking of the double object construction, as observed in (6), parallels that of the causative construction, as illustrated in the contrasting pair of examples in (7a, b) (Manning et al., 1999: 43):

(7) a. Taroo-ga Ziroo-ni Kazuo-o home-sase-ta.
    Taro-Nom Ziro-Dat Kazuo-Acc praise-Cause-Past
    ‘Taro made/had Ziro praise Kazuo’.

    Taro-Nom Ziro-Acc Kazuo-Acc praise-Cause-Past
    ‘Taro made/had Ziro praise Kazuo’.

It is observed in (7a, b) that the causee Ziroo can be marked with the dative particle ni, but not with the accusative particle o. According to Manning et al., if the causative construction is mono-clausal, the unacceptability of (7b) can be explained by the double-o constraint straightforwardly; on the other hand, if the structure is bi-clausal and each clause has an o-marked NP, the sentence in (7b) is wrongly judged to be acceptable, resulting in no violation of the double-o constraint (since the double-o constraint is effective only within a single clause). The difference in clausality is shown in (8a, b):

(8) a. [s Taroo-ga Ziroo-o Kazuo-o home-sase-ta] (mono-clausal)
    *double-o

b. [s Taroo-ga Ziroo-o [s Kazuo-o home] sase-ta] (bi-clausal)
    single-o single-o

From the above discussion based on the double-o constraint, Manning et al. argue that the bi-clausal analysis is on the wrong track, and conclude that the causative construction is mono-clausal.

2.2 An Analysis in HPSG

So far, we have seen the mono-clausal assumption as presented by Manning et al (1999). On the basis of this assumption, they present a further analysis of the Japanese causative
construction within the framework of HPSG. In this subsection, we will overview their HPSG analysis.

2.2.1 The Syntactic Structure

Manning et al. suggest that the syntactic structure of (9) should be (10) (Manning et al., 1999: 61):

(9) Taro-ga Hanako-ni hon-o kaw-ase-ta.
    Taro-Nom Hanako-Dat book.Acc buy-Cause-Past
    ‘Taro made/had Hanako buy a book’.

(10)

In the structure above, the causative predicate *kaw-ase-ta* ‘caused to buy’ requires three arguments: the nominative NP *Taro*, the dative NP *Hanako* and the accusative NP *hon* ‘book’.
The crucial point to be noted here is that the predicate is treated as a single verb. Manning et al., regarding the causative predicate as a single verbal form, argue that the causative morpheme -\textit{sase} should not be treated as a higher verb as it is in the bi-clausal analysis (see the structure in (3)). In their syntactic structure in (10), therefore, the causative predicate as a whole is expressed as a simple three-argument verb.

2.2.2 The Hierarchical Lexical Argument Structure

Since the causative predicate is a combination of two verbal constituents (V and -\textit{sase}), in one causative sentence the predicate produces two verbal events: a lexical verbal event and a causative verbal event. Supposing that the causative predicate is a single verb and that the whole sentence is mono-clausal, how can this supposition capture the complex verbal events in a causative sentence? Manning et al. answer this question by stating, “The construal phenomena that seem to motivate an analysis of Japanese causatives in terms of embedded constituent structures can be explained in terms of hierarchical lexical argument structures (Manning et al., 1999: 40 (the underline is mine))”.

To understand this notion of hierarchical lexical argument structure, let us here observe the case of the causative predicate \textit{kaw-sase} ‘cause to buy’ in (9) for example. The following feature structure is taken from Manning et al. (1999: 58):
In the feature structure above, we can see that the ARG(UMENT)-ST(RUCTURE) members are linked to the elements shown by the 1, 2 and 3 notations; the first member is linked to the SUBJ(ECT) element and the second and third members to the COMP(LEMENT)S elements, respectively. Note here that these elements are hierarchically arranged in the ARG-ST list. This hierarchy is reflected in the semantic CONT(ENT), where two verbal relations of cause-rel(ation) and buy-rel are contained in a hierarchical way; that is, buy-rel is subsumed into cause-rel. Furthermore, each verbal relation contains the information of semantic roles: ACTOR and UNDERGOER. It is seen here that the UNDERGOER in cause-rel also functions as the ACTOR in buy-rel. This complex semantic relation makes it possible that a causative sentence bears the complex construal.

There is one more thing to be added here. Manning et al. consider that the operation called “compression” is required in the relation between the ARG-ST features and the VALENCE features. The function of the compression is precisely explained by the following quotation (Manning et al., 1999: 57):

(12) The function compression flattens out embedded lists in the ARG-ST list, promoting their members to be on a par with the other list members and deleting embedded PROs in the process.
By the compression, the hierarchical ARG-ST is changed into a simple one. This process is shown as follows:

\[
\begin{align*}
\text{(13) } a. & \quad \langle \overline{1}_i, \overline{2}_j, \text{PRO} \rangle, \overline{3}_k \rangle \\
\text{b. } & \quad \langle \overline{1}_i, \overline{2}_j, \overline{3}_k \rangle \\
\text{compression}
\end{align*}
\]

Owing to the compression, the complex causative predicate is syntactically treated as a simple three-argument verb, so that the causative construction is structurally mono-clausal.

3 Criticisms for Mono-clausality

We have seen in the previous section the mono-clausal analysis by Manning et al. (1999) based on two pieces of syntactic evidence of subject honorification and the double-\(o\) constraint, but there is doubt that their explanation is successful. This section reexamines their arguments on these two phenomena and shows that their mono-clausal analysis is dependent on unreliable evidence.

3.1 Subject Honorification

As seen in 2.1.1, Manning et al. present a subject honorification example in (5a) to argue that the causative predicate is a single verb ((5a) is repeated here as (14)):

\[
\text{(14)} \quad \text{Tanaka sensei-ga } \text{Suzuki-ni } \text{hon-o o-yom-ase-ninat-ta.}
\]

Prof. Tanaka-Nom Suzuki-Dat book-Acc read-Cause-SH-Past
‘Prof. Tanaka made/had Suzuki read a book’.

Manning et al. state that the subject honorific form \(o-V-ninar\) can be applied to the sequence \(V-sase\), and they claim that this phenomenon can be a piece of evidence for their mono-clausal analysis.

However, my survey suggests that the example in (14) is judged to be totally unacceptable.
asked 32 Japanese native speakers (including myself) to judge the acceptability of (14). The results were all negative. The direct cause of being judged unacceptable is that the honorific prefix o- is added to the verb yom ‘read’; the honorific predicate o-yom wrongly conveys the speaker’s respectful feelings to Suzuki, not to Tanaka sensei, which means that a subject referent for the verb yom is Suzuki. In the bi-clausal analysis, this fact can be simply explained because Suzuki can be treated as the embedded subject. Therefore, it can be concluded that subject honorification is supporting evidence for the bi-clausal analysis rather than the mono-clausal one.

Examples similar to (14) are given below:

    Prof. Tanaka-Nom Suzuki-Dat sushi-Acc eat-Cause-SH-Past
    ‘Prof. Tanaka made/had Suzuki eat sushi’.
    Prof. Tanaka-Nom Suzuki-Dat essay-Acc write-Cause-SH-Past
    ‘Prof. Tanaka made/had Suzuki write an essay’.

The examples in (15a, b), whose sentence patterns are exactly the same as (14), are judged to be totally unacceptable because the honorific target for the verb o-tabe or o-kak is not Tanaka sensei but Suzuki. These data also show that subject honorification cannot be evidence to support Manning et al.‘s mono-clausal analysis, and that it serves instead as evidence for the bi-clausal analysis.

3.2 The Double-o Constraint

As already seen in 2.2.2, Manning et al. explain that the double-o constraint prevents the causative construction from having two o-marked NPs ((7b) is repeated here as (16)):

(16) *Taroo-ga Ziroo-o Kazuo-o home-sase-ta.
    Taro-Nom Ziro-Accet Kazuo-Acc praise-Cause-Past
    ‘Taro made/had Ziro praise Kazuo’.
Noting that the double-o constraint applies only within a single clause, Manning et al. claim that the unacceptability of (16) shows that the causative construction is mono-clausal.

However, whether the double-o constraint is helpful or not is open to discussion. For example, although the causative sentence in (17a) is unacceptable just as Manning et al. predict, the ones in (17b, c), where the two o-marked NPs are not adjacent, are becoming more acceptable (see Tsujimura, 2007: 331):

    Taro-Nom Ziro-Acc park-Acc walk-Cause-Past
    ‘Taro made/had Ziro walk throughout the park’.

b. ??Taroo-ga Ziroo-o mayonaka-ni koon-o aruk-ase-ta.
    Taro-Nom Ziro-Acc midnight-at park-Acc walk-Cause-Past
    ‘Taro made/had Ziro walk throughout the park at midnight’.

c. (?)Taroo-ga Ziroo-o mayonaka-ni hitoride koon-o aruk-ase-ta.
    Taro-Nom Ziro-Acc midnight-at alone park-Acc walk-Cause-Past
    ‘Taro made/had Ziro walk throughout the park alone at midnight’.

The different degree of acceptability in (17a-c) shows that the more elements intervene between the two o-marked NPs, the more the sentence acceptability improves, which means that the double-o constraint is less effective unless two o-marked NPs are adjacent. Therefore, it is concluded that there remains doubt as to whether the double-o constraint can be genuine evidence favourable to the mono-clausal analysis.

4 Evidence of Bi-clausality

In the previous section, we have seen that subject honorification and the double-o constraint cannot serve as evidence to support Manning et al.’s (1999) mono-clausal analysis. In this section, in turn, it will be pointed out that there are two types of positive evidence to show that the causative construction is bi-clausal.
4.1 Adverbial Modifications

The interpretation of adverbial modifications can be a piece of evidence for the bi-clausal analysis (see Shibatani, 1976). For instance, consider the following example, taken from Shibatani (1976: 245) (the English translations in (19i, ii) are taken from Tsujimura, 2007: 295):

(19) Taroo-wa Hanako-o heya-ni damatte hair-ase-ta.
    Taro-Top Hanako-Acc room-into silently enter-Cause-Past
(i) ‘Taro made Hanako enter the room without her speaking’.
(ii) ‘Taro silently made Hanako enter the room’.

As the English translations in (i) and (ii) show, the causative sentence in (19) can have two interpretations. The reason why this ambiguity occurs can be accounted for by the bi-clausal analysis, in which the embedded verb (i.e. V) and the matrix verb (i.e. -sase) are separately treated; the interpretation of (i) is available when the adverb damatte ‘silently’ modifies the embedded verb hair ‘enter’, whereas the one of (ii) is available when the adverb modifies the matrix verb -sase ‘cause’. If it is assumed that the causative construction consists of a single clause and that its predicate V-sase is a single verb on the whole, the ambiguity of adverbial modifications cannot be explained straightforwardly.

According to Manning et al. (1999: 48), however, there are cases where certain adverb positions bring unambiguous interpretations. For example, consider the following sentences (Miyagawa, 1980):

(20) a. Taroo-ga damatte Hanako-o heya-ni hair-ase-ta.
    Taro-Nom silently Hanako-Acc room-into enter-Cause-Past
    ‘Taro made Hanako enter the room silently’.
b. Damatte Taroo-ga Hanako-o heya-ni hair-ase-ta.
    silently Taro-Nom Hanako-Acc room-into enter-Cause-Past
    ‘Taro made Hanako enter the room silently’.
What the adverb *damatte* in (20a, b) modifies is the causative verb -*sase* only. Unlike the case of (19), as *damatte* cannot modify the lexical verb *hair*, the interpretation ‘Hanako entered the room without her speaking’ is unobtainable. These facts observed by Manning et al. may seem to cast doubt as to whether adverbial modifications can serve as a piece of evidence for the bi-clausal status.

However, the validity of adverbial modifications as evidence is still defensible because the reason why *damatte* in (20a, b) preferentially modifies the causation event is concerned with other factors other than the clausality. In (20a), when the sentence is uttered with normal intonation, since there is considered to be a semantic association between the manner adverb *damatte* and the subject *Taro*, *damatte* preferentially modifies Taro’s causation event. But exceptionally, if the speaker intentionally puts a pause between *Taro-ga* and *damatte* and makes clear the adjacent relation of *damatte* and *Hanako-o*, *damatte* can modify Hanako’s action of entering the room. In (20b), on the other hand, *damatte* is interpreted to modify Taro’s causative action only. The reason is considered to be that *damatte* is adjacent only to *Taro* but not to *Hanako*. For this reason, Taro’s causative action takes priority over Hanako’s entering action.

### 4.2 *Soo S*- Substitution

The bi-clausality of the causative construction can be confirmed by the *soo s*- ‘do so’ substitution test, which is used here on the premise that the expression *soo s*- can be substituted for a single VP constituent (see Shibatani, 1973). Consider the following examples:

(21) A: Taro-wa Ziroo-ni hon-o yom-ase-ta.
   Taro-Top Ziro-Dat book-Acc read-Cause-Past
   ‘Taro made/had Ziro read a book’.

   B1: Hanako-mo Ziroo-ni *soo s*-ase-ta.
   Hanako-also Ziro-Dat *soo s*-do-Cause-Past
   ‘Hanako made/had Ziro do so, too’.

---

2 That is, contrary to Manning et al.’s prediction, (20a) is an ambiguous sentence.
    Hanako-also Ziro-Dat so do-Past
    ‘Hanako did so to Ziro, too’.

B3:    Hanako-mo soo si-ta.
    Hanako-also so do-Past
    ‘Hanako did so, too’.

In (21B1), as the sequence *hon-o yom* ‘read a book’ in (21A) can be substituted for the pro-form *soo s-*, it follows that it is a VP. The unacceptability of (21B2) indicates that the string *hon-o yom-ase* ‘cause to read a book’ cannot be substituted for *soo s-*, and consequently it is not a VP. In (21B3), *Ziroo-ni hon-o yom-ase* ‘make/have Ziro read a book’ can be substituted for *soo s-*, which means that the expression as a whole constitutes a VP. These results are summarised in (22a-c):

(22)  a. VP: *hon-o yom
     b. *VP: *hon-o yom-ase
     c. VP: Ziroo-ni hon-o yom-ase

Considering the observation results in (22a-c), it seems more reasonable to hypothesise the bi-clausal structure in (23) than the mono-clausal structure in (10):

(23)    S
     / \  
    /   \  
   NP   VP
  /     /  
Hanako-mo NP S
     / \  
    /   \  
   Ziroo-ni NP VP
          / \  
         /   \  
        PRO\  NP V
     /     /  
    hon-o yom  sase-ta  

67
The bi-clausal structure in (23) can explain the acceptability of (21B1-3) straightforwardly. The reason why the example in (21B1) or (21B3) is acceptable is that the structure contains two VPs: hon-o yom in the embedded sentence and Ziroo-ni hon-o yom-ase-ta in the matrix sentence. That is, these VPs can be substituted for the VP pro-form soo s- (or soo si-ta ‘did so’). On the other hand, the reason for the unacceptability of (21B2) is that hon-o yom-ase does not constitute a VP and is not suitable for the soo s- substitution. If the causative predicate is assumed to be a single word, it is impossible to give a syntactic account for the acceptability of (21B1) and the unacceptability of (21B2).

Before closing this subsection, we must comment on the validity of the soo s- substitution. Manning et al. (1999: 47) are sceptical of using soo s- as a pro-VP, noting that “It is not the case that soo s- always takes a VP antecedent, since the antecedent can be an event expressed by two conjoined sentences in a previous discourse”. Their example is as follows:

Taro-Top Yamada-teacher-Dat meet-Purp go-Past
‘Taro went to see Prof. Yamada’.
Suisenzyoo-o kaite morau yoo tanon-da.
recommendation-Acc write receive Comp ask-Past
‘He asked for a letter of recommendation to be written for him’.

B: Hanako-mo soo si-ta.
Hanako-also so do-Past
‘Hanako did so, too’.

The antecedent of soo s- in (24B) is normally interpreted just as the second VP in (24A): suisenzyoo-o kaite morau yoo tanom ‘ask for a letter of recommendation to be written’. In addition, as Manning et al. point out, this soo s- can also refer back to an event expressed by two conjoined sentences in (24A). The latter possibility, however, does not lead to the conclusion that soo s- is not a pro-VP. This is because what soo s- in (24B) refers to in the latter reading is a combination of the VPs in (24A): Yamada-sensei-ni ai-ni it-te suisenzyoo-o kaite morau yoo tanom ‘go to see Prof. Yamada and ask for a letter of recommendation to be written’; that is, the soo s- expression is substituted for a complex VP in this case. Therefore,
to use *soo s-* as a pro-VP must be non-problematic.³

5 Conclusion

In this paper, I have discussed the structure of Japanese causatives. Manning et al. (1999) claim that the causative construction is syntactically mono-clausal and that the complex construal of the construction can be captured in terms of hierarchical lexical argument structures. However, I have pointed out that their mono-clausal analysis is based on unreliable evidence, and instead I have presented two pieces of syntactic evidence to support the bi-clausal analysis. Throughout the paper, I have made it clear that the structure of Japanese causatives is not mono-clausal but bi-clausal.

References


³ It should be noted in my examples in (21) that the possibility that such pragmatic ambiguity occurs is utterly excluded.
A cross-cultural investigation of the macrostructure of Japanese and English Ph.D. theses in the field of literature

Masumi Ono1

Abstract

This paper investigates the macrostructure of literature Ph.D. theses written by native speakers of Japanese or English, and aims to obtain an insight into the organisational features of this genre. Ninety-nine Ph.D. theses were collected from three Japanese and three British universities. The macrostructure of the theses was analysed from multiple aspects, and cross-cultural and intra-cultural comparisons were made. The results showed that the Japanese and English theses differed considerably in the occurrences of acknowledgements and abstracts, the amount of space allocated to introductory chapters, and the number of chapters included in the theses. The thesis macrostructures examined in this study were categorised as topic-based (Paltridge, 2002; Paltridge & Starfield, 2007) but displayed a wide variation in the overall structure of the theses and constituent elements. Varying patterns of the thesis macrostructure highlighted the peculiarity of the given genre and discipline. Culturally different thesis writing conventions are discussed.

1 Introduction

Writing a Ph.D. thesis2 is a challenging requirement for postgraduate students, and the importance, difficulty and complexity of dealing with this genre have been recognised (Bunton, 2002; Paltridge, 2002; Paltridge & Starfield, 2007; Starfield & Ravelli, 2006). However, insufficient attention has been paid to Ph.D. theses, partly because of their great length (Dudley-Evans, 1999), compared to research articles, which are relatively short and more established as a research target in genre studies. Different aspects of Ph.D. theses have been studied, such as the macrostructure (Paltridge, 2002; Paltridge & Starfield, 2007; Ridley, 2000; Starfield & Ravelli, 2006), introductions (Bunton, 2002; Soler-Monreal, Carbonell-Olivares, & Gil-Salom, 2011), literature review (Kwan, 2006; Ridley, 2000) and conclusions (Bunton, 2005). The whole text of Ph.D. theses has also been examined in

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2 Following Bunton (2002: 75) who focuses on the academic context in the UK, Hong Kong and Australian universities, the term ‘thesis’ in this study is defined as follows: “a ‘thesis’ is written for the research degrees of Ph.D. and M.Phil., while a much shorter ‘dissertation’ is one of the final requirements for a taught Master’s degree.”
terms of citation practices (Thompson, 2000, 2001) and generic structure called ‘moves’ (Bunton, 1999; Parry, 1998).

The macrostructure of theses in different disciplines has shown remarkably different conventions; four main types of theses are categorised as follows (Paltridge, 2002; Paltridge & Starfield, 2007): (a) traditional-simple, (b) traditional-complex, (c) topic-based and (d) compilation of research articles. Among the four types, the most common macrostructure of humanities Ph.D. theses is topic-based. In this form, a thesis normally begins with an introductory chapter followed by a series of theme-based chapters, and ends with a concluding chapter. Each discipline tends to have a traditionally favoured thesis macrostructure that can be shared by different disciplines. In addition, theses produced within the same discipline do not always have the same macrostructure since sub-disciplines or research subjects may require conventional macrostructures (Paltridge, 2002). Therefore, the diversity in the thesis macrostructure seems to have to do with issues regarding disciplinarity and interdisciplinarity (Turner, 2003).

In recent years, rhetorical conventions in Ph.D. theses in a range of sciences and social sciences have customarily been studied (Bunton, 2002, 2005; Gil-Salom, Soler-Monreal, & Carbonell-Olivares, 2008; Soler-Monreal et al., 2011). However, humanities have been neglected in genre research and only a few studies have been conducted hitherto. For instance, Ph.D. theses in history and sociology have been investigated with regard to the overall organisation and linguistic features in introductions (Starfield & Ravelli, 2006). More specifically, thesis titles, chapter headings and the use of first person pronouns in the theses have been analysed in terms of use and meaning. The theses that demonstrated the newly emerging use of terms and phrases were categorised as new humanities. This finding

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indicates the evolution of humanities Ph.D. theses within the same discipline. Furthermore, Ph.D. theses in a newly emerging area have also been closely examined in terms of the macrostructure (Paltridge, Starfield, Ravelli, Tuckwell, & Nicholson, 2011). The study centred on theses in the field of visual and performing arts, where an artwork and a written text on the artwork are related as a Ph.D. project, and the two components are jointly taken into consideration in evaluating the Ph.D. theses. The findings showed a range of potentially acceptable thesis macrostructures within the same discipline. The wide variation in the organisational structure and its components seems to be characteristic of the theses in the visual and performing arts. Despite such investigations on Ph.D. theses, Ph.D. theses in the field of literature, in particular, have not been sufficiently studied with regard to the organisational structure.

In addition, cross-cultural analysis has been conducted in genre-based studies. Research article introductions, for instance, have been investigated through cross-cultural comparisons, such as, English and Chinese (Loi, 2010; Taylor & Tingguang, 1991), English and Hungarian (Árvay & Tankó, 2004), English and Polish (Duszak, 1994; Golebiowski, 1999), and Brazilian Portuguese and English (Hirano, 2009). Similarly, research article abstracts have been examined cross-culturally, involving various languages, such as English and French (Bonn & Swales, 2007), English and Swedish (Melander, Swales & Fredrickson, 1998), and English and Spanish (Martín, 2003). Cross-cultural analysis has also involved the whole text of research articles in terms of causal metatext (English and Spanish: Moreno, 1997) and metaphor (English, French and Spanish: Salager-Meyer, 1990). It seems obvious that most previous work has tended to focus on English texts and that little attention has been given to Japanese discourse. Although cross-cultural studies of academic genres/discourse exist, very few cross-cultural comparisons of Japanese and English discourse have been made regarding generic structure (cf., Okamura, 2003). In English as a Foreign Language (EFL) contexts, like Japan, the importance of English has been emphasised in education. In fact, some departments or universities require undergraduate and postgraduate students to write assignments or dissertations/theses in English. Hence, it is worth investigating the generic features of Japanese and English Ph.D. theses in order to gain insights into the organisational features of this genre from cross-cultural perspectives.
This paper aims to investigate the macrostructure of Japanese and English Ph.D. theses in the field of literature by cross-cultural and intra-cultural comparisons. A significant contribution to the field should be obtained by addressing the following research question: Are there any differences between Japanese and English Ph.D. theses in the field of literature in terms of the macrostructure?

2 The framework and methods

The framework of this study requires two degrees of comparison, namely, (i) cross-cultural comparisons and (ii) intra-cultural (national) comparisons (Figure 1). At a cross-cultural level, Ph.D. theses from three Japanese and three British universities are compared. The intra-cultural level, on the other hand, is used to seek similarities and differences in Ph.D. thesis macrostructures within the Japanese and British universities. Individual differences within the same institution are also considered since it is assumed that not all theses, even in the same discipline, always have shared organisational features.

![Diagram showing cross-cultural and intra-cultural comparisons between British and Japanese universities]

Figure 1: The framework of this study

*Note.* UEA stands for the University of East Anglia.

The total number of 99 Ph.D. theses, consisting of 51 Japanese Ph.D. theses written by native speakers of Japanese and 48 English Ph.D. theses written by native speakers of
English\textsuperscript{4}, were collected from three Japanese and three British institutions. The target theses were submitted between 2000 and 2008. The departments from which the theses were selected shared similar features. All six universities had a literature department in which a wide range of literature studies were available; not only national literature (i.e., Japanese or English literature) but also literature from other countries or comparative literature were studied. Furthermore, the three prestigious British universities were comparable in terms of the size of departments, the foundation period of the universities, and the academic rank of the departments as evaluated by the nationally established ranking system in the UK, Research Assessment Exercise (RAE). The three Japanese universities were also similar in that they were established as national universities and their academic level was regarded as high.

In the selection of the Ph.D. theses, only prose-centred literature theses were chosen. These covered fiction, non-fiction and short stories. Theses that concentrated on poetry/poets, films, theatre or creative writing were excluded from this study since they required considerably different approaches and structure from prose-centred theses. The selected 99 literature theses were divided into three types: (a) single-author focus (Japanese 29; English 19), (b) comparative focus (Japanese 0; English 12) and (c) literary-genre focus (Japanese 22; English 17). Single-author focus theses deal with one particular author as a research subject, whilst comparative focus theses target more than one author. Literary-genre focus theses concentrate on a particular subject or theme, such as silence or laughter in literature.

The overall organisation of the theses was analysed in the following respects. First, the occurrence of acknowledgements, abstracts, tables of contents, introductory chapters and concluding chapters were examined by Chi-square tests. Second, the number of chapters in the theses and the proportion of space in the theses allocated to introductory and concluding chapters were analysed by using Mann-Whitney tests and Kruskal Wallis tests. Third, variation in the thesis macrostructure was verified by Chi-square tests.

\section*{3 Results}

\textsuperscript{4} All the English theses were written by British students.
3.1 Acknowledgements, abstracts and tables of contents

The results of Chi-square tests concerning the occurrence of acknowledgements indicated significant differences between the Japanese and English groups ($p < .001$), among the Japanese theses ($p = .022$) and among the English ones ($p = .021$) (Table 1). In the Japanese group, only one Chiba thesis contained acknowledgements. Among the English theses, on the other hand, all the Warwick theses had acknowledgements whereas the Essex and UEA theses contained them frequently (Essex: 93.3%; UEA: 71.4%). All the English acknowledgements were located before the first chapter, which seems to be a conventional feature of the English theses. The results regarding the occurrence of acknowledgements indicated cross-cultural differences (Japanese: 2.0%; English: 93.8%) as well as intra-cultural differences among the Japanese theses and among the English ones.

The occurrence of abstracts in the theses also showed cross-cultural differences between the Japanese and English groups ($p < .001$) (Table 1). The majority of the English theses had abstracts (91.7%) whilst only one Tsukuba thesis contained an abstract among the Japanese group (2.0%). Among the English theses, all the Essex and Warwick theses contained abstracts while only 42.9% of the UEA theses had them. This result leads us to consider intra-cultural differences in the English theses ($p < .001$). The Japanese theses, on the contrary, indicated intra-cultural similarities ($p = .511$) in that abstracts of the theses were not, in most cases, included in the Japanese theses.

As for tables of contents, the results clearly showed that all the Japanese and English theses contained them (Table 1). Including a table of contents in a Ph.D. thesis seems universal, at least in the present corpus. The location of tables of contents was also found to be similar among the Japanese and English groups. They were usually located in between the title page and the first chapter. Tables of contents in the majority of these, as one might expect, included chapter titles and their page numbers as well as section titles and the corresponding page numbers if sections were present in the theses.
# Table 1: The occurrence of acknowledgements, abstracts, tables of contents, introductory and concluding chapters

<table>
<thead>
<tr>
<th>Country</th>
<th>University (n)</th>
<th>Acknowledgements (%)</th>
<th>Abstract (%)</th>
<th>Table of contents (%)</th>
<th>Introductory chapter (%)</th>
<th>Concluding chapter (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>Tsukuba (23)</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Tokyo (22)</td>
<td>0</td>
<td>4.5</td>
<td>100</td>
<td>95.5</td>
<td>63.6</td>
</tr>
<tr>
<td></td>
<td>Chiba (6)</td>
<td>16.7</td>
<td>0</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Total (51)</td>
<td>2.0</td>
<td>2.0</td>
<td>100</td>
<td>98.0</td>
<td>84.3</td>
</tr>
<tr>
<td>UK</td>
<td>Essex (15)</td>
<td>93.3</td>
<td>100</td>
<td>100</td>
<td>93.3</td>
<td>80.0</td>
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<td></td>
<td>Warwick (26)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>96.2</td>
<td>88.5</td>
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<td></td>
<td>UEA (7)</td>
<td>71.4</td>
<td>42.9</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Total (48)</td>
<td>93.8</td>
<td>92.3</td>
<td>100</td>
<td>95.8</td>
<td>87.5</td>
</tr>
</tbody>
</table>

**Chi-square Tests**

- J vs. E: $p < .001^*$
- J: $p = .022^*$
- E: $p = .021^*$
- J: $p = .511$
- E: $p < .001^*$
- N/A
- J vs. E: $p = .610$
- J: $p = .511$
- E: $p = .761$
- J: $p = .002^*$
- E: $p = .408$

**Findings**

- J & E: intra-cultural differences
- J: cross-cultural differences
- E: cross-cultural similarities
- universal
- J & E: intra-cultural similarities
- J: cross-cultural similarities
- E: intra-cultural similarities
- J: intra-cultural differences
- E: intra-cultural similarities

**Note.** $^*p < .05$.

J stands for Japanese and E stands for English.
However, a few theses had a relatively simple organisational structure of tables of contents in which chapter numbers were merely mentioned without any specific chapter headings. Some theses did not specify page numbers of sections, either, which is not reader-friendly and may not be effective for guiding thesis readers.

3.2 Introductory and concluding chapters

The first and final chapters of the literature theses were not always called *Introduction* and *Conclusion*, respectively. In investigating the occurrence of introductory and concluding chapters at the level of macrostructure, only those chapters whose titles explicitly referred to their status as introductions (e.g., introduction, introductory chapter) or conclusions (e.g., conclusions, concluding remarks, concluding chapter) were taken into account at this stage. The examination of the first chapters in theses in terms of generic structure, regardless of their titles, is reported elsewhere (Ono, 2011).

The results showed that the majority of Japanese and English theses contained introductory chapters (Japanese: 98.0%; English: 96.2%), which indicates cross-cultural similarities in that introductory chapters were a conventionalised organisational feature of Ph.D. theses in both groups; therefore, no significant difference was found between the two groups ($p = .610$) in terms of the occurrence of introductory chapters. Intra-cultural similarities were also observed among the Japanese theses ($p = .511$) and among the English ones ($p = .761$). In other words, the literature Ph.D. theses tended to have an introductory chapter as the first chapter of the theses. This finding is consistent with Paltridge (2002) and Paltridge and Starfield (2007) in that humanities theses contained an introduction before the main content chapters. If theses did not have an
introductory chapter, a preface was occasionally present. In cases when both a preface and an introductory chapter co-existed in the same thesis, a preface came first followed by the introductory chapter.

Concluding chapters, on the other hand, were not always found in the Japanese and English theses although the majority of the theses contained them (Japanese: 84.3%; English: 87.5%). No significant difference was found between the Japanese and English groups ($p = .776$). Particular attention should be drawn to intra-cultural differences among the Japanese theses ($p = .002$). The Tokyo theses had a different tendency from the Tsukuba and Chiba theses in that only 63.6% of the Tokyo theses had concluding chapters whereas all the Tsukuba and Chiba theses contained them. The English theses, on the contrary, did not display intra-cultural differences ($p = .408$). Thus, the results concerning the occurrence of concluding chapters highlight cross-cultural similarities between the Japanese and English groups, intra-cultural similarities among the English theses, and intra-cultural differences among the Japanese theses. In cases when theses did not have a concluding chapter as an individual chapter, concluding remarks tended to be included in the final chapter. Alternatively, an afterword was occasionally present after the final chapter.

It is worth looking at the introductory and concluding chapters together from an integrated point of view. Interestingly, all the Tsukuba, Chiba and UEA theses had both introductory and concluding chapters whilst the Tokyo (63.6%), Essex (80.3%) and Warwick (84.6%) theses frequently but not always contained both chapters. Although this implies institutional differences, the occurrence of introductory and concluding chapters may equally depend on the subject matter, the thesis writer’s intention or their supervisors’ advice. This cannot be determined unless the thesis writers are interviewed,
which was not done in the present study.

3.3 The number of chapters

It is certain that all Ph.D. theses have a main body that plays a central role in presenting the main content and argument of the theses, regardless of whether they have an introductory chapter or a concluding chapter. The number of chapters located in between introductory chapters and concluding chapters was counted in each of the theses. For those theses that did not have introductory or concluding chapters, all individual chapters were counted. Table 2 describes the features of the number of chapters in the Japanese and English theses.

<table>
<thead>
<tr>
<th>Country</th>
<th>University</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>Tsukuba</td>
<td>23</td>
<td>6.91</td>
<td>1.857</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Tokyo</td>
<td>22</td>
<td>6.73</td>
<td>2.763</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Chiba</td>
<td>6</td>
<td>4.83</td>
<td>1.941</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>51</td>
<td>6.16</td>
<td>2.187</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>UK</td>
<td>Essex</td>
<td>15</td>
<td>5.27</td>
<td>2.764</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Warwick</td>
<td>26</td>
<td>4.35</td>
<td>1.355</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>UEA</td>
<td>7</td>
<td>5.29</td>
<td>0.756</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>48</td>
<td>4.97</td>
<td>1.625</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>99</td>
<td>5.71</td>
<td>2.313</td>
<td>2</td>
<td>13</td>
</tr>
</tbody>
</table>

On average, the Japanese theses had approximately six chapters (Mean = 6.16) whereas the English theses included approximately five chapters (Mean = 4.97). Taking the average of the six universities, the literature theses tended to consist of approximately six chapters (Mean = 5.71), ranging from two to 13 chapters. Among the Japanese theses, the Tokyo theses indicated high standard deviation (SD = 2.763), which was
similar to the standard deviation of the Essex theses ($SD = 2.764$), suggesting high individual variation in the numbers of chapters in theses at these universities. In contrast, the standard deviations of theses in the other universities were not as high as with the Tokyo and Essex theses. The UEA theses showed the lowest standard deviation, which implies that the seven UEA theses have a similar number of chapters in the theses (Mean = 5.29). Figure 2 displays similarities and differences in the number of thesis chapters in the six universities.

![Bar Chart](image)

**Figure 2:** The number of chapters included in the theses

A Mann-Whitney test indicated a significant difference between the Japanese and English groups ($p < .001$). Therefore, cross-cultural differences were found in the number of thesis chapters. It was confirmed that the Japanese theses tended to have more chapters than the English ones. At the intra-cultural level, on the other hand, Kruskal-Wallis tests were administered and no significant differences were found in the
Japanese theses \((p = .143)\) or in the English theses \((p = .104)\). Thus, intra-cultural similarities were revealed among the Japanese theses as well as among the English ones.

3.4 The proportion of space in the theses allocated to the introductory and concluding chapters

The space occupied by the introductory and concluding chapters in the theses, relative to the whole was calculated in the following way: (1) the number of pages of introductory chapters was divided by the total number of pages of the theses, and (2) the number of pages in the concluding chapters was divided by the total number of pages in the theses. I acknowledge the fact that word count is more accurate than page count since not all pages are equally filled with text and different font types and sizes fill the space differently. However, word count was not possible in the present study due to technical difficulties as some of the theses were not available in the electronic format. Despite this methodological limitation, it was thought that the measure based on page numbers, which was used for both Japanese and English texts, was appropriate, given the study’s focus on the proportion of introductions and conclusions within the whole thesis rather than their length. Approximations still provide an insight into the proportions of introductory and concluding chapters in terms of the whole texts.

Descriptive features regarding the percentage of the introductory chapters are given in Table 3. The findings of the introductory chapters indicated that in the Japanese theses, introductory chapters constituted 6.77\% of the total thesis on average whereas in the English theses the figure was 9.73\%. Standard deviations were similar between the two groups: the Japanese group \((SD = 5.925)\) and the English group \((SD = 5.565)\).
Table 3: Descriptive features of introductory chapters in the theses

<table>
<thead>
<tr>
<th>Country</th>
<th>University</th>
<th>n</th>
<th>Mean (%)</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>Tsukuba</td>
<td>23</td>
<td>7.63</td>
<td>4.302</td>
<td>1.76</td>
<td>19.51</td>
</tr>
<tr>
<td></td>
<td>Tokyo</td>
<td>22</td>
<td>6.26</td>
<td>7.466</td>
<td>0</td>
<td>32.93</td>
</tr>
<tr>
<td></td>
<td>Chiba</td>
<td>6</td>
<td>5.33</td>
<td>5.333</td>
<td>1.33</td>
<td>15.51</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>51</td>
<td>6.77</td>
<td>5.925</td>
<td>0</td>
<td>32.93</td>
</tr>
<tr>
<td>UK</td>
<td>Essex</td>
<td>15</td>
<td>7.98</td>
<td>5.237</td>
<td>2.03</td>
<td>17.23</td>
</tr>
<tr>
<td></td>
<td>Warwick</td>
<td>26</td>
<td>10.91</td>
<td>6.155</td>
<td>2.76</td>
<td>29.11</td>
</tr>
<tr>
<td></td>
<td>UEA</td>
<td>7</td>
<td>9.10</td>
<td>2.571</td>
<td>6.29</td>
<td>12.46</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>48</td>
<td>9.73</td>
<td>5.565</td>
<td>2.03</td>
<td>29.11</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>99</td>
<td>8.21</td>
<td>5.913</td>
<td>0</td>
<td>32.93</td>
</tr>
</tbody>
</table>

On the other hand, concluding chapters constituted a smaller proportion of the whole thesis than the introductory chapters (Table 4). The mean percentage of the concluding chapters in all the theses was 3.85, and was similar for the Japanese and English theses (Japanese: Mean = 3.51; English: Mean = 4.22).

Table 4: Descriptive features of concluding chapters in the theses

<table>
<thead>
<tr>
<th>Country</th>
<th>University</th>
<th>n</th>
<th>Mean (%)</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>Tsukuba</td>
<td>23</td>
<td>4.73</td>
<td>3.025</td>
<td>1.61</td>
<td>16.22</td>
</tr>
<tr>
<td></td>
<td>Tokyo</td>
<td>22</td>
<td>2.36</td>
<td>2.791</td>
<td>0</td>
<td>9.44</td>
</tr>
<tr>
<td></td>
<td>Chiba</td>
<td>6</td>
<td>2.99</td>
<td>1.094</td>
<td>1.33</td>
<td>4.41</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>51</td>
<td>3.51</td>
<td>2.953</td>
<td>0</td>
<td>16.22</td>
</tr>
<tr>
<td>UK</td>
<td>Essex</td>
<td>15</td>
<td>4.87</td>
<td>6.774</td>
<td>0.68</td>
<td>24.11</td>
</tr>
<tr>
<td></td>
<td>Warwick</td>
<td>26</td>
<td>3.90</td>
<td>3.557</td>
<td>0.49</td>
<td>18.83</td>
</tr>
<tr>
<td></td>
<td>UEA</td>
<td>7</td>
<td>4.03</td>
<td>2.090</td>
<td>1.14</td>
<td>6.88</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>48</td>
<td>4.22</td>
<td>4.600</td>
<td>0.49</td>
<td>24.11</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>99</td>
<td>3.85</td>
<td>3.837</td>
<td>0</td>
<td>24.11</td>
</tr>
</tbody>
</table>

Standard deviation in the English groups (4.600) was higher than that in the Japanese theses (2.953) in spite of the similar mean between the two groups. This is interpreted to mean that the English theses varied individually more than the Japanese theses did with regard to the proportion of the theses occupied by the concluding chapters.
As for the proportion of the theses taken up by the introductory chapters, cultural differences were revealed as a result of a Mann-Whitney test ($p = .001$); the English introductory chapters took up a significantly higher proportion than the Japanese ones. In intra-cultural comparisons, the results of Kruskal-Wallis tests indicated near significant difference among the Japanese theses ($p = .051$) and no difference among the English theses ($p = .248$). In fact, the Tsukuba theses (Mean = 7.63) tended to have longer introductory chapters than the Chiba theses (Mean = 5.33). Thus, a tendency toward cross-cultural differences between the Japanese and English groups, and intra-cultural similarities within the Japanese theses and within the English theses was observed in the proportion of introductory chapters in the literature theses (Figure 3).

![Graph](image-url)

Figure 3: The proportion of introductory and concluding chapters in the theses
The proportion of the theses taken up by the concluding chapters, on the other hand, was not cross-culturally different between the Japanese and English groups, according to the result of a Mann-Whitney test ($p < .825$). However, Kruskal-Wallis tests indicated intra-cultural differences among the Japanese theses ($p = .009$), with the Tsukuba theses having a higher proportion of concluding chapters than the Tokyo and Chiba theses. Intra-cultural similarities were found among the English theses ($p = .474$) (Figure 3).

Figure 3 also shows the comparison between the introductory and concluding chapters in terms of the proportions of each chapter in the whole text. It seems clear that the percentage of the introductory chapters in the theses is higher than that of the concluding chapters in both the Japanese and English groups. This was confirmed by a Wilcoxon Signed Ranks test, which indicated a significant difference between the proportions of the introductory and concluding chapters ($p < .001$); the introductory chapters were found to occupy significantly more space than the concluding chapters in both the Japanese and English groups of theses. In the cases of the Tokyo (J), Warwick (E) and UEA (E) theses, the proportion of the introductory chapters in the theses was more than twice as high as that of the concluding chapters.

3.5 The macrostructure of the literature Ph.D. theses

All the literature theses in the corpora were categorised as topic-based in terms of macrostructure, which is consistent with the findings of previous studies concerning the macrostructure of humanities theses and dissertations (Paltridge, 2002; Paltridge & Starfield, 2007). However, within the topic-based category, a wide variation in the macrostructure of the theses was also observed. Therefore, I investigated the
organisational structure in depth to discover how it varied in the literature theses.

The literature thesis macrostructure had two different dominant patterns; the most common macrostructure was the `introduction_chapters_conclusion` pattern, and the second dominant structure was the `introduction_parts_chapters_conclusion` pattern. The former type is regarded as a chapter-based macrostructure since chapters are a basic unit of theses. Theses that had this macrostructure usually consisted of an introductory chapter, a series of topic-based chapters, and a concluding chapter (See an example in Appendix A). Table 5 provides results of cross-cultural and intra-cultural comparisons of the chapter-based pattern.

Table 5: The chapter-based macrostructure of the literature Ph.D. theses

<table>
<thead>
<tr>
<th>Structure</th>
<th>Japanese (%)</th>
<th></th>
<th>English (%)</th>
<th></th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tsukuba (n = 23)</td>
<td>Tokyo (n = 22)</td>
<td>Chiba (n = 6)</td>
<td>Essex (n = 15)</td>
</tr>
<tr>
<td>Introduction</td>
<td></td>
<td>43.48</td>
<td>18.18</td>
<td>50.00</td>
<td>47.06</td>
</tr>
<tr>
<td>Chapter 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chapter 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chapter 3 etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conclusion</td>
<td></td>
<td>Japanese total: 33.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>p = .119</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown above, 33.33% of the Japanese theses had the chapter-based macrostructure whilst 62.50% of the English theses used this pattern. A Chi-square test indicated a significant difference between the Japanese and English groups (p = .005). Apparently, the English theses favoured this arrangement more than the Japanese theses did. At the intra-cultural level, no significant difference was found among the Japanese theses (p = .119) whereas the English theses indicated a significant difference (p = .025). A remarkable finding was that all seven UEA theses employed the chapter-based pattern.
whilst approximately half of the Essex theses (47.06%) and approximately two thirds of the Warwick theses (60.71%) used this pattern. Thus, cross-cultural differences between the Japanese and English groups, intra-cultural similarities among the Japanese theses, and intra-cultural differences among the English theses were revealed concerning the application of the introduction_chapters_conclusion macrostructure.

The second most common macrostructure was the introduction_parts_chapters_conclusion pattern, which is viewed as a two-level macrostructure where a series of lower level units (i.e., chapters) constitute a superordinate unit (i.e., parts). This pattern is more complex than the first pattern since a superordinate unit of part is constructed based on the chapter-based structure. In general, this type of thesis consists of an introductory chapter, two or more parts, each consisting of a series of chapters and a concluding chapter (See an example in Appendix B). Theses that employed the two-level macrostructure did not necessarily use the terms part and chapter in reference to the constituent structure. Alternatively, the term volume or section was occasionally used in the theses. The main criterion for the identification of this type of macrostructure is whether they have a hierarchal structure in the main body, which consists of two different levels of constituent units; investigations of the internal structure of chapters are outside the scope of this study.

The two-level macrostructure was found in the Japanese theses (33.33%) more frequently than the English ones (12.50%) (Table 6). A Chi-square test indicated a significant difference between the Japanese and English groups ($p = .018$). If both groups are taken together, 22.92% of the literature theses used the two-level macrostructure. Among the Japanese theses, a significant difference was observed in the use of this macrostructure ($p = .033$) where more than half of the Tsukuba theses
employed this arrangement (52.17%) whilst the English theses did not show a significant difference ($p = .278$).

Table 6: The two-level macrostructure of the literature Ph.D. theses

<table>
<thead>
<tr>
<th>Structure</th>
<th>Japanese (%)</th>
<th>English (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tsukuba ($n = 23$)</td>
<td>Tokyo ($n = 22$)</td>
<td>Chiba ($n = 6$)</td>
</tr>
<tr>
<td>Introduction</td>
<td>52.17</td>
<td>18.18</td>
<td>16.67</td>
</tr>
<tr>
<td>Part 1 Chapters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part 2 Chapters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conclusion</td>
<td>Japanese total: 33.33 $p = .033$</td>
<td>English total: 12.50 $p = .278$</td>
<td>J vs. E $p = .018$</td>
</tr>
</tbody>
</table>

Thus, with regard to the use of the two-level macrostructure, cross-cultural differences between the Japanese and English groups, intra-cultural differences among the Japanese theses, and intra-cultural similarities among the English theses were found. Having looked at the two types of dominant macrostructures it was remarkable that the English theses employed the chapter-based macrostructure (62.50%) more frequently than the two-level macrostructure (12.50%). In contrast, the Japanese theses featured the two patterns equally (33.33% each).

4 Discussion

The overall organisation of the literature Ph.D. theses has been investigated from different aspects by cross-cultural and intra-cultural comparisons, and the findings have

---

5 Percentages were calculated within each of the universities in order to find distributions of types of macrostructure in individual universities. In addition to the two dominant macrostructures, other types of macrostructure were also found but are not reported here. Therefore, the total of percentages within the individual universities is not 100% in some cases.
indicated cross-cultural and intra-cultural similarities and differences (Appendix C). Striking cross-cultural differences were observed in regard to the following four points. First, the majority of English theses had both acknowledgements and abstracts whereas the Japanese theses seldom included them. Hyland (2003: 242) states that “acknowledgements are commonplace in scholarly communication and virtually obligatory in dissertation writing”. However, this was not the case with the Japanese theses since cross-culturally different acknowledging conventions were discovered. Since neither Japanese nor English thesis guidelines tend to say anything about acknowledgements, acknowledging conventions seem to have to do with supervisors’ guidelines or the general convention that Ph.D. students acquire by reading other work, for instance, previous Ph.D. theses. The frequent occurrence of acknowledgements in the English theses may imply that the English writers feel obliged to express thanks, regardless of whether they were satisfied with supervision, because it is recognised as a kind of etiquette to include acknowledgments in theses in British contexts. Furthermore, they may use acknowledgments, intentionally or unintentionally, as a device for self-promotion by indicating their closeness to important figures. In the Japanese theses, on the other hand, the absence of acknowledgements may be associated with the nature of acknowledgements as a personal statement of gratitude which is made publicly. In the Japanese context, it may be more customary to express thanks privately instead of publicly, unlike the British context. These unsolved issues concerning acknowledgements require further investigations by interviewing writers and supervisors about the use/non-use of acknowledgements, which is covered in a larger study currently in progress.

The second finding, that there were cross-culturally different abstracting conventions in the theses, supports the suggestion of Swales and Feak (2009) that research article
abstracts vary cross-culturally in rhetorical features, although the present study has looked at Ph.D. thesis abstracts rather than research article abstracts. The finding of cross-cultural differences in thesis abstracts implies that there are different purposes to writing thesis abstracts between the Japanese and English theses. It was found that the Essex and Warwick theses required an abstract of a Ph.D. thesis to be included in the thesis as a compulsory element, whereas the Japanese thesis abstracts were written and submitted to the department for administrative purposes and therefore they were seldom included in the thesis. A unique phenomenon was that three out of seven UEA theses contained an abstract but the other four did not. This inconsistency regarding the existence of abstracts could be ascribed to the Ph.D. students’ carelessness, simply forgetting to write or include it, or to the lack of explicit guidance on thesis writing provided by the department or supervisors. Alternatively, changes in the regulations with regard to thesis-writing conventions might have affected the presence or absence of abstracts in the UEA theses. Further research needs to investigate abstracting conventions in depth.

Third, a higher proportion of the Japanese theses was taken up by introductory chapters than the English theses. This tendency implies that the Japanese and English theses may differ in constituent elements or functions of introductory chapters, which are investigated elsewhere (Ono, 2011). In both the Japanese and English theses, introductory chapters were significantly longer than concluding chapters, which seems to be a common structural feature of literature Ph.D. theses.

Fourth, the macrostructure of literature theses showed two dominant patterns: the chapter-based type (i.e., the introduction_chapters_conclusion pattern) and the two-level type (i.e., the introduction_parts_chapters_conclusion pattern).
used by the English theses more frequently than the Japanese theses, whilst the latter pattern was employed by the Japanese theses significantly more than the English theses. The two-level type of macrostructure was not stressed in the previous studies (Paltridge, 2002; Paltridge & Starfield, 2007); therefore, findings regarding the two dominant macrostructures of literature theses, where the Japanese and English groups showed a cross-culturally different preference, are a new discovery. Another relevant finding was that some Japanese and English theses included prefaces, afterwords, or supplementary sections. Combinations of these elements with introductory and concluding chapters resulted in more variation in the macrostructure of the literature theses.

Regarding cross-cultural similarities, all the Japanese and English theses had tables of contents, suggesting this was a universal feature of Ph.D. theses. The majority of the Japanese and English theses had introductory and concluding chapters, which implies the vital role played by these chapters. Intra-cultural differences were also found in the occurrence of acknowledgements and abstracts among the English theses, whilst the Japanese theses showed intra-cultural differences in the existence of acknowledgements and concluding chapters. A wide variation in the macrostructure of the Tokyo theses, compared to the other universities, was recognised as an intra-cultural difference. Similar to the visual and performing arts theses (Paltridge et al, 2011), a macrostructural continuum has been observed in this study, which shows varying degrees of variation in the thesis macrostructure, ranging from more conventionalised types (i.e., the chapter-based or two-level macrostructure) to less conventionalised types, which are, therefore, viewed as dispersed and peculiar macrostructures. Individual differences found in the thesis macrostructure seem to indicate the nature of peculiarity and diversity of the literature Ph.D. theses. This feature can be understood as a central characteristic of research in the field of literature.
In sum, the study has shed light on the neglected genre of literature Ph.D. theses and has shown varying degrees of similarities and differences concerning the macrostructure of the Japanese and English theses. Cross-cultural and intra-cultural differences found in the study have indicated various conventions and writers’ individual preferences and choices in relation to implicit or explicit requirements in thesis writing practices in different cultural and institutional contexts. The macrostructural features of the Ph.D. theses are culturally and socially conventionalised by a relevant ‘discourse community’ (Swales, 1990, 2004) whose expectations of Ph.D. theses are not necessarily shared across countries or among the institutions within the same country. Thesis writing conventions are never rigid in a strict sense as they may change gradually or rapidly, being influenced by social and cultural factors or by an academic paradigm in the field in which members of the discourse community are involved. To help thesis writers understand these conventions, which may differ across countries, institutions and departments, there is a need for workshops on thesis-writing in each department and university, such as the ones conducted by Bunton (2002) and Starfield (2003) in their teaching contexts. The findings and data from this study can be used for the development of training or teaching materials for thesis-writing workshops in Japanese and British universities.

Acknowledgements

I would like to express my sincere gratitude to my supervisor Bojana Petrić for her constructive comments on this paper. I also wish to thank my advisor Phil Scholfield for his painstaking support during the data analysis process.

References

theoretical article introductions’. *International Review of Applied Linguistics* 42/1, 71-100.


University of Michigan Press.


Appendix A: An example of the chapter-based macrostructure of the thesis

| Thesis title: | Languages of the Body and the Body of Language: A Comparative Analysis of Two Beat Writers and Two Southern African Writers |
| Structure: | Introduction  
| | Chapter 1: Jack Kerouac  
| | Chapter 2: Dambudzo Marechera  
| | Chapter 3: William Burroughs  
| | Chapter 4: Tsitsi Dangarembga  
| | Conclusion  
| Category: | Comparative focus |

Appendix B: An example of the two-level macrostructure of the thesis

| Thesis title: | The use of silence: A Twentieth century preoccupation in the light of fictional examples, 1900-1950 |
| Structure: | Introduction  
| | 1. Cultures of Silence  
| | Part One: Social Silences  
| | 2. Socio-Economic Silences  
| | 3. Woman/Women and Silence  
| | 4. ‘Race’ and Silence  
| | Part Two: Ontological Silences  
| | 5. The Limits of Language  
| | 6. The Illimitability of Language  
| | Conclusion  
| Category: | Literary-genre focus |
Appendix C: Findings regarding the macrostructure of the Japanese and English theses

<table>
<thead>
<tr>
<th>Cross-cultural differences</th>
<th>Cross-cultural similarities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Occurrences of constituent elements</strong></td>
<td><strong>Occurrences of constituent elements</strong></td>
</tr>
<tr>
<td>Acknowledgements (J &lt; E)</td>
<td>Tables of contents (J &amp; E)</td>
</tr>
<tr>
<td>Abstracts (J &lt; E)</td>
<td>Introductory chapters (J &amp; E)</td>
</tr>
<tr>
<td>The number of chapters (J &gt; E)</td>
<td>Concluding chapters (J &amp; E)</td>
</tr>
<tr>
<td>The proportion of the introductory chapters in the theses (J &lt; E)</td>
<td>The proportion of the concluding chapters in the theses (J &amp; E)</td>
</tr>
<tr>
<td>Thesis macrostructure</td>
<td>The proportion of the introductory chapters was higher than that of the concluding chapters (J &amp; E)</td>
</tr>
<tr>
<td>The chapter-based macrostructure (J &gt; E)</td>
<td></td>
</tr>
<tr>
<td>The two-level macrostructure (J &gt; E)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intra-cultural differences</th>
<th>Intra-cultural similarities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Occurrences of constituent elements</strong></td>
<td><strong>Occurrences of constituent elements</strong></td>
</tr>
<tr>
<td>Acknowledgements (J, E)</td>
<td>Abstracts (J)</td>
</tr>
<tr>
<td>Abstracts (E)</td>
<td>Introductory chapters (J, E)</td>
</tr>
<tr>
<td>Concluding chapters (J)</td>
<td>Concluding chapters (E)</td>
</tr>
<tr>
<td>The number of chapters (J, E)</td>
<td>The proportion of the introductory chapters in the theses (J, E)</td>
</tr>
<tr>
<td>The proportion of the concluding chapters in the theses (J)</td>
<td>The proportion of the concluding chapters in the theses (E)</td>
</tr>
<tr>
<td>Thesis macrostructure</td>
<td>Thesis macrostructure</td>
</tr>
<tr>
<td>The chapter-based macrostructure (E)</td>
<td>The chapter-based macrostructure (J)</td>
</tr>
<tr>
<td>The two-level macrostructure (J)</td>
<td>The two-level macrostructure (E)</td>
</tr>
</tbody>
</table>

Note. J stands for Japanese and E stands for English. ‘<’ or ‘>’ indicates a significant difference between the Japanese and English groups.
The effect of local discourse coherence on pronoun resolution: an eye-tracking study

Clare Patterson

Abstract

This paper presents an investigation into the role of discourse cues on the processing of pronouns. In an eye-tracking whilst reading study, the discourse prominence of antecedents is manipulated via ‘backward-looking center’ status (from Centering Theory), to see whether this affects if and when an antecedent is considered during pronoun processing. The role of coherence cues is investigated from the point of view of the repeated-name penalty. Cues from discourse prominence and discourse coherence are found to be processed at different points in the timecourse of pronoun resolution; the implications for models of pronoun resolution are considered.

1 Introduction

When we encounter a pronoun during the process of language comprehension, we must make a quick and accurate decision about who or what the pronoun refers to. Much of the time this is an unconscious process, and one that has been the subject of a considerable amount of psycholinguistic research. Researchers have investigated the kinds of information that are used to resolve a pronoun, and whether different types of information are available at different times during the resolution process (see Arnold, 1998 and Garnham, 2001 for an overview). Previous research indicates that there are many cues which can aid pronoun resolution, including (but not limited to) number agreement, gender agreement, grammatical role, syntactic position and cues from the surrounding discourse. In this paper, I will focus on discourse cues, describing an eye-tracking study in which I investigated the timecourse and interaction between different types of discourse cues in pronoun resolution.

2 Discourse cues

Previous research suggests that pronouns usually refer to prominent entities within a discourse. Various factors affect prominence, and two in particular have been the focus of much attention in psycholinguistic research. These are subjecthood and first-mention. Subjecthood (Crawley, Stevenson and Kleinman 1990; Järvinen, van Gompel, Hyönä

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1 This work was funded by an ESRC quota studentship awarded to Clare Patterson at the Language and Linguistics Department, University of Essex.
and Bertram 2005; Kaiser and Trueswell 2008) refers to the idea that grammatical subjects are more prominent in a discourse than entities with other grammatical functions. The implications for pronoun processing are that if a pronoun triggers a search for a prominent entity in the discourse, entities with grammatical subject status will be a more likely referent, since subjects are more prominent. While the idea of a hierarchy of grammatical categories has been suggested by many linguists, Crawley et al. (1990) were among the first to test this hierarchy in relation to the processing of pronouns. First-mention (Gernsbacher and Hargreaves 1988; Carreiras, Gernsbacher and Villa 1995; cf. Järvinen et al. 2005, among others) refers to the idea that the first-mentioned entities in a discourse have a special status which is more prominent, therefore first-mentioned entities are good candidates to be the referent of a pronoun. While it is clear that both subjecthood and first-mention contribute to an entity's discourse prominence, neither factor alone can fully account for discourse prominence. Furthermore, it should be noted that in SVO languages like English it is difficult to untangle the effects of each factor on discourse prominence, because first-mentioned entities are often subjects. One model which aims to bring together subjecthood and first-mention into one account of discourse prominence is Centering Theory, and this theory will be briefly outlined below.

2.1 Centering Theory

Centering Theory (CT) was developed in the field of computational linguistics by Grosz, Joshi and Weinstein (1995). The original purpose of CT was to develop a framework for understanding discourse coherence, but the ideas of CT were soon co-opted into psycholinguistics (see, for example, Gordon, Grosz and Gilliom 1993) as researchers saw its potential for tracking the prominence of a discourse entity in text, thus providing a testable mechanism for the process of pronoun resolution. CT uses the factors of subjecthood and first-mention, as well as previous discourse status, to provide a ranking of the discourse entities (potential referents for pronouns) at different points throughout a discourse. The top-ranked entity at a particular point is assumed to be the most prominent one. The basic mechanisms of CT are described below.
2.1.1 An introduction to the basic mechanisms of CT

In example (1) given below, there are three entities that can be ranked in terms of their prominence. The entities are listed below in the example along with the elements that will contribute to their ranking:

(1)  
*Susan gave Betsy a pet hamster.*

<table>
<thead>
<tr>
<th>Entity</th>
<th>Mention</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUSAN</td>
<td>subject, first-mention</td>
<td></td>
</tr>
<tr>
<td>BETSY</td>
<td>indirect object, second-mention</td>
<td></td>
</tr>
<tr>
<td>HAMSTER</td>
<td>direct object, third-mention</td>
<td></td>
</tr>
</tbody>
</table>

‘Susan’ is both the grammatical subject and the first-mentioned entity, and both these factors boost her in the prominence ranking. So in this utterance² ‘Susan’ is the top-ranked, and therefore the most prominent, entity. For the subsequent utterance, CT assumes that if any entity is referred to using a pronoun, it should be the top-ranked entity from the previous utterance (‘Susan’ in our example). Example 2 shows a subsequent utterance (utterance 2). Since this is the second utterance in the discourse, the previous discourse status of the entities is taken into account when the rankings are calculated.

(2)  
Utterance 1: *Susan gave Betsy a pet hamster.*
Utterance 2: *She reminded her that such hamsters were quite shy.*

<table>
<thead>
<tr>
<th>Entity</th>
<th>Mention</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUSAN</td>
<td>subject, first-mention, backward-looking center (Cb)</td>
<td></td>
</tr>
<tr>
<td>BETSY</td>
<td>indirect object, second mention</td>
<td></td>
</tr>
<tr>
<td>HAMSTER</td>
<td>direct object, third mention</td>
<td></td>
</tr>
</tbody>
</table>

The top-ranked entity from the previous utterance (*Susan*) is assumed to be the referent of the pronoun ‘she’ and is given the status of ‘backward-looking center’ (Cb).

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² In CT a discourse is divided into ‘utterances’ and the rankings are calculated for each utterance. There is some debate as to what constitutes an utterance, whether it is a sentence, a main clause, or any clause type.
status, like first-mention and subjecthood, boosts an entity’s ranking. So Susan is the top-ranked entity in the second utterance, as well as the first utterance.

2.1.2 The repeated-name penalty

One important and empirically testable aspect of CT relevant to the current study is the ‘repeated-name penalty’ (Gordon et al. 1993). As discussed above, CT makes the assumption that the top-ranked entity of a previous utterance should preferentially be realised as a pronoun. Gordon et al. (1993) tested this assumption by presenting utterances in which the Cb was realised as a repeated name rather than a pronoun. This led to a disruption in reading times on the repeated name, in comparison to utterances that contained a pronoun. This effect was called the repeated-name penalty. Two claims about the repeated-name penalty are explored in the current study. Firstly, the claim that the repeated-name penalty is applicable to all definite descriptions, not just names (Gordon et al. 1993). It should be noted that much experimental work in this area has focussed on names (e.g. Gordon et al., 1993; Gordon and Scearce, 1995; Rose, 2007; Fukumara and van Gompel, 2010; Gelormini-Lezama and Almor, 2011). This leaves open the question of whether the repeated-name penalty would be seen if definite descriptions (such as the soldier) were repeated. Secondly, Gordon and Hendrick (1998) claim that in complex constructions, the repeated-name penalty is reduced. This is certainly a logical expectation. If the reader is processing a complex discourse, processing resources for maintaining the topic of an utterance will be more limited. Therefore, reminding the reader/hearer more explicitly about the topic of an utterance by repeating a name might be more helpful than disruptive.

3 The timecourse of pronoun resolution

Another issue in current research is the timecourse of pronoun resolution. The concern of much of the debate has been whether or not certain types of information are used earlier than others, or whether all sources of information are available from the earliest point in processing a pronoun (Nicol and Swinney, 1989; Sturt, 2003; Badecker and Straub, 2002; Arnold, Eisenband, Brown-Schmidt and Trueswell, 2000). Eye-movement studies (both the visual world paradigm and eye-tracking whilst reading) have contributed evidence on both sides of the debate. The question has often been concerned with the timing of syntactic information versus pragmatic or discourse
information. Some research has focussed on the syntactic principles regarding pronouns as outlined in Chomsky’s Binding Theory (Chomsky, 1981). For example, Nicol and Swinney argued that the constraints of Binding Theory are applied at the earliest stage of pronoun processing. Binding conditions then constrain all subsequent processing so that, for example, an entity which is inaccessible according to Binding Theory is never considered as an antecedent at any stage of processing. Badecker and Straub, on the other hand, claimed that binding-inaccessible antecedents are considered during processing, and furthermore that all constraints (syntactic and discourse based) are available from the start of processing, and are in competition during throughout. Sturt, on the basis of several eye-tracking studies, proposed a ‘binding as defeasible filter’ model, in which binding constraints were applied early, but could be violated at later stages of processing when discourse information is applied.

Moving away from purely syntactic cues, there has been debate on how rapidly discourse information is used in pronoun processing. Experimental results have been mixed, with some showing that discourse information is used from an early stage (for example Arnold et al., 2000; Badecker and Straub, 2002; Clackson, Felser and Clahsen 2011) and others finding that discourse information is somewhat delayed (for example Garrod and Terras 2000, although they were looking at discourse roles not involving pronouns).

Despite the amount of research in this area, it seems that the timecourse of pronoun resolution is not yet clearly understood. Broadly, two types of model have emerged; one type that suggests an ordering of constraints, such that different sources of information are available at different times during pronoun processing, and another type in which all information is available throughout, but information sources may compete with one another during resolution. Using eye-tracking (during reading), it may be possible to uncover more about the contribution of discourse cues over the timecourse of pronoun resolution.

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3 Binding condition A states that reflexives must be bound locally; condition B states that pronouns cannot be bound locally; condition C states that referential expressions cannot be bound.
4 The current study

The current study aims to explore the effects of discourse cues over time. In contrast to previous studies, two potential subject antecedents will be presented. The eye-tracking methodology will allow us to see how the resolution process unfolds. The specific research questions are:

1. In a complex discourse, where there are two potential subject antecedents, which will be the preferred referent of the pronoun during processing?
2. What will be the effect of manipulating the previous discourse on subsequent pronoun resolution?
3. Will the repeated name penalty be seen with a definite description?

4.1 Materials and study design

The experimental materials were comprised of 24 short scenarios of three sentences each. The first sentence was the context sentence, the second was the critical sentence and the third was the wrap-up sentence (see example 3 below). Each scenario contained a pronoun and two characters (people); the two characters in the scenario are potential antecedents for the pronoun. The context sentence (the first sentence) mentions one of the two potential antecedents. The critical sentence (the second sentence) mentions both potential antecedents, which are both grammatical subjects, and later in the sentence there is a singular third-person pronoun (he or she). The wrap up (final) sentence follows the critical sentence, and does not mention either of the two potential antecedents, nor does it introduce any new characters. Note that the position of the words on screen during the experiment was not as shown in the example below (see section 4.3, method and procedure, for more information). In each scenario, there was a QP (quantified phrase) and a DP. The QPs were all made up of the quantifier ‘every’ and a gender-stereotypical noun. The DPs were all definitional gender nouns. Half of each were male and half female. The QP and the DP were always of a different gender.

It is possible that the pronoun referred to someone not mentioned within the scenario, since pronouns are always technically ambiguous in this way. In general readers tend to link pronouns to antecedents that are mentioned in the current text, so the current study will look for evidence that readers tried to link the pronoun to one or other of the antecedents mentioned within the scenarios. This is not to rule out the possibility of outside reference, rather the focus will be on evidence relating to the two antecedents presented.
so that in each item only one character matched the pronoun in gender\textsuperscript{5}. The overall set of QPs did not differ in length or frequency from the set of DPs\textsuperscript{6}, although it was not possible to match length and frequency in each individual item.

(3)

CONGRUENT CONTEXT, QP MATCH

(a) The soldiers felt really quite uneasy about the squadron parade. Every soldier who knew that the queen was watching intently was absolutely convinced that he should wave as the parade passed. [wrap-up sentence]

CONGRUENT CONTEXT, DP MATCH

(b) The queen felt really quite uneasy about the squadron parade. Every soldier who knew that the queen was watching intently was absolutely convinced that she should wave as the parade passed. [wrap-up sentence]

INCONGRUENT CONTEXT, QP MATCH

(c) The queen felt really quite uneasy about the squadron parade. Every soldier who knew that the queen was watching intently was absolutely convinced that he should wave as the parade passed. [wrap-up sentence]

INCONGRUENT CONTEXT, DP MATCH

(d) The soldiers felt really quite uneasy about the squadron parade. Every soldier who knew that the queen was watching intently was absolutely convinced that she should wave as the parade passed. [wrap-up sentence]

Two factors were manipulated to create four experimental conditions as shown above. These factors were \textit{DP/QP match} and \textit{context congruency}. For the current paper we are interested in one of these factors, context congruency, but both will be explained in order to clarify the experimental design.

\textsuperscript{5} The stereotypical gender QPs were taken from an offline test by Ian Cunnings, in which nouns (mostly associated with occupations such as builder, plumber) were presented to participants who had to score them according to how stereotypically male or female they were. Items with the highest male and highest female scores were used.

\textsuperscript{6} Frequencies for the nouns were obtained from the British National Corpus, http://www.natcorp.ox.ac.uk/
DP/QP match refers to whether the pronoun matches in gender with the QP antecedent (every soldier in example 3) or the DP antecedent (the queen in example 3). Conditions (a) and (c) are examples of QP match, and conditions (b) and (d) are examples of DP match. Koornneef (2008; see also Koornneef, Wijnen and Reuland 2006) proposes that variable binding takes place before coreference7 during online pronoun processing. He suggests that the search for the antecedent starts with a search for a variable binding antecedent, and consideration of a coreference antecedent will be delayed by comparison. In the current experiment, the QPs are always variable binding antecedents, since they c-command the pronoun and they cannot refer to an individual in the discourse (ruling out coreference). The DPs in the experimental items are always coreference antecedents, since they do not c-command the pronoun (ruling out variable binding) but they can refer to an individual in the discourse. So the DP/QP match manipulation was included in order to see whether one type of antecedent was preferred during processing.

This paper is primarily concerned with the context congruency manipulation (congruent/incongruent context). In congruent contexts, (a) and (b) in example 3, the pronoun matches in gender with the antecedent that is ‘supported’ by the context. Context support comes from being mentioned in the context sentence, thereby boosting the prominence of one particular antecedent over another. In example 3a, the pronoun he matches in gender with the QP every soldier. Every soldier receives a boost in prominence from being mentioned in the context sentence (The soldiers felt really quite uneasy…). In incongruent contexts, (c) and (d), the pronoun matches in gender with the antecedent that was not mentioned in the context sentence. In example 3d, the pronoun she matches the queen, but the context sentence starts The soldiers…. In other words, in incongruent conditions the non-matching antecedent receives a boost in prominence from the context sentence.

7 Variable binding is a logical operation linking a pronoun (the variable) to an antecedent, which takes place at the level of syntax. The antecedent must c-command the pronoun for variable binding to take place. Conversely, coreference takes place when a pronoun and an antecedent both refer to the same entity from in the discourse; this is said to be a discourse level operation, and syntactic configuration does not constrain this operation.
4.2 Predictions

According to CT, in the congruent conditions the highest-ranked antecedent matches in gender with the pronoun, whereas in the incongruent conditions the highest ranked antecedent mismatches in gender with the pronoun. For example, in congruent condition (a), the context mentions *The soldiers*. In the critical sentence, *Every soldier* is first-mentioned, and is a subject, and (crucially) is the Cb according to CT. This makes it a more prominent entity in the discourse than *the queen*, which does not have Cb status. When the pronoun is encountered, it matches in gender with the most prominent entity. By contrast, in condition (c), which is an incongruent condition, *the queen* is mentioned in the context sentence. This gives Cb status to *the queen* in the critical sentence, elevating its prominence. (*The queen* is also a subject, but does not have the advantage of being first-mentioned). The pronoun, however, matches with *every soldier* which is not the most prominent entity. The mismatch between the pronoun’s expected referent (in gender terms) and the highest ranked antecedent (according to CT) in the incongruent conditions will result in a disruption to reading times. Thus, longer reading times are expected at the pronoun in the incongruent conditions.

The timecourse of this disruption is in question. According to Arnold *et al.* (2000), discourse information is available from an early stage of processing, so it is possible that the effects will appear early. However, according to Sturt (2003), discourse-based constraints come into effect later in processing, thus a delayed effect would be predicted on this basis.

Given that the scenarios are more complex than simple declarative sentences, and that definite descriptions are used as opposed to names, we do not expect to see a strong repeated-name penalty effect. The main region of analysis will be the pronoun, and any effect of repeating an NP, if such an effect occurs, should take place upstream of the pronoun, where the repeated NP is encountered. On this basis it would be surprising to find a repeated-name penalty effect (that is, a disruption to reading times when the repeated NP is referred to).

With regard to the DP/QP manipulation, Koornneef’s model of variable binding before coreference predicts that the DP match conditions will yield disruptions in early
measures. This is because the pronoun in all conditions will initially look for a VB antecedent. In the QP match conditions, this will match in gender with the pronoun, but in the DP match conditions the VB antecedent will mismatch in gender with the pronoun, causing processing difficulty.

4.3 Method and procedure

Scenarios were distributed among four lists in a Latin-square design so that each participant saw 6 items in each condition, and they did not see the same item in more than one condition. The lists were pseudo-randomised with fillers and pseudo-fillers\(^8\) so that items did not appear close together. The item order of the four lists was reversed to create four further lists, so that there were eight lists in total\(^9\). Participants were 32 native speakers of English who were recruited from the University of Essex and the surrounding community. All were paid £7 for their participation. All participants confirmed that they had not been diagnosed with any language difficulty/disorder. Some participants wore contact lenses or glasses during the experiment, and all reported that they could read from the screen successfully.

Eye movement data was recorded using the head-mounted Eyelink II system (by SR Research, Canada). Participants were seated in front of a PC monitor at a distance of 80cm. They wore a headset carrying two eye cameras and a head camera, with a rubber cap underneath the headset to prevent it from slipping during the experiment. The head camera compensated for small head movements that might be made during recording via the tracking of LEDs at the four corners of the display monitor. The position of the eye cameras was adjusted for each participant. Data from the right eye was recorded, with the pupil being tracked at a 500Hz sampling rate. There was a drift correction procedure before each trial in which a target appeared in the top left of the screen.

\(^{8}\) 36 real fillers and 12 pseudo-fillers were used. The pseudo-fillers were materials for a different experiment (not described here), they contained a pronoun and two potential antecedents, but were of a different structure to the experimental items. The real fillers were of a different structure to the experimental items. Half of the fillers were sentences without pronouns but of a comparable length to the experimental items (they contained names and occupations, like the experimental items); there were also 4 items containing reflexives, and 14 containing pronouns of a different type to those in the experimental items.

\(^{9}\) As the task goes on, participants may become more tired, and they also become more familiar with the task so reversing the lists helps to prevent the effects of training and/or tiredness being associated more strongly with particular items.
(above the position where the text would start in the next trial), and participants had to press a button while fixating on the target. After set up, participants were presented with a screen containing instructions, followed by seven practice trials, three of which were followed by practice comprehension questions. Responses to the comprehension questions and to the drift correction screen were made using a USB gamepad connected to the host PC. Participants were instructed to sit still for the duration of the experiment.

Following two thirds of the trials there were comprehension questions. This was to ensure that the participants were reading and understanding the trials that were presented. Comprehension questions did not explicitly probe the referent of the pronoun. After removing three questions whose correct response rate was lower than 60%, the participants’ overall correct response rate was 84% (scores ranged from 71% to 94%).

After the eye-tracking part of the experiment was complete, participants took a working memory test and finally they did a questionnaire experiment (experiment 1c). The experiment session took around 1 hour in total.

4.3 Analysis (regions of interest)

Results were analysed using a 2x2 ANOVA by participants and items in each region of interest.

4.3.1 Track loss

Fixations that were shorter than 80ms and within 1 degree of visual angle from another fixation were merged with the neighbouring fixation. Other fixations shorter than 80ms were removed, as were fixations longer than 1000ms. Additionally, three individual trials which had excessive track loss were removed from the data set. This resulted in a loss of 0.5% of the data.

4.3.2 Regions of interest

For the purpose of the analysis, the critical sentences were divided into 13 areas of interest. An example sentence and its divisions are shown below.
Figure 1. Division of an example scenario into thirteen interest areas.

The bride was anxious about the arrangements for the wedding.

Every priest who heard that the bride had sent a very long
list of demands agreed that he should try hard to be reasonable.

Weddings can be difficult to organise.

4.3.3 Skipping rates

In a given trial, if a region was initially skipped it was excluded from the analysis. Skipping rates for the regions are as follows:
Precritical region: 22%
Critical region: 21%
Spillover region: 8%

5 Results

Results from the critical region will be shown first, looking at first fixation durations and regression-path times. Then the regression-path times, rereading times and the total viewing times from the spillover region will be shown. Results tables for all measures can be found in Appendix A.

The precritical region contains the two words preceding the critical region. This region was examined in order to check that any effects found in the critical region were not apparent before the pronoun was encountered. There were no main effects of context in the precritical region.
5.1 Results from the critical region

This region contained the pronoun and the preceding word (always ‘that’). This region was always on the third line of text, and it was as close as possible to the middle of the line of text to avoid the effects of any inaccurate landing positions at the line change. Figure 2 shows the mean first fixation durations in the critical region.

Figure 2. Mean first-fixation durations, critical region.

The mean first-fixation durations in the critical region are higher in the incongruent condition (the orange bars). This was confirmed by a 2x2 ANOVA, where there was a significant main effect of context ($p_1 = 0.03$, $p_2 = 0.05$). While this is a very early measure, the results here fit with the expected pattern, that the incongruent conditions tend to cause disruption.

The first-pass times (the sum of the fixation durations in a region before exiting to the left, to check earlier material, or the right, to move to new material) did not reveal the
same pattern as the first-fixation durations; there were no significant effects or interactions in this measure.

The regression-path time is a measure which shows the amount of time (sum of the fixation durations) that a reader spends in a region before exiting to the right, that is, before moving on to read further material, so it takes into account any regressive eye movements. Figure 3 shows the mean regression-path times in the critical region.

Figure 3. Mean regression-path times, critical region.

The pattern shown in regression-path times is the reverse of the pattern in the first-fixation times. There are longer regression-path times for the congruent conditions, so participants spent longer in the pronoun region, and making regressive eye movements to check earlier material, before moving on to read the rest of the scenario when the condition was congruent. The ANOVA confirms this pattern with a marginal effect of context ($p_1 = 0.07$, $p_2 = 0.06$).
As noted above, there were no main effects or interactions of context in the first-pass times, nor were there main effects or interactions in the rereading times or total viewing times in the critical region. There were no main effects or interactions for the DP/QP contrast in any measure in this region. Means and standard deviations for all measures are shown in Appendix A, along with the results of the ANOVAs.

5.2 Results from the spillover region

This region contained the two words following the pronoun. This region was always on the third line of text on the screen. Figure 4 shows the mean regression-path times in the spillover region.

Figure 4. Mean regression-path times, spillover region.

What we see in the spillover region is a different pattern. Now we see that both the congruent conditions and one of the incongruent conditions pattern together, with a
noticeably lower regression-path time for one of the incongruent conditions. There is a marginal main effect of context but only in the item analysis ($p_1 = 0.30, p_2 = 0.07$), with longer reading times in the congruent conditions again. While this does appear to echo the pattern of regression-path times in the critical region, it seems the effect is being driven by the regression-path times in one particular condition.

Figure 5 shows the mean rereading times in the spillover region.

Figure 5. Mean rereading times in the spillover region.

The pattern in the rereading times is similar to the pattern in the regression-path times, except that now there is a bigger difference between the two congruent conditions. Overall the congruent conditions have longer rereading times than the incongruent conditions, although the pattern is not very clear. The ANOVA confirms a marginal main effect of context only in item analysis ($p_1 = 0.31, p_2 = 0.07$).

Figure 6 shows the mean total viewing times in the spillover region.
Finally in the total viewing times for the spillover region we see the same pattern again, with overall longer total viewing times in the congruent conditions than the incongruent conditions, but with some variation. Again, the ANOVA shows a marginal main effect of context in the item analysis only ($p_1 = 0.26$, $p_2 = 0.05$).

6 Discussion

To summarise the findings, first fixation durations, a very early measure, were shorter in the congruent conditions in the critical region. However, there was a complete reversal of this pattern in the regression-path times in the critical region, with longer times in the congruent conditions which were marginally significant. This pattern was reflected to some extent in the spillover region, although it was weakened somewhat by a split in trends in the incongruent conditions. The ANOVA results weakly confirmed the longer reading times in the congruent conditions in the spillover region, showing
marginal main effects in the item analysis for regression-path times, rereading times and total viewing times.

The early results certainly fit with the CT predictions. It was expected that the context sentence, which mentioned one of two characters, would boost the prominence of that character in the critical sentence, making it a likely candidate for the pronoun. When the pronoun’s gender clashed with the ‘boosted’ antecedent’s gender, there was disruption to reading times. This effect only appeared fleetingly, in first fixations on the pronoun. This shows that a discourse factor such as prominence can have an early effect on the processing of pronouns. It is perhaps surprising to find such early discourse effects during pronoun processing, given the findings of Nicol and Swinney (1989) and Sturt (2003), who found discourse effects later in processing. It should be noted, however, that their experiments were on reflexive pronouns, and they were comparing the timing of syntactic binding principles in comparison to discourse effects. It is likely that the processing of a non-reflexive pronoun will be sensitive to different cues from that of a reflexive pronoun, given the nature of the syntactic constraints; while Principle B does not apply to the sentences in the current experiment, differences between Principle A (for reflexives) and Principle B (for pronouns) suggest that pronouns and reflexives will differ in their sensitivity to certain constraints.\textsuperscript{10} The findings here support the view that discourse cues can contribute to the online processing of pronouns from an early stage (Arnold \textit{et al.} 2000; Badecker and Straub 2002; Clackson, Felser and Clahsen 2011).

It is clear that in later measures the pronoun in the incongruent conditions was processed more quickly. What could have driven the reversal of the first discourse effect in the later measures? It is possible that a repeated-name penalty effect played a role in this reversal, although it was not expected. The repeated-name penalty has mainly been observed in simple sentences and with names (Gordon \textit{et al.} 1993), not definite descriptions. Additionally, the effect is usually observed on the repeated-name itself rather than further downstream. However, a repeated name may have had a

\textsuperscript{10} It is not possible to provide a full discussion here of the differences between Principles A and B, however, some key differences are: (i) Principle A specifies a particular antecedent, while Principle B rules out antecedents in certain positions; (ii) the acquisition of Principle B appears to be delayed in child language development, in comparison to Principle A (see Clackson, Felser and Clahsen 2011 for a discussion); (iii) there is some evidence that aphasics can maintain knowledge of Principle A while knowledge of Principle B is lost (Grodzinsky \textit{et al.} 1993).
disruptive effect on the coherence of the discourse, the results of which can be observed at a later processing point. It is possible that the repeated name upset the coherence of the discourse at the point of repetition, and this disruption made the repeated antecedent less favourable. In this way the effects of the repetition, even over a complex discourse, may have been picked up at the point of processing a pronoun. If this is the case, then it suggests that different aspects of the discourse are taken into account at different times over the timecourse of pronoun resolution. At the very earliest point, the antecedent considered is the one that is more prominent, by virtue of being the Cb of the previous utterance (or, in more theory neutral terms, by being the one that refers back to previous sentences/clauses meaning that is probably the topic and as such is likely to be the referent of a pronoun). But later pronoun processing stages may take into account coherence information. This could reflect integration processes, when the reader considers how their interpretation fits into the overall discourse structure. This fits in with the ‘bonding and resolution’ model of pronoun processing (Garrod and Sanford 1994; Garrod and Terras 2000). In this model, encountering a pronominal element triggers the search for an antecedent. Potential antecedents are considered (this is the ‘bonding’ stage). When a candidate has been selected, it is evaluated in the ‘resolution’ stage, to see how the chosen candidate fits in with the overall interpretation of the discourse. Any upset to the coherence of a discourse, such as the repeated name, may not directly affect the bonding stage, but may affect the resolution stage when the discourse interpretation is considered.

Finally, the results of the DP/QP manipulation should be mentioned briefly. No effects of NP type were found throughout the experiment, providing no support for the hypothesis that variable-binding antecedents should be considered before coreference antecedents. This is contrary to the findings of Koornneef et al. (2006) and Koornneef (2008), where the variable binding (QP) antecedent mismatch caused early disruption to reading times. There does not seem to be a preference for one antecedent over another in the current experiments. While the c-command position of an antecedent is an important factor in the processing of reflexive pronouns, it seems that it may be less important in the processing of non-reflexive pronouns.
7 Conclusion

To conclude, I will return to the main research questions outlined above:

1. In a complex discourse, where there are two potential subject antecedents, which will be the preferred referent of the pronoun during processing?
   It seems that there is not a clear preference as far as variable-binding and coreference are concerned. What does seem to be important is the Cb status or prominence within the discourse.

2. What will be the effect of manipulating the previous discourse on subsequent pronoun resolution?
   The previous discourse can provide a ‘boost’ to a particular antecedent’s prominence, making it initially an attractive candidate in the bonding stage of pronoun processing. The coherence of the previous discourse, as far as repeated-names contribute to coherence, also affect pronoun resolution but at a later stage.

3. Will the repeated name penalty be seen with a definite description?
   The repeated name penalty was not measured on the repeated element, but downstream of it. It does seem to have had an effect, despite being a definite description in a complex discourse.

The results presented here support a model in which different types of discourse information are used at different times during the processing of a pronoun. Further research is needed to confirm these results and to explore further the contribution of discourse information over the timecourse of pronoun resolution.

References


Appendix A

Table 1 Mean and standard deviations for first fixation duration, first pass time, regression path time, rereading time and total viewing time in the critical region (no outlier removal)

<table>
<thead>
<tr>
<th>Antecedent type</th>
<th>QP</th>
<th></th>
<th>DP</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Congruent</td>
<td>Incongruent</td>
<td>Congruent</td>
<td>Incongruent</td>
</tr>
<tr>
<td>Context</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>First fixation duration</td>
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<td></td>
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<tr>
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<td>265</td>
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<tr>
<td>Regression-path time</td>
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<td></td>
<td>430</td>
<td>316</td>
<td>378</td>
<td>277</td>
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<tr>
<td>Rereading time</td>
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<td>163</td>
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<td></td>
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<td>296</td>
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<tr>
<td>Total viewing time</td>
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<td>438</td>
<td>421</td>
<td>418</td>
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<tr>
<td></td>
<td>388</td>
<td>327</td>
<td>248</td>
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Table 2 ANOVA results for first fixation duration, first-pass time, regression-path time, rereading time and total viewing times in the critical region\textsuperscript{11}.

<table>
<thead>
<tr>
<th>Item analysis</th>
<th>Participant analysis</th>
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<tr>
<td>Context</td>
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</tr>
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<td>Total viewing time</td>
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</tr>
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</tr>
<tr>
<td>Antecedent type*context</td>
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</table>

Table 3 Mean and standard deviations for first fixation duration, first pass time, regression path time, rereading time and total viewing time in the spillover region (no outlier removal)

<table>
<thead>
<tr>
<th>Antecedent type</th>
<th>QP</th>
<th>DP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context Congruent</td>
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<tr>
<td>First fixation duration</td>
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<td>204</td>
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</tbody>
</table>

\textsuperscript{11} One participant was removed from the analysis in this region because they did not contribute a mean value in every condition (due to individual trial removal as a result of track loss or initially skipped regions).
Table 4 ANOVA results for first fixation duration, first-pass time, regression-path time, rereading time and total viewing times in the spillover region.

<table>
<thead>
<tr>
<th></th>
<th>Item analysis</th>
<th>Participant analysis</th>
</tr>
</thead>
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<td>Total viewing time</td>
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The Status of Yalli/lli in Lattakian Syrian Arabic: Complementizer, Relative Pronoun or Determiner?

Buthaina Shaheen

Abstract

In Lattakian Syrian Arabic, the head of a restrictive relative clause is linked to the clause by the forms yalli/lli. A priori it is not clear whether these forms are complementizers, relative pronouns or determiners. A number of linguists have proposed different analyses for such linking forms. Sag (1997), for example, argues that English relative ‘that’ is a pronoun. In this article, I provide examples which show how the syntactic behaviour of yalli is different from that of a relative pronoun, e.g., yalli cannot be part of a larger clause initial phrase. Other linguists working within the Mainstream Generative Grammar/Minimalism, for example Aoun & Li (2003), have proposed that these linking words are complementizers, but without discussing the evidence to support this claim. A third view, proposed by Ouhalla (2004), is that these particles are determiners heading a specifier of NP. This analysis has a problem with examples where a complement precedes the relative clause. In this paper I argue that yalli is a complementizer.

1 Introduction

Yalli/lli are forms that link the antecedent and the restrictive relative clause in Lattakian Syrian Arabic (LSA) as examples (1) and (2) show. A priori it is not clear whether these forms are complementizers, relative pronouns, or determiners. In what follows I will discuss the syntactic status of these forms, and consider evidence that appears to suggest that yalli/lli are complementizers.

(1) ṣṣadiːq yalli shif-t-o
            the-friend that met-i-him
        The friend that I met.

(2) lbint yalli ḡaklit tiffaːḥa
            the-girl that ate-she the-apple
        The girl that ate the apple

Aoun & Li (2003), Aoun and Choueiri (1996), Elomari (1998), Aoun and Benmamoun (1998) among others have proposed that these are complementizers. However they do not discuss the evidence to support this claim.
Superficially the forms *yalli/lli* look like relative pronouns in that they appear in a position in which certain pronouns and complementizers can appear. However, through some examples I show how they differ from a pronoun: i) *yalli* has only one form regardless of number and gender of the antecedent, and irrespective of the case of the relativized position; ii) *Yalli* cannot be part of a larger initial phrase unlike a relative pronoun, iii) there is a difference in the behaviour of *yalli* in relatives clauses and in wh-questions. This is unlike a wh-word which is consistent in its syntactic behaviour in both constructions. In other words, in wh-questions *yalli* follows a wh-phrase which is presumably in Spec CP and the conclusion to be drawn is that *yalli* is a complementizer.

I also show the arguments that English ‘that’ is a complementizer, the rationale behind this is to show that *yalli* is similar in many respects to English ‘that’.

I finally argue that the analysis proposed by Ouhalla (2004) in which *yalli* is a determiner is untenable because there are empirical problems with it.

The paper is organised into 5 parts. Section 2 provides facts about *yalli* and how it differs from a pronoun. In section 3 I present an argument about English ‘that’. Section 4 discusses some problems for the analysis that *yalli* is a determiner, in particular, it evaluate Ouhalla’s proposal and shows that it is dubious. In section 5 I conclude the discussion with a brief summary of the main points used in this paper to support the claim that *yalli* is a complementizer.

### 2 Yalli/lli as complementizers

In this section I present some facts about the syntactic behaviour of *yalli/lli*:

A. *Yalli* does not have the versatility of a pronoun. It has only one form regardless of number and gender of the antecedent.

(3) *l’ista:z yalli ka:n ho:n*
*the-teacher.MAS.SING that was here*
*The teacher that was here*
(4) l’a:nsi yalli ka:n-it ho:n
  the-teacher.FEM.SING that was-she.FEM.SING here
  The teacher that was here

(5) l’ista:ze:n yalli/l/li ka:n-o ho:n
  the-teacher.MAS.DUAL that were-they.MAS.PLURAL here
  The two teachers that were here

(6) l’a:niste:n yalli/l/li ka:n-o ho:n
  the-teacher.FEM.DUAL that were-they.FEM.PLURAL here
  The two teachers that were here

(7) l’asa:tzi yalli/l/li ka:n-o ho:n
  the-teacher.MAS.PLURAL that were-they.MAS.PLURAL here
  The teachers that were here

(8) l’a:nsa:t yalli/l/li ka:n-o ho:n
  the-teacher.FEM.PLURAL that were-they FEM.PLURAL here
  The teachers that were here

Yalli did not change its form with the change of number of the antecedent; the antecedent is singular in both (3) and (4), dual in (5) and (6), and plural in (7) and (8). Yalli also had the same form irrespective of the gender of the antecedent, the antecedent is masculine in (3), (5) and (7) and feminine in (4), (6) and (8). Pronouns, however, have different forms for number and gender:

(9) huwi ‘eja
    he- MAS.SING came
    He came.

(10) hiyyi ‘eje-t
    she FEM.SING came- FEM.SING
    She came.

(11) hinni ‘ej-o
    they MAS/FEM.DUAL/PLURAL came-MAS/FEM.DUAL/PLURAL
    They came.
Also *Yalli* has one form regardless of the case of the relativized position: examples (3)-(8) show *yalli* introducing the relative clause when subject position is relativized, examples (12) and (13) show *yalli* when object position is relativised; and examples (14) and (15) show *yalli* introducing the relative clause when prepositional object position is relativised:

(12) lkta:b yalli qri:-t-o  
      the-book that  read-I-it MAS. SING.ACC  
      The book that I read

(13) tiffa:ḥa yalli ʾakal-t-a ...  
      the-apple that  ate-I-it FEM. SING.ACC ...  
      The apple that I ate ...

(14) lbint yalli ʾibi-t maʾ-a ...  
      the-girl that played-I with-her FEM. SING. DAT ...  
      The girl I played with ...

(15) lbe:t yalli trebbait fi-h  
      the-house that  brought-up-I in-it MAS. SING.DAT  
      The house that I was brought up in

Again *yalli* had only one form although the case of the relativized position in (12) and (13) is accusative, and the case of the relativized position in (14) and (15) is dative.

One point to mention here with regard to resumptive clitics in this dialect is that restrictive relative clauses have one pattern with two aspects for the distribution of resumptive clitics: in certain contexts, clitics are obligatory. When they are obligatory, they could follow a preposition, a noun, or a verb. In other contexts, resumptive pronouns are ruled out. There are no contexts in which both gaps and resumptives can appear. Clitics are required in all non-subject positions: direct object position, object of preposition positions, possessor position, but do not occur when the highest and embedded subject position is relativized.

B. *Yalli* cannot be part of a larger fronted phrase either as object of a preposition within a PP or as a possessor within a DP. A preposition cannot be used directly before *yalli*:

(16) a rrijja:l yalli ḥkai-t maʾ-o  
      the-man that talked-I with-him  
      The man to whom I talked
b *rrija:l ma`-yalli ḫkai-t the-man to-that talked-i The man to whom I talked

(17) a rrija:l yalli ba`rif mart-o the-man that I-know wife-his The man whose wife I know

b * rrija:l mara yalli ba`rif the-man wife that I-know The man whose wife I know

(16b) is ungrammatical because *yalli behaves as if it were a possessor with a fronted DP; if *yalli were a pronoun, it would be able to appear as a possessor.

*Yalli contrasts with with a wh-word; e.g. *mi:n/who . The latter can be part of a complex initial expression in a wh-question:

(17) ma` mi:n reḥt-i? with who went-you With whom did you go?

(18) zo:j mi:n shif-t? husband who saw-you Whose husband did you see?

Also, whereas one can have *yalli in relative clauses, one cannot have it as a wh-question pronoun, either on its own or as part of a larger fronted phrase. If *yalli were a relative pronoun, one would expect it to function as a wh-question word in a wh-question, as it is the case with the English ‘who’ which can be used in both constructions.

(19) *yalli ra:h? that went? Who went?

Though we might get examples with a preposition before yalli, still there is reason for thinking that it is different from a relative pronoun, mainly because the preposition does not form a constituent with yalli from a syntactic point of view:

(21) wsa:q byalli bta`arf-o mni:ḥ
    trust in-that you-know-him well
    Trust whoever you know well.

(22) `te layalli meḥṭa:j hal maṣare
    give to-that in need this money
    Give whoever is in need this money.

(23) ḥkait-o `an yalli shif-na-h mbariḥ
    talked-you about that saw-us-him yesterday
    You talked about the person that we saw yesterday.

(24) ’akal-o min yalli tbakht-o
    ate-they from that I-cooked-it
    They ate from the food that I cooked

The sentence (21) – (24) contain a type of free relative (a relative clause with no antecedent). The prepositions here are selected by the preceding verb and not by some element in the relative clause. They can be followed by an ordinary NP; an antecedent can be inserted between the preposition and yalli. So (21) can be changed into (25):

(25) wsa:q bshshakhṣ yalli bta`arf-o mni:ḥ
    trust in-the-person that you-know-him well
    Trust the person that you know well.

Although the preposition and yalli are cliticized in examples (21) and (22), I presume they combine in the phonology and they are not one syntactic constituent. In other words, the preposition b and l ‘in’ and ‘to’ respectively do not form a syntactic constituent with yalli. This is rather like he’s in He’s clever or he’ll in he’ll be here, which are single phonological units but not syntactic constituents. It is also like to’s in The man we talked to’s clever, where the auxiliary attaches to a preceding preposition. The preposition which is in the main clause is the head of a prepositional phrase, and the relative clause is the complement. It is quite
common to analyse free relatives as relative clauses with a null antecedent (see Grosu: 2003). My claim that this is merely a phonological cliticization and does not involve any morphological process is supported by the following arguments:

i) There are other prepositions which precede *yalli*, but which are not cliticized to it. Examples (23) and (24) contain prepositions `*an* and *min* `about’ and ‘from’ which come immediately before the complementizer but are not attached to it. (21) and (22) are similar to (23) and (24) in this respect except that the preposition in the former examples is cliticized to *yalli*.

ii) The same prepositions *b/in* and *l/to* can combine with other elements such as the following definite article (26) and (27) and the following noun (28) and (29). This suggests that they are syntactically independent of their hosting words:

(26) wsːːq belbrofisoːr
    trust  in-the-professor
    Trust the professor

(27) `tai-t lalulaːd baskoːt
    I gave to-the-children biscuits
    I gave biscuits to the children.

(28) tfajaʾt bseʾr ʂʃarʃ
    I surprised in-rates exchange
    I was surprised with the exchange rates.

(29) `tai-t lalaila baskoːt
    I gave to-Laila biscuits
    I gave biscuits to Laila.

iii) There are free relative clauses introduced by *yalli* on its own, where the relativized position is a nominal position: subject position (30) or object position (31).

(30) yalli ʾakal lbaskoːti hoːn
    that ate the-biscuit here
    (The person) that ate the biscuit is here
(31) yalli ba`f-o ho:n
that I know-him here
(The person) that I know is here

Since free relatives can appear in subject and object position, one expects them to appear in prepositional object position (regardless of whether the preposition is combined with yalli or not)

C. Yalli can co-occur with mi:n/who in a wh-question: if yalli were a pronoun, one would expect it to occupy initial position in a question, and not follow a question word mi:n. That is, yalli can’t be in Spec CP in these wh-questions and therefore it has to be a complementizer. If it is a complementizer in wh-questions it is natural to assume that it is a complementizer in relative clauses.

(32) mi:n yalli raːh?
Who that went?
Who went?

As (32) shows, both mi:n and yalli can co-occur. It is not uncommon for languages to allow overt wh-elements and complementizers. In Norwegian a wh-phrase can be followed by an overt complementizer:

(33) jeg lurer pa hvem som ser mest svensk ut.
I wonder who that looks most Swedish

In modern English this is not the case: ‘an overt complementizer (like that/for/if) cannot have an overt specifier in the superficial structure of a sentence’ (Radford, 2009: 131)

(34) a. The man who we saw
    b. The man that we saw
    c. *The man who that we saw

D. Yalli would also appear in all types of relative clauses including ones that in English only allow that:
3 English that complementizer vs. yalli

I will consider evidence that supports the claim that English *that* is a complementizer\(^1\). It can then be considered whether the same arguments can be extended to *yalli*.

A. The fact that *that* has one form regardless of different antecedent types is consistent with it being a complementizer rather than a pronoun (Radford, 1988: 483). Pronouns, however, typically co-vary in form with their antecedents:

(36) I have seen the boy (male)/girl (female)/book (inanimate) *that* was here yesterday.
(37) Have you met the man (singular)/men (plural) *that* we talked to yesterday?

This is also true for *yalli* as in examples (3) – (8).

Worth mentioning here is that there is a pronoun *that* in English which is different from the relative *that*; the former having singular/plural forms:

---

\(^1\) There are other arguments which support the fact that ‘that’ is a complementizer, but which cannot be extended to *yalli* in LSA:

A. Huddleston and Pullum (2002: 1057) argue that *that* ‘would not only cover the ground of all the simple ‘wh’ words put together…it would also appear in a variety of constructions where no ‘wh’ word could replace it’ as shown in (1) where a relative pronoun like *how* cannot replace *that*:

(1) a I was surprised at the way that she handled the problem.
  b *I was surprised at the way how she handled the problem.

Huddleston and Pullum argue further that *that* can take non-nominal as antecedents, unlike relative pronouns:

(2) a. It was *to him* that I was referring.
  b. *It was to him who I was referring.

B. Relative pronouns can be used in both finite and infinitival relative clauses, by contrast, *that* can only introduce finite relative clauses (Radford, 1988: 483):

(3) a. Peter is not a good father to who to talk.
  b. *Peter is not a good father to that to talk.
(38) a That’s an interesting book.
    b Those are interesting books.

So if relative *that* was a pronoun we would expect (39b) not (39a) to be grammatical, but this is not the case.

(39) a The men that we talked to yesterday
    b *The men those we talked to yesterday

B. English *that* can never be part of some larger relative phrase; it cannot, for example, be a direct complement of a preposition (see Huddleston and Pullum, 2002: 1057 and Radford, 1988: 483). Thus, whereas we can have relative clauses which are introduced just by *who* and ones which are introduced by more complex phrases containing *who*, we cannot have *that* in the same context; ‘For one thing, typical Pronouns (e.g. relative who or which) can function as the immediately following Complement of a Preposition, whereas *that* cannot’ (Radford: 482):

(40) a. The man to whom you gave it.
    b. *The man to that you gave it

*That* also does not have a genitive form, unlike relative pronouns (Radford, 1988: 483):

(41) a. The man whose mother went shopping.
    b. *The man that’s mother went shopping

(42) a. The man to whose mother you give the flowers.
    b. *The man to that’s mother you gave the flowers

*Yalli*, see examples (16b) (17b), cannot be part of a larger fronted phrase. Being so, it is similar to English ‘that’.

The argument so far suggests that English *that* is not a pronoun. The argument also shows that the syntactic behaviour of *that* is similar to that of *yalli* suggesting that *yalli* is a complementizer.

It is noteworthy that there are others who proposed that *that* is a pronoun, but here I show that this position is dubious. Sag (1997), for example, offers the following argument about *that* being a pronoun and not a complementizer:
A. That-relatives like (43) involve what would appear to be a that-trace structure of a kind that is not in general permitted: for Sag (43) is acceptable because the gap is following a relative pronoun and not a complementizer, unlike (44) where the gap is not grammatical as it is following a complementizer.

(43) The people [that ___ voted in the election]
(44) *The people [that I thought [that ___ voted in the election]] (462)

The counterargument to this claim is that the contrast between (43) and (44) suggests that the two ‘that’s can just be two different complementizers: relative ‘that’ and complement-introducing ‘that’. Essentially, Sag highlights a difference between relative that and complement that. The former but not the latter allows a following extraction site. This is similar to LSA, where there is yalli and inno; two different complementizers (see Ouhalla, 2004) where the former introduces a relative clause, whereas the latter introduces a complement clause. The only difference in the two languages is that the two complementizers look different in LSA, but similar in English.

B. That-relatives freely coordinate with wh-relatives (Sag, 1997: 463). For Sag, the fact that that-relatives and wh-relatives can be combined requires them to be of the same sort of structure:

(45) a. Every essay which she's written and that I've read is on that pile.
   b. Every essay that she's written and which I've read is on that pile.

However, it is important to note that coordinate structures typically allow as conjuncts anything that can appear in the position where the coordinate structure appears. The fact that the two relative clauses have different structures if ‘that’ is a complementizer is no reason why they shouldn’t be coordinated. Here is an example where noun phrases with different structures are coordinated:

(46) I borrowed [[Kim’s book about syntax] and [those papers about phonology]]

The point here is that one conjunct ‘Kim’s book about syntax’ has a specifier ‘kim’, while the other conjunct doesn’t have anything in the specifier position. This is the same in the relative
clause examples in (45a) where there is ‘which’ in the specifier position in the first conjunct, but there is nothing visible in the specifier position in the other conjunct.

C. Other evidence for the (pro)nominal status of that comes from dialect variation, for example, the existence of varieties (Hudson,1990 cited by Sag 1997) where relative that allows a possessive form, as in (47):

(47) The pencil [that's lead is broken] (463)

‘That’ probably is a pronoun in a dialect that allows (47) but Standard English doesn’t allow such things.

4 Could yalli be a determiner?

The discussion so far yields evidence that yalli which is similar to relative that is not a pronoun. However, there is yet another analysis that assumes that relative that is a determiner. Ouhalla (2004) proposed that the relative clause is a DP, originating in the specifier position of NP. The N moves to a position in front of yalli/lli. Under this proposal these particles are determiners heading a specifier of NP:

(47) [DP l- [NP [DP yalli shif-t-o] [N' $sadi:q]]] ⇒ [DP l- [N $sadi:q] [NP [DP yalli shif-t-o] [N' t]]]

This proposal might explain why there is yalli only with definite heads and not with indefinite antecedents as in (49). When there is an adjective phrase modifying an indefinite noun there is no definite article used (48).

(48) a. lbi $n  l-hilwi
   the-girl the-beautiful
   The beautiful girl

   b. bint hilwi /* l$hilwi
   girl beautiful/*the-beautiful
   A beautiful girl
(49) a. rijja:l yalli ḥkait ma`-o
    The-man that talked-I to-him
    The man that I talked to him.

    b. rijja:l (*yalli) ḥkait ma`-o
    a man that talked-I to-him
    a man that I talked to him.

However, this analysis is problematic:

A. This analysis treats Arabic relative clauses as distinctive; D with a TP complement whereas in most languages they seem to be CPs. One wants to treat languages as similarly as possible.

B. This analysis has a serious problem; N may have a complement. In examples like (50) a complement precedes the relative clause, after head movement the complement is left behind. The result of head-movement is ungrammatical because the complement follows the relative and it should precede.

(50) *ṭṭari:q yalli ḥkaina `ann-ollandon
    the-road that talk-we about to-London
    *The road that we talked about to London

(51) ṭṭari:q llandon yalli ḥkaina `ann-o
    the-road to-London that talk-we about
    The road to London that we talked about

C. Stacking, where a nominal is associated with more than one relative clause, is another argument against Ouhalla’s. In a sentence like (52), there is a specifier and it is widely assumed that one cannot have more than one instance of a specifier; there is an N’ combining with DP to form an NP and one does not expect to apply that again.

(52) lbint lli shif-t-a lli ḥkai-na `ann-a mba:riḥ
    the-girl that saw-I her that talked-we about-her yesterday
    The girl that I saw that we talked about yesterday

Worth mentioning here is that both T and C have a single specifier in Arabic (as it is the case in English).
5 Conclusion

This discussion of yalli/lli leads us to conclude that they are complementizers that introduce relative clauses in Lattakian Syrian Arabic. I have highlighted a number of reasons for thinking they are not pronouns, especially the fact that they are invariant and the fact that they are never part of a larger clause-initial phrase. I have also shown that they are rather like English relative that, another complementizer which has sometimes been assumed to be a pronoun. Finally I have argued against Ouhalla’s (2004) proposal that yalli and lli are determiners. If they are not either pronouns or determiners, it seems clear that they must be complementizers.

References

Perception and Production of English [d] by Pakistani Learners

Nasir A. R. Syed

Abstract

The main aim of this experiment was to study the perception and production of English [d] by Pakistani learners in order to understand the role of the following factors in L2 acquisition: native and non-native input, word and sentence context, and marked and unmarked position of the target sound in words. In this study, three target groups and two control groups were selected for a series of experiments. Each of the three target groups comprised 30 participants while each of the control groups comprised ten participants. The first of the three target groups was of ‘inactive’ learners of English in Pakistan who could understand English but did not speak or listen to English regularly. The second of them was of ‘active’ learners of English in Pakistan who did speak and listen to English spoken by Pakistani teachers regularly. The third group was of ‘advanced’ learners who were living in the UK and were actively involved in speaking and listening to English. Among the two control groups, one was of Pakistani English language teachers and the other of Saraiki monolinguals. Perception tests comprising identification and discrimination tasks were conducted with all the five groups but production tests were conducted with only the three target groups. The recordings of the production test were evaluated by native speakers of English on a Lickert scale. The results show that the target learners could discriminate [d] from other sounds of English but they equated English alveolar [d] with either L1 dental or retroflex stops. In all the tests, the UK group performed best of all and the ‘inactive’ learners were at the bottom while the ‘active’ Pakistani learners were in between. The performance of the participants was better in onset than coda position, and was better in words than in sentences.

1. Theoretical background

A large body of empirical research on the acquisition of second language phonetics/phonology demonstrates that various linguistic factors like position of the target sound in words, context in which the sound is produced, L1 influence and universal markedness, and non-linguistic factors like age of acquisition, motivation, input and learning environment play an important role in the acquisition of L2 consonants. Various models of second language acquisition have been developed to account for the difficulties that L2 learners face in the acquisition of sounds of the target language (hereinafter TL). The Contrastive Analysis Hypothesis (hereinafter CAH) claims that the differences between L1 and L2 cause errors in second language acquisition (Lado 1957, Wardhaugh 1970). Thus, the CAH declares L1 as the main source of difficulties in the acquisition of an L2. The Markedness Differential Hypothesis (MDH: Eckman 1977, 2004) predicts that among the elements which are different between L1 and L2, the one which is more marked
will be relatively more difficult to learn than the one which is less marked or unmarked. Later research either provides empirical support or suggests amendments to these models, or presents new ideas about the difficulties faced by learners in the acquisition of sounds of L2. Some of the studies point out some very important factors which may affect the acquisition of L2 phonemes. Some of these factors are experience, input and learning environment.

Flege, Takagi & Mann (1996) found that experienced Japanese learners performed better in the identification of English liquids. However, Brown (1998, 2000), on the basis of her empirical studies with Japanese, Korean and Chinese learners, concludes that the age of exposure and experience do not matter in the acquisition of L2 sounds unless the distinctive feature required for the target sound is active in the L1 of the learners. Flege (1995) delineates the same fact in another way by claiming that if the establishment of a new phonetic category is blocked on account of equivalence classification between an L2 sound and a corresponding L1 sound, the experience or input may not bring any considerable improvement. The speech learning model (SLM) by Flege predicts that a new phonetic category may be established only if learners perceive the difference between an L2 sound and the corresponding L1 sound. The SLM also predicts correspondence between perception and production of L2 sounds (Flege 1995: 239).

The context in which a particular consonant of L2 occurs also plays a very important role in acquisition. Markedness is not only of the nature of sound; it may be of the position of occurrence of a particular L2 sound. A consonant is acquired easily or relatively better in a less marked position than in a marked position (Eckman 1977, 2004). The position of the L2 segment in words has been focus of the MDH. An L2 segment may be relatively easier to acquire in onset than in coda position because coda position is more marked than onset position (Archibald 1998). This prediction is based on the fact that the set of possible coda consonants may be a subset of the set of possible onset consonants in the world languages (Ibid: 163). The studies confirm that acquisition of a contrast is easier in onset than in coda position (ibid: 57).

It is not only the position in word which contributes to the difficulty or ease of acquisition of a new sound of an L2. Context also has its influence on acquisition. The level of accuracy of L2 learners in production of sounds spoken in words may be different from the level of accuracy of the same sounds produced in sentences. Birdsong (2007), on the basis
of an empirical study with L2 French learners, developed a generalization which predicts a unidirectional relationship between competence of L2 learners in global pronunciation (sounds spoken in sentences) and segmental utterance (sounds produced in isolated words) in that better performance of learners in the production of L2 sounds in sentences implies better production of the same sounds in words but not vice versa. Thus, the existing literature on second language acquisition provides empirical evidence that factors like environment, input, context and position of sounds in words play effective role in the acquisition of L2 sounds. The accurate acquisition of a new sound of L2 actually means both accurate perception and production of the target sound. Flege (1995) predicts correspondence between perception and production of L2 sounds in the sense that L2 learners produce sounds of the L2 in the way they perceive them. Thus, better production of an L2 sound implies better perception of the same L2 sound by learners. Ha (2001) and Kulge et al (2007), for example, found strong correspondence between perception and production of consonants of English by L2 learners.

The next part provides research questions followed by the detailed description of research methodology including details of the participants, nature of stimuli and evaluation process adopted in the study. The results are presented in part 4 and analyzed in part 5. The paper ends with conclusions and recommendations in part 6.

2. Current Study

The study aims to analyze the perception and production of English [d] by Pakistani learners, whose L1 is Saraiki. It will also study the role of input, context and position on the acquisition of English [d] by the learners. Saraiki is a language of the Indo-Aryan family (Masica 1993) spoken in Pakistan. Like most of the languages of the Indo-Aryan family, Saraiki has retroflex and dental stops in its phonemic inventory. But English has alveolar stops in its phonemic inventory. As the L1 of the Saraiki learners of English has two consonants [ɖ ɖ] corresponding to the English alveolar [d], it is expected that these learners may face difficulty in acquiring a new phonetic category for English [d]. There is a probability that they perceptually assimilate English [d] with one of the corresponding sounds of the L1. The current study aims to analyze this phenomenon with following research questions;

1. How do the Saraiki learners of English perceive and produce English [d]?
2. Is there any correspondence between perception and production?

3. How do input (from native speakers and non-native teachers), context (words and sentences) and position (onset and coda) of the target L2 consonant affect the acquisition of the sound?

3. Research Methodology

In Pakistan there are two types of learners of English who may be classed as active and passive learners. Since English is the language of official communication and medium of instruction in sciences and technology, the educated class of society has to learn English regardless of whether they speak it regularly or not. Thus, there are a large number of educated people in Pakistan who can read/write English but do not speak it. In this study they are called ‘Adult’ learners of English. Another class of learners comprises of those who besides reading/writing, speak and listen English regularly. In the current study they are called 'Student' learners.

3.1. Participants

For the current experiment, two groups of target learners were selected from Pakistan to represent active and passive learners of English. A third group of the target learners was selected from Essex, United Kingdom. These UK-based learners were basically from Pakistan who had come to the UK as adults. They were not active learners in Pakistan but after having arrived in the UK, they had been getting direct input from the native speakers of English. The participants of all the three groups were educated initially from similar types of educational institutions in remote rural areas of Pakistan and spoke same L1. Extreme care was taken in the selection of the participants that they are similar in all respects except for the test variables. The details of the participants are given below.

3.1.1. Adult learners

Pakistani teachers are expected to be in touch with English language because most of the academic reading/writing process occurs in English in Pakistan. However, in rural areas of Pakistan, teachers do not necessarily speak/listen English. A group of 30 college teachers teaching in remote areas of Pakistan were selected to represent the passive learners of English. They could read and write English but they did not speak/listen to English regularly. None of them has ever been a student or teacher of English language. All of
them were teaching subjects other than English in the rural areas of Southern Punjab (Central Pakistan) where Saraiki is L1 of majority of the population. According to their own estimation, these teachers listened English language spoken by non-native speakers for less than an hour per day. They had not listened English spoken by the native-speakers of English for a considerable period of time regularly. The age of these participants ranged between 23 and 51 years (mean=32.66 SD=7.8).  

3.1.2. Student learners

30 Pakistani students, who were doing MA in English language and literature from Pakistan who had never got input from any native speaker of English in the past for a considerable period of time, were selected in this group. Their ages ranged between 18 and 27 years (mean=21.97, SD=2.6.) According to their own statements, they spoke English for an average of 2 hours (minimum=0, maximum=5, SD=1.2) daily. They listened English spoken by non-native speakers (their teachers in most of the cases) for an average of 2.56 hours (range= 0-8, SD=1.6) daily. They represent the active learners of English in Pakistan who get input from Pakistani teachers.

3.1.3. UK-based learners

30 Pakistanis who had been living in Essex in the UK for 70.8 months (minimum=4, maximum=360, SD=80) were selected as advanced learners. They had got input from Pakistani teachers and were inactive learners of English at the time of arrival in the UK. After arriving in the UK, they became active speakers of English and were getting input from native speakers of English. Their ages ranged between 21 and 59 years (mean=33.26, SD=7.212). Best & Tyler (2007:21) suggest that the cut-off point for experienced learners should be between 6-12 months stay with native speakers of L2 because studies (Flege & Liu 2001 etc.) show after that initial period “very little perceptual benefit seems to accrue from additional experience”. All except one of the participants of this group had stayed in the UK for less than six months and only three of them had stayed there for less than a year at the time of the experiment. 27 of them had stayed in the UK for more than a year. They had started listening English by native speakers of English after their arrival in the UK. Their age of arrival in the UK ranged between 19 and 36 years (mean=26.26, SD=4.58).

1 SD= Standard Deviation
They all were from the same area in Pakistan from where the other two groups of participants were selected.

3.1.4. Control groups

Ten English language teachers in Pakistan and ten Saraiki monolinguals were also selected as control groups. The purpose of the selection of English language teachers was to have an idea of the input that learners of English get in Pakistan. All the teachers selected for the experiment were from the same colleges where the student participants were selected. The monolinguals were selected with a view that the results of the perception test with them would provide a basis for understanding the perceptual mapping between the consonants of L1 and L2 in the minds of the Saraiki learners of English before they had started learning English as L2. Thus the experiment with the monolinguals would provide a goodness of fit type of yardstick for English [d] vis-à-vis Saraiki retroflex and dental stop. The L1 of the participants of all five (two control and three target) groups was Saraiki.

3.2. Experiment

The experiments were conducted in different places of convenience to the participants. Most of the experiments in Pakistan were conducted in the institutions where the respondents were teaching/studying. None of the participants was paid for participation. First of all, the nature of the experiment was explained to them. Then, the participants were asked to give written permission on a printed consent form which carried a brief description of the experiment. All the respondents were served a questionnaire to elicit information about their linguistic and academic background. Ethical approval for this study was obtained from the University of Essex and approval for conducting experiments within the institutions in Pakistan was also sought from the concerned heads of the departments/institutions where the experiments were conducted.

VCV stimuli (like [ada]) for the perception test were recorded in the voice of a female native speaker of English (aged 27) who was from Essex. An M-AUDIO MICROTRACK II professional 2-channel digital audio recorder was used for recording the stimuli. The recording was done in a quiet psycholinguistic laboratory in the Department of Language and Linguistics, University of Essex. The audio recording device had a setting of 44.1 KHz sampling rate and 16 Bit depth. The same recording device which was used for recording of the stimuli was also used for recording the participants of the study.
The study consisted of two experiments, a perception and a production test. The perception test consisted of identification and discrimination tasks which are detailed below. The nature of the experiment was explained to the participants in their L1 and the same was also written in English on the answer sheets which were provided to the target participants and English language teachers.

3.2.1. Identification Task

In the identification task, the stimuli ([ada] sounds) were played and the respondents were asked to identify the consonant between two vowels. The participants were asked to write their responses in both Urdu and English on a given answer sheet. Some extra CVC stimuli spoken by the same native speaker were also mixed in with the target stimulus as catch trails so that the participants would not know the target sounds. Each of the stimuli was played three times. For each of the correct identifications one mark was awarded so that those who identified [d] correctly all three times got 3 marks. In the identification task, though the stimuli were repeated three times but the order of the stimuli was changed randomly on each repetition. The participants were allowed to listen to any stimulus more than once and were asked to write their answers only when they had fully identified the consonant. Most of the times, the respondents wrote their answers on the first hearing. However, sometimes they asked for repetition. Audacity 1.3 Beta (Unicode) software was used for playing sound files. Cosoni CD 920 MV headphone was used for proper listening.

3.2.2. Discrimination Task

The discrimination task was conducted after the identification task. In the discrimination task, recordings of [ada] and two other VCV carrying consonants closer to [d], were played and the respondents were asked to match the first consonant in VCV with the next two and determine if the first sound matches with second, third or neither of the two. The respondents noted their responses on the given answer sheets by ticking in the proper cell. The following stimuli were used for testing the participants’ discriminability of [d].

[aadaa] [aajaa] [aadʒaa]

These stimuli were played along with some catch trials and distracters.
3.3. Production test

The final stage of the experiment was a production test. The participants were asked to read at normal rate a list consisting of words carrying the target sounds. The list carried the words with the target sounds twice; once in a carrier sentence and once in isolated words. The carrier sentence was ‘I say …… again’. The stimuli for the production test were ‘deal’ and ‘weed’. Thus, we got the production of [d] by the participants in onset and coda position in words and sentences. Along with the target words (‘deal and weed’) some other words were also included in the list which the participants read in the production task. So the participants did not know the target sounds. The participants were asked to read the stimuli at normal speed which is recommended for such studies (e.g. see Strange 2007: 41).

3.4. Evaluation of the production test data

The production test data were evaluated by native speakers, as is standard in SLA studies (Larson-Hall 2004:49, Frieda & Nozawa 2007:83 & Guion et al 2000, Schmidt 2007 etc). 4 native speakers of English were asked to mark the target sounds on a Lickert scale of 1-5 where 5 meant ‘native-like’, 4 meant ‘a little deflected away from native-like’, 3 meant ‘different from natives but understandable’, 2 meant ‘hardly understandable’ and 1 meant ‘unintelligible’. Marking on a Lickert scale is normally recommended for assessment in such tests (Porte 2002: 49). A printed copy of the criterion chart was provided to the judges along with instructions. The whole procedure was also explained orally to the judges before evaluation. The judges evaluated the sounds in the researcher’s office in the latter’s presence. The judges were paid for their services. All the judges were from the County of Essex. They marked the sounds in separate sessions.

The reliability of the judgements was tested using an absolute reliability test (Schofield 2011) and the acceptance level was fixed 60% agreement (or .6 agreement value) because for such evaluations this threshold is normally accepted by statisticians (Jones & James 1979:215, Hair et al. 2006/1998: 118 etc.) and linguists (Tseng, Zolta & Schmitt 2006:93, Ghenghesh 2010:131, Schofield 1995:206 etc.). As the agreement of the judgements by the four native speakers was below the threshold, the judgement of one of the judges (who disagreed with the other judges maximally) was discarded. After exclusion of the marks by one of the judges, the absolute agreement in the marks of the native speakers for [d] in
words in onset was 62% (0.615) and in coda position 63% (0.625) while in sentences the agreement among the judges in their marks in onset and coda position was 59% (0.585) and 73% (0.73) respectively. The average of the marks of the three judges was taken for further calculation.

The productions of [d] in isolated words by all participants and that in sentences by only the UK participants were marked. Thus, overall performance of the participants of all groups will be compared on the basis of their production of the target consonant in the context of isolated words. However, the production of the UK group in both isolated words and sentences will be compared to study the role of context in the acquisition of L2 consonants. The reason for studying the performance of the UK group in production of [d] in words and sentences is based on the assumption that the only the advanced group of learners can show equally better performance in the production of L2 sounds in isolated words and in continuous speech. The results are discussed in the following paragraphs.

4. Results

As discussed in the previous section, perception and production test were used for data collection. The perception test was based on two tasks namely identification and discrimination of [d]. In the discrimination task the accuracy of the UK, Student and Adult groups is 96.7%, 97.1% and 96.7% respectively. In the identification task, the accuracy of the UK, Student and Adult participants is 95.6%, 72.12% and 74.44% respectively. Kruskal Wallis test confirms significant variance among the groups in identification test (chi square=7.728, sig=0.021). More than 95% of the participants have similar responses in identification and discrimination task which confirms the results of the perception test. It is important to point out that out of total 90 participants, 81 participants (90%) were consistent in their responses in all the three trials of the identification task i.e. they either identified the target correctly in all three trials or incorrectly in all three trials. Only 9 participants identified the target partially correctly and partially incorrectly. The following table reflects this.

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2 Although the agreement in the marks of the judges awarded for [d] in onset position in sentences was below the threshold (i.e. 60% agreement), it was accepted as the last possible option because the difference of the agreement level was not far from the fixed threshold.
1.1: The frequency of responses of the participants in the identification task

<table>
<thead>
<tr>
<th>No. Of times [d] was identified correctly</th>
<th>Participants</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>.00</td>
<td>13</td>
<td>14.4</td>
</tr>
<tr>
<td>2.00</td>
<td>9</td>
<td>10.0</td>
</tr>
<tr>
<td>3.00</td>
<td>68</td>
<td>75.6</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The table 1.1 shows that 13 participants could not identify the target sounds in all three repetitions and 68 of them identified the target sound correctly in all three repetitions. So, these 81 participants were consistent in their responses as they either identified the target sound correctly or incorrectly in all three trials. Only 9 of the participants were not consistent in their behaviour in that they twice identified the target sound correctly and once incorrectly.

The following table shows average marks obtained by the participants in the production of [d]. Standard deviations are given in parentheses.

1.2: Average marks of the participants in the production of [d]

<table>
<thead>
<tr>
<th>Group</th>
<th>Words</th>
<th>Sentences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Onset</td>
<td>Coda</td>
</tr>
<tr>
<td>UK</td>
<td>3.93 (.33)</td>
<td>3.67 (.38)</td>
</tr>
<tr>
<td>Student</td>
<td>3.55 (.31)</td>
<td>3.43 (.54)</td>
</tr>
<tr>
<td>Adult</td>
<td>3.25 (.42)</td>
<td>3.67 (.44)</td>
</tr>
</tbody>
</table>

The performance of different groups in onset and coda position in words is tested by applying a series of t-tests on the data which shows that the marks obtained in onset are significantly different from those in coda position in the UK (t=2.755, sig=.01) and Adult (t= -3.816, sig=.001) groups but not in the Student group (p>.05). To see the interaction between position of consonant (onset and coda) and grouping, a two way (2*3) ANOVA with position (onset and coda) as the within group factor and grouping as the between group factor is applied which confirms significant interaction between groups and position (F= 10.812, df= 2, sig=.001). The group variance is also significant (F= 9.810, df=2,
However, the post-hoc Bonferroni test confirms only a significant difference between the UK and Student (sig=.001) and the UK and Adult groups (sig=.001), while the difference between the Adult and Student groups is non-significant (p>.05).

A two-way within subjects ANOVA is also applied to see the difference in the UK participants’ production of English [d] in isolated words and sentences and the interaction between position (onset and coda) and context (words & sentences). The results show a significant difference in the performance of the UK group between words and sentences (F= 19.072, df=1, sig=.001). However, the interaction between position and context is marginally non-significant (F= 4.152, df=1, sig=.051).

Spearman’s rho correlation test confirms a weak but significant correlation between the perception (identification) and production (r= .218, sig=.039) of the participants. The correlation between perception and production is also verified in the sense that the group of participants which is better in perception is also better in production and vice versa.

Since the average of the three judgements was taken in the production test, the marks of the production test were not in round figures. If the marks of the participants are rounded to the closest whole numbers, we find 26 out of 30 participants of the UK group who are in category ‘4’ which is defined as ‘a little deflected away from native-like’. 19 and 7 participants of the Student and Adult groups also lie in this category respectively. The following table shows the overall results;

1.3: The production of English [d] by the participants

<table>
<thead>
<tr>
<th>Category</th>
<th>UK</th>
<th>Student</th>
<th>Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native-like (5)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A little deflected away from native-like (4)</td>
<td>26</td>
<td>19</td>
<td>7</td>
</tr>
<tr>
<td>Different from natives but understandable (3)</td>
<td>4</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>Hardly understandable (2)</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Unintelligible (1)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
The study of the nature of errors in perception of the target sound may provide important clues about the phonetic category of the sound in the L2 phonemic inventory of the participants. In terms of manner of articulation, the target sound is perceived correctly by all the participants. However, errors in the perception voicing of the target sound are done by the participants. The identification of the place of articulation of the target sound by the participants will be discussed separately in detail.

Out of the total errors of the participants in the identification of [d], 97.96% were those of voicing. It means the respondents identified English [d] as a voiceless stop. The following table shows detail of such errors. The voicing errors committed by the English language teachers in Pakistan and the Saraiki monolingual participants are also included for comparison.

1.4: Errors in perception of voicing

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of Times [d] is perceived [t]</th>
<th>% age</th>
<th>Total Trials</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>4</td>
<td>4.4%</td>
<td>90</td>
</tr>
<tr>
<td>Student</td>
<td>21</td>
<td>23.33%</td>
<td>90</td>
</tr>
<tr>
<td>Adult</td>
<td>23</td>
<td>25.6%</td>
<td>90</td>
</tr>
<tr>
<td>Monolinguals</td>
<td>9</td>
<td>30%</td>
<td>30</td>
</tr>
<tr>
<td>*ELTP</td>
<td>9</td>
<td>30%</td>
<td>30</td>
</tr>
</tbody>
</table>

*English language teachers in Pakistan

Another important factor in the perception is place of articulation of the target sound. English [d] is alveolar; while the L1 of the participants has retroflex [ɖ] and dental [ɖ]. In identification task, they were asked to write their answers in two languages i.e. English and Urdu/Saraiki. The Urdu alphabet system has two letters for voiced dental and retroflex stops which are ‘د’ for dental stop and ‘ڑ’ for retroflex. It also has two letters for voiceless dental and retroflex which are ‘ڈ’ and ‘ڈ’ respectively. In response to the stimulus carrying English [d], all the participants either wrote the symbol representing to dental or retroflex in Urdu. None of them pointed out that what they were hearing was neither dental nor retroflex stop. Thus an important question arises whether the participants perceive

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3 Saraiki uses the same alphabet system which Urdu does. So, the letters for these two sounds in Urdu and Saraiki are the same and all educated people know Urdu very well.
English [d] as a separate alveolar stop or they equate it either with retroflex or dental stop of their L1. The current results show that the participants mostly identified English [d] as either dental stop or retroflex. Even those who perceived it as voiceless identified it either voiceless dental or voiceless retroflex. The table 4.4 shows how many times the participants perceived English alveolar stops as dental and retroflex. The responses of Saraiki monolinguals and English language teachers in Pakistan (ELTP) are also included for comparison.

1.5: Frequency of identification of [d] as dental or retroflex stop

<table>
<thead>
<tr>
<th>Groups</th>
<th>Monolingual</th>
<th>#ELTP</th>
<th>Adult</th>
<th>Student</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>No.</em></td>
<td>%age</td>
<td>No.</td>
<td>%age</td>
<td>No.</td>
</tr>
<tr>
<td>Dental</td>
<td>29</td>
<td>96.7</td>
<td>10</td>
<td>37.04</td>
<td>54</td>
</tr>
<tr>
<td>Retroflex</td>
<td>1</td>
<td>3.3</td>
<td>14</td>
<td>51.85</td>
<td>36</td>
</tr>
<tr>
<td>Others</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>11.1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
<td>27</td>
<td>100</td>
<td>90</td>
</tr>
</tbody>
</table>

* No.= Number of times a stimulus was considered dental or retroflex. #ELTP = English language teachers in Pakistan.

5. Discussion

We analyze the results in the light of the research questions. The first question was about the nature of perception and production of English [d]. The discrimination test results show that the participants can discriminate English [d] from other sounds of English quite easily as the accuracy of all the participants is above 95% in the discrimination test. But they do not seem to have developed a new phonetic category for English [d] because in identification test they equated it with either retroflex or dental stop of their L1. None of the participants pointed out that the consonant in the stimulus was neither retroflex nor dental stop. We shall discuss this point later. As long as their production is concerned, most of the participants of UK and Student and some of participants of the Adult group produce English [d] which is ‘a little deflected away from native-like’ while some of the participants of the UK and Student groups and most of the participants of the Adult group produce English [d] in a way which is ‘different from natives but understandable’ (see table 1.3 above).

4 There were three repetitions but one of the teachers did not write his responses in Urdu. Thus the responses of 9 teachers with (9*3) 27 repetitions are included in this result.
The second of the research questions was about the correspondence between perception and production. The correlation between the two confirms the correspondence between perception and production. The results also confirm similar correspondence in that the directionality of learnability in perception and production is same among the learners in that the learners (UK group) who got better marks in perception also got relatively better marks in production. In other words, those who perceive an L2 sound better also produce it better. In this study, the perception is determined on the basis of identification, not discrimination, test because the real understanding of an L2 sound by learners can be had through identification, not discrimination, test (Boersma & Hamann 2009:31).

In the process of learning, perception occurs prior to production. The results verify this because the perception test results are better than the production test results. If we take the mark of the UK participants in production (3.93 out of 5) and convert it to percentage we can say that the UK group has an average of 78.6% accuracy in production test. Similarly the Student and Adult participants have 71% and 65% accuracy in the production test. On the other hand their accuracy in the perception (identification) test is 95.6%, 72.12% and 74.44% respectively. Thus, the participants are better in perception than in production. This is in line with the claim that there is a period of accurate perception before accurate production in the process of learning an L2 (Osborne 2010: 9).

The third research question was about the role of position, context and input in the acquisition of L2. We shall take these one by one. Only the UK-based learners acquired significantly more marks in the production of [d] in onset than in coda position. As onset position is stronger and less/unmarked, the learners show better results in onset in the production of [d]. This is in accordance with the predictions of the Markedness Differential Hypothesis. The MDH predicts more difficulty for learners in the acquisition of an L2 sound in coda than in onset position. An important finding in the results is the significant interaction between the position and grouping variables. It points out the role of markedness at different stages of language acquisition. The significant interaction between position and grouping indicates that the nature of difficulty in learning for different group of learners in the onset position may be different from that in coda position. Perhaps this is the reason that the performance of the Adult and Student groups in onset and coda position is not in line with that of the UK participants.
Another important question in the study was the role of context in the acquisition of L2 sounds. The results of the participants are better in the production of [d] in words than in sentences, which is in line with the generalization developed by Birdsong (2007) about the acquisition of L2 sounds that better performance in the acquisition of L2 consonants may be obtained in words before sentences. It is quite natural because the learners acquire words prior to sentences.

The role of input was also part of the research questions. The three groups of participants share similar academic and linguistic backgrounds. The only difference among the groups is that of the input or environment. The Pakistan-based groups of learners do not have access to the input from native speakers which the UK group has. On the other hands, the difference between the Student and Adult groups is that the former get input from their teachers and they speak and listen to English regularly which the latter do not do. We can rightly assume that the participants of the UK group of learners were either at the level of the Adult participants or below when they came to the UK because they were inactive learners of English before their arrival in the United Kingdom. So the relative improvement in the UK group vis-à-vis Pakistan-based groups in perception and production of [d] is because of the former’s interaction with native speakers in the UK. However, it is interesting to note that the Student participants are not significantly better than the Adult participants in perception and production of English [d]. It indicates that the input that the Student participants are getting does not bring any improvement in them. However, this issue needs further research.

Now we come to the analysis of the nature of errors done by the participants. There are two types of errors done by the participants related to voicing and place of articulation. An important error in perception test is identification of English [d] as voiceless. This may be explained by comparing the realization of laryngeal contrast in the L1 and L2 of the learners. Languages are divided on the basis of laryngeal features into voicing languages and aspiration languages (Simon 2009). English is an aspiration language because it differentiates [d] from [t] on account of aspiration-contrast. Saraiki is a voicing language because it differentiates [d] and [t] on account of voicing-contrast. Thus, [d] in the L1 of the participants has lead-voicing while it has short-lag voicing in the L2. This situation can be better understood through the following figure adapted from Nasukawa (2010:198).
Saraiki [t] lies in almost the same VOT range as English [d]. Thus, it is not surprising that in 17.78% (48 out of 270) of the total repetitions of the identification test English [d] in the stimuli spoken by a native speaker of English is considered voiceless by the target participants. It is not unexpected that the English [d] with short lag-VOT is considered voiceless by the participants because in their L1 phonemic inventory [d] is pre-voiced and [t] with short lag-VOT. However, it may be questioned as why [d] is perceived as [t] in only 17.78% (48 out of 270 (90 participants * 3 repetitions)) of the trials in the identification test and remaining 82.22% of the times, it was perceived correctly. Actually, the range of VOT values of native speakers of English in [d] is between 8 and 31 ms.\(^5\) On the other hand, the VOT range for [t] in Saraiki is between 0 and 6 ms.\(^6\) The VOT of [d] in the stimulus used in the identification test was 13 ms. As it is not exactly in the VOT range of Saraiki [t] which is 0-6 ms, only one fifth of the participants perceive it voiceless. The correct identification of [d] by the participants in most of the trials shows that the learners are not only dependent on VOT in the perception of English [d]. It also indicates learnability of the participants.

Another important factor in the perception was that of place of articulation. All the participants identified English alveolar stop as retroflex or dental stop in their responses written in Urdu. None of the participants pointed out that the sound in the stimuli was neither retroflex nor dental which means they equate English [d] either with the retroflex or dental stop of their L1. What is the reason that some of the participants identified English [d] as dental stops and others perceived it as retroflex? To our understanding, as English

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\(^5\) This is based on the VOT of [d] in 12 repetitions of the word ‘deal’ by native speakers of English from Essex.

\(^6\) This is based on the VOT of [t] in 5 repetitions by a Saraiki monolingual.
[d] is phonetically closer to Saraiki dental stop, so the participants who perceived it as dental, did so on account of phonetic similarity between English [d] and Saraiki [ɖ]. On the other hand, those who equated English [d] with retroflex of their L1 did so because of phonological reason. But this phonological reason is not motivated by the L1 phonology; rather it is motivated by the L2 phonemic inventory of English. Apparently it seems to be a circular conclusion but we should realize that the participants of this study have been learning English for years. So, they have already acquired a particular L2 phonemic inventory. In the English L2 phonemic inventory of the learners, alveolar [d] is realized as retroflex. But why?

It is important to know the reason for this. The substitution of English [d] with retroflex has also been observed in other South Asian (Kachru 1992) particularly Indian (Jagannath 1981, Ohala 1983, 1978, Gargesh 2004 & Koshal 1978 etc.) and Pakistani (Mahboob & Ahmar 2004:1011, Rehman 1991: 85, 1990: 25) learners of English. In terms of articulation, frequency of occurrence, late acquisition in children and perception, retroflex stops are more marked than dental stops (Hamann 2001:29). Then what is the reason for this substitution while the L1 of the learners also has dental stop in its phonemic inventory. Arsenault (2008) analyzes the loanword adaptation of English alveolars to retroflexes with an idea that [anterior] is redundant and [distributed] is the distinctive feature in the retroflex consonants of Indo-Aryan languages. Thus, the speakers whose L1 is one of the Indo-Aryan languages, substitute English alveolar with retroflex consonants because the alveolars share feature [anterior] with the dentals (which is redundant in their L1 and hence not prominent) but [distributed] with retroflexes which is distinctive. Arsenault considers this an important factor for substituting English alveolars with retroflexes in Hindi and Telugu (2006:1). This is further explained with following figure reproduced from Arsenault:

Figure 2: Representation of dental, alveolar and retroflex stops

<table>
<thead>
<tr>
<th>Dental</th>
<th>Alveolar</th>
<th>Retroflex</th>
</tr>
</thead>
<tbody>
<tr>
<td>[+distributed]</td>
<td>[+anterior]</td>
<td>←[+anterior]</td>
</tr>
</tbody>
</table>

If the feature [+anterior] is negligible for the learners they will substitute alveolar with retroflex and if the feature [-distributed] is negligible, they will substitute it with dental. Of
course, phonologically active and distinctive features are less subject to variation (Arsenault 2008: 20) change, or deletion. Thus the learners substitute English alveolars with retroflex sounds in Hindi and Telugu. But this idea is not applicable to the substitution of English [d] with L1 retroflex in the current study because the feature [anterior] is not redundant in the L1 of the learners of this study as in Saraiki alveo-palatal stops [c j] are [+dist -ant] and dental stops are [+ dist +ant]. Thus the feature [anterior] is an active distinctive feature between alveo-palatal and dental stops of Saraiki. Besides, the Saraiki monolinguals and UK group of learners are more inclined to substitute English [d] with dental than with retroflex of their L1. The other groups of participants are also equating English [d] partly with retroflex and partly with dental stop. Had the idea of Arsenault been applicable to the current situation, all the participants would have perceived English [d] as retroflex. Thus the feature-based justification of producing and perceiving English alveolar as retroflex does not seem convincing.

Actually the Saraiki learners of English are inclined to substitute English alveolar with retroflex of their L1 neither on account of markedness nor acoustic cues. To our understanding, the main reason for this substitution is that Saraiki, like most of other languages in Pakistan, does not have dental fricatives in its phonological inventory. Thus the Saraiki learners of English (like other Pakistani learners) substitute English dental fricative [ð] with the corresponding dental stop [d] of their L1. So, there is no slot left for alveolar stop in the L2 phonological inventory of the learners. As dental stop is already occupied by English [ð], the closest place in Saraiki left for alveolar stop is retroflex. Consequently the speakers of this language substitute English alveolar stop with retroflex stop. Now it has fossilized as a tradition and has become a part of the phonemic inventory of Pakistani English. The following words of Jackson (2011) about the substitution of English alveolar stops by the Indian learners are equally valid for Saraiki learners of English;

“One thing that happens is that the English dental fricatives /θ ð/ become promoted to stops in the alveolar/dental position, with the /t d/ realisation. Consequently, with their place usurped, the English alveolar stops /t d/ are shifted along to occupy the retroflex position, with the realisation /ṭ ṭ/. This readjustment accounts for …… the realisation of English alveolar stops as retroflex” (p.420).

7 The feature geometry model by Clement and Hume (1995) is used to explain these sounds.
The identification of English [d] as dental stop of Saraiki by monolinguals provides rather a support to this idea. As the monolinguals do not know English, their dental place of articulation is not already occupied by English dental fricatives. So, they identified English [d] as dental on the basis of phonetic cues. But as the other three groups of participants are learners of English, their dental place is already usurped by English dental fricatives. So, they perceive the stimulus as retroflex relatively maximum number of times.

The trend of perceiving English [d] as retroflex further substantiates our view. The following graph shows percentage of times English [d] is perceived as retroflex by different groups of participants:

Figure 3: Identification of [d] as retroflex (in percentage)

(In the graph, Teacher means English language teachers in Pakistan)

The above graph clearly shows that perception of English dental stop as retroflex is a phenomenon of bilinguals or L2 learners who learn English in academic environment of Pakistan. The recordings of English [d] sounds produced by the participants were carefully heard by the author. English [d] is produced as retroflex by almost all the participants from Pakistan. Thus the real situation is that in the L2 phonemic inventory of these learners, English [d] is retroflex. Those who identified the stimulus for English [d] on the basis of their L2 phonological constraint by equating the stimulus carrying English [d] with the already existing sounds of English in their mind, they perceived English [d] as retroflex. And those who merely perceived the stimulus on the basis of acoustic cues, they equated it

8 The participants of the study knew that they were being tested on their listening of English sounds.
with L1 dental stop.

6. Conclusion and recommendations for further reading

At the end of the discussion, we return to the research questions. The first question was about the perception and production of English [d] by Pakistani learners. The perception test results show that Pakistani learners can easily discriminate [d] from other sounds of English. However, they assimilate English [d] with L1 retroflex or dental stops. The production of the target sound by most of the UK and Student participants was ‘a little deflected away from native-like’ but that of the Adult learners in Pakistan was ‘different from natives but understandable’. Another question was about the correspondence between perception and production. The results confirm correspondence between perception and production of English [d] by the Pakistani learner of English. Thus the hypothesis by Flege (SLM: 1995) about the correspondence between perception and production of L2 phonemes is verified. The third question was about the role of input, context and position in the acquisition of L2 consonants. The better performance of the UK participants vis-à-vis Pakistan based-participants partially confirms the effective role of input and learning environment in the acquisition of L2 consonants. The better performance of the participants in the production of [d] in isolated words than in sentences also confirms the role of context in the acquisition of L2 sounds. It confirms the idea of Birdsong (2007) that the L2 learners acquire better pronunciation of the target sounds in words prior to sentences. The UK and Adult participants performed better in the production of [d] on onset than on coda position which verifies the role of markedness in the acquisition of L2 sounds.

The performance of the Student and Adult group in production of [d] in words in onset position was not better than their performance in coda position which is unexpected. This is something which needs attention of the future researchers. Similarly, the role of the input that the Student learners are getting does not seem to be effective. Further research is also required for finding the reason for this.

Apparently, there is no indication that the participants of this study have acquired a new phonetic category for [d] because none of them identified English [d] as a sound different from both dental and retroflex stop of their L1. However, it may be inferred that the participants normally correlate the stimuli with the existing script which they were using.
Thus, they only used available letters of English and Urdu script for identifying the stimuli of [d]. That is why they either considered the stimuli in terms of dental or retroflex stops when they replied in Urdu. But when they were asked to write their responses in English in identification test, they wrote [d] on hearing the stimulus [ada]. It is a limitation of the research methodology used in this experiment that it could not clearly test the discriminability of the participants between the L2 and L1 stops. Although the identification task compensates this limitation to some extent, but for further confirmation of the findings of this experiment, a subtle perception test is required which may test the discriminability of the participants between English alveolar and Saraiki dental & retroflex stops.

References


O sea in Talk: a study of Mexican Spanish interactions

Ariel Vázquez Carranza

Abstract

The present paper utilises the methodology of Conversation Analysis (hereafter CA) to explore the use of o sea in naturally occurring conversation in Mexican Spanish. It investigates the use of o sea from sixty four hours of video-recorded interactions. The general findings suggest that o sea is part of the machinery of repair in its different forms: self-initiated repair in the same turn, self-initiated repair in transition space, other-initiated repair; o sea as part of a revision of previous talk; and o sea prefacing a request for clarification and a displaying of understanding. I propose that o sea is part of the transition of topic in conversation and debate previous analysis of turn-final o sea; namely I argue that o sea in turn-final position takes the turn to a point of completion (by the falling intonation and the lengthening of its final vowel), projects that the speaker’s contribution is not over and entails that further talk on the same matter may come. I also suggest that turn-final o sea may contribute to the display of a cognitive state. Finally I propose a potentially more accurate way in which o sea can be translated into English.

Keywords: o sea, sequential markers, repair, topic-shift, Mexican Spanish

1. Introduction

The study of interaction, from the point of view of CA, has not only revealed the organization of talk (e.g. Sacks, et al., 1974; Schegloff, 1996; Schegloff, 2007, etc.) or how actions at talk are structured (e.g. “repair” [Schegloff, et al., 1977; Drew, 1997]…; “laughter” [Jefferson, 1983; Holt, 2010…]; “surprise” [Wilkinson and Kitzinger, 2006]; “agreement” [Pomerantz, 1984; Heritage and Raymond, 2005…], etc.) but also it has provided deep insights on the understanding of the functions of sequential markers\(^1\) in talk (e.g. well and uh [Pomerantz, 1984]; turn-initial “no” [Schegloff, 2001]; actually [Clift; 2001]; oh [Heritage, 2002]; look [Sidnell, 2007]; so [Raymond, 2004]; etc.). The significance of this approach to the analysis of such particles lies in the examination of the sequential environment in which the particle is produced; the use of this type of analysis has shown that overwhelmingly these markers convey a given relation between previous and subsequent talk; for example in English, it has been long established that well or/and uh follow disagreement (Pomerantz; 1984), or that oh indexes epistemic

\(^1\) Schegloff (1987) describes sequential markers as “little markers that do a piece of sequential work” (p. 72).
independence in assessment sequences (Heritage, 2002). To my knowledge there is no report which has examined Spanish markers—such as oye, ah, pues, o sea—using this methodology. Hence the present study aims to contribute to the filling of this research gap with respect to the Spanish particle *o sea*.

In contrast to other sequential markers in Spanish *o sea* is composed of two words: the conjunction *o* (or) and the verb *ser* (to be) conjugated in the third person singular in its subjunctive form, *sea*. Schwenter (1996) indentifies further linguistic characteristics of *o sea*; for example, *o sea* is phonologically independent, it can be reduced from its full phonological form i.e. [o'sea] to ['osa] or ['sa], its final vowel can be lengthened when located at the end of the turn [o'sea:]; and it is a completely fused particle so nothing can go between *o* and *sea*. This author also suggests that due to its core function as a connective it is regularly translated into English as “that is” (p. 859); although it has been translated as “I mean” (in Romera, [2001, 2004]), here I will suggest an account of when to use each translation; still there will be cases where *o sea* has not translation into English.

Previous studies have examined *o sea* at the sentence and discourse level (Cortez Rodríguez, 1991; Casado Velarde, 1991; Schwenter, 1996; Romera, 2001, 2004; Félix-Brasdefer, 2006). On the whole, these studies have proposed that *o sea* marks relations between two units; such relations are identified by Cortez Rodríguez (1991), Casado Velarde, (1991) and Schwenter (1996) as semantic and pragmatic relations. Romera (2001, 2004) and Félix-Brasdefer, (2006) expanded the analysis and described a textual relation as well. In what follows I will look at the analysis that has been offered in the literature and will present further observations to this; and subsequently I will attempt to unfold the role of *o sea* in conversation in terms of actions at talk by using the analytic approach of CA.

### 1.1. Semantic Relation

*Oh*-prefacing is used to “convey that… [an] opinion that is being agreed with [on a given matter] was formed earlier and on the basis of independent experience of the referent event” (Heritage, 2002:197). It is important to note that apart from Feliz-Bresdefer (2006) and Romera (2004) the name used to refer to these relationships has not been made explicit by the authors as such, they have used other nominations that convey the same notion (e.g. ‘conectores extraoracionales’ Cortez Rodriguez [2006]).
A semantic relation occurs when *o sea* links two propositions with equal semantic content where the proposition that appears in second position is an explanation or reformulation of the one that appears in first position; for instance in excerpt (a) “the problem of *machismo*” is explained with the description of the behaviour of the boy and his sisters.

(a) Taken from Cortez Rodriguez (1991: 50).

*En la nuestra casa / por ejemplo / mucho / porque está el problema del machismo / *o sea* el niño no puede tocar esto porque para eso tiene hermanitas que se lo quiten///* (H-B-2)

In our house / for example / a lot / because there is the problem of *machismo* / *that is* the boy can’t do anything because he’s got his little sisters who do it for him///* (My translation)

As this instance indicates, *o sea* may be located within the turn. One can observe that *o sea* starts a new element of the turn or a new turn constructional unit (hereafter TCU). In further observations it will be shown that *o sea* occurs not only within the turn but also in initial or turn-final position.

1.2 Pragmatic Relation

Félix-Brasdefer (2006) suggests that there is a pragmatic relationship between two units when an illocutionary meaning is established; that is, when the speaker’s intentions and hearer’s recognition of them determine the relationship between the units. In general the studies point out that a pragmatic relation that is established by *o sea* can express explanation, conclusion, correction, and also, as Schwenter (1996) argues, *o sea* may work as an epistemic parenthetical which means that *o sea* marks the “speakers’ degree of commitment to what they say” (p. 865). The following examples illustrate the different pragmatic relations described by the authors:

1.2.1. Explanation

(b) Taken from Romera (2001: 114).

<\texttt{H4}> Lo que pasa que yo este cable no sé.

<\texttt{H3}> ¿Esto para qué es? ¿Tú sabes para qué es esto?

<\texttt{H3}> Para la batería.

<\texttt{H4}> *o sea*, es otra forma de alimentación.

<\texttt{H4}> *What happens is that this cable, I don’t know.*

<\texttt{H4}> *This is for what? Do you know what this is for?*

4 It is the unit of conduct in conversation. It can be sentences, phrases, clauses, lexical items (grammar), intonational packaging (phonetic), recognizable action in context (pragmatics) (Schegloff, 2007).
According to the literature when *o sea* is used as an explicative the speaker may reformulate what s/he said before *o sea* as in example (b). The extract also shows that *o sea* is located in an environment where H4 could have taken the turn but instead H3 added a second TCU to his/her turn. In terms of actions at talk one can question what *o sea* does there apart from prefacing an explanation? I suggest that it appears to be launching a revision of the previous TCU, hence doing repair.

1.2.2. Conclusion

(c) Taken from Schwenter (1996: 863).

M: le han dicho, que ya no le dan {prorroga}.

"they’ve told him, that they won’t give him another extension."

R: {o sea} ya tiene que: irse a Valencia, no?

"*o sea* now he has to go off to Valencia, right?"

In example (c), I notice that R draws a conclusion from M’s preceding utterance. One may observe that *o sea* is in turn-initial position and that it is launched after an informing. *O sea* indeed prefaches a conclusion, *ya tiene que irse a Valencia*; however, the *no?* at the end of the turn is requesting a confirmation of that conclusion; thus in this case *o sea* may not be only prefacing a conclusion but is also a request for confirmation.

1.2.3. Correction

(d) Taken from Cortez Rodríguez (1991: 60).

Bueno / a mi lo único que me gustaría es que hubiera / vamos no sé / quizá algo más. / *o sea* tipo universidad /// (M-A37)

"Well / the only thing I wish there would be / I don’t know maybe something more... / *I mean* like a university /// (My translation)

(e) Taken from Cortez Rodriguez (1991: 61)

E.- ¿usted normalmente le ve siempre?

I.- no // *o sea* si estoy en casa lo veo pero sin no estoy no me importa mucho /// (M-B-42)

E.- Do you usually see him?

I.- no // *I mean* if I’m at home I see him but if I’m not there I don’t care much /// (My translation)

Cortez Rodriguez (1991) argues that *o sea* is used for self-correction; it may work, he states, as a “*formula salvavidas*” (rescue formula) as in excerpt (d) where the speaker shows incapacity to finish the previous sequence and reinitiates his sentence with *o sea* (p.60). For example for example (e) the author argues that *o sea* is used to *atenuar* (attenuate) the previous unit.
It could be argued that *o sea* in excerpts (d) and (e) may be more than a resource that the speakers use when they appear to have trouble finishing their turn: it is observed that *o sea* does follow a correction but this readjustment may have different characteristics; for example, excerpt (d) is a repair aiming to complete the TCU whereas (e) indexes a revision of the TCU that precedes *o sea* with a formula “I don’t mean X, I mean Y”, so I suggest that in this case *o sea* may be doing more than *atenuar*, i.e. it may be doing repair.

### 1.2.4. Epistemic Parenthetical

(f) Taken from Schwenter (1996:866)

> y es que allí como tienes que tener también=  
> 'and since there you have to also have'  
> =alumnos de los gitanos.  
> =gypsy students.  
> pues el niño no va a estar rodeándose con ellos, *o sea*.  
> *well the kid isn't going to be interacting with them, O SEA.*  
> pero yo pienso que eso es absurdo.  
> *but I think that that is absurd.*

Schwenter (1996) points out that when *o sea* is accompanied by first person singular subjects and belief verbs (e.g. *to think*) the speakers convey their degree of commitment to what they say, for example in example (f) the speaker has made what can be considered as a racist comment oriented to gypsy students, then the speaker corrects his remark with the final utterance stating that such attitude is absurd. This practice of *o sea* can as well be considered to be a revision of a previous fragment of talk: repair; where the speaker displays an adjustment of what s/he stated before; it is worth mentioning that the *o sea*, similar to excerpt (b), is positioned in an environment where the coparticipant could have taken the turn, in this case *o sea* is located in what appears to be a turn-final position.

### 1.3. Textual relation

Finally Félix-Brasdefer (2006) and Romera (2001, 2004) apply a discursive approach to the analysis of *o sea*, they examine it as a Discourse Functional Unit (DFU). Félix-Brasdefer defines *o sea* as a particle that contributes to the organization of discourse in

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5 It is a marker that “is uttered with the primary function of bringing to the listener’s attention a particular kind of linkage of the upcoming utterance with the immediate discourse context” (Redeker 1991:1168).
conversation; he argues that *o sea* is used (i) to re-start or re-orient discourse; (ii) as an intensifier; and (iii) as a conversational DFU to offer the floor to the interlocutor (p. 195). Below there are some examples he presents to demonstrate these usages:

**1.3.1. Re-start**

(g) Taken from Félix-Brasdefer (2006: 195)

Roberto Benigni / decían que él... / *o sea* no sé si te acuerdas al final cuando saca lo del tanque/ que el niño quería un tanque / y al final sale un tanque de Estados Unidos que es el que defiende / el final es muy Holliwodesko…

*Roberto Benigni / they said that he… / I mean I don’t know if you remember the end when he shows the tank/ the boy wanted a tank / and at the end an American tank appears which is the one that is defending / it’s got a Hollywood ending…* (My own translation)

Félix-Brasdefer’s analysis coincides with Romera’s in that *o sea* is deployed when “the speaker introduces the first part of an utterance, and at any point [s/he] feels the need to redirect her [/his] speech into a different direction” (Romera, 2001: 119). In other words, *o sea* is used to do repair.

**1.3.2. Intensifier / continuer in conversation**

(h) Taken from Félix-Brasdefer (2006: 195)

a) sí, pero eso es trabajo / *o sea* de becaria / y lo que pasa es que para obtener horario preferencial trabaja creo que 15 días o algo así / allá en la dirección de carreras…

a) yes, but that’s a job / *I mean* as a scholarship holder / and the thing is that in order to get a preferential shift she works I think 15 days or something like that / there in the careers office… (My translation)

(i) Taken from Félix-Brasdefer (2006: 201)

b) Víctor: ahí sigues
   Vero: sí / *o sea* sí =
   Víctor: =sigues haciendo tu luchita?

b) Víctor: *are you there*
   Vero: *yes / I mean* yes=*
   Víctor: *are you still trying?* (My translation)

Félix-Brasdefer argues that in excerpt (h) *o sea* is used to emphasise the speaker’s communicative intentions by emphasising *becaria* (“scholarship holder”). In excerpt (i) he notes that *o sea* is situated between two emphatic affirmative responses to maintain the negotiation open and to keep the conversation going. His paper he acknowledges a comment reviewer suggesting that the examples were instances of repair rather than “conversational continuants”; however, Félix-Brasdefer disagreed stating that the
examples are not instances of self-repair but rather cases where *o sea* appears to be lubricating the ongoing interaction (p. 201).

Re-examining Félix-Brasdefer’s analysis and considering that repair goes beyond “correction” or “replacement” (Schegloff, et al., 1977) the present analysis agrees with Félix-Brasdefer’s reviewer in that this practice falls in the domain of repair because the TCU which follows the *o sea* is revising the former TCU.

### 1.3.3. Offer the floor

(j) Taken from Félix-Brasdefer (2006: 202)
Blanca: …pero entonces ahorita tienes un poco de insomnio ¿por qué? *O sea*=
Tere: no, simplemente me despierto, pero vuelvo a dormir en media hora…
Blanca: …*but then you now suffer from insomnia why? O sea*=
Tere: *no, I simply wake up, but then I get back to sleep in half an hour…* (My translation)

(k) Taken from Félix-Brasdefer (2006: 202)
Interviewer: *y sí / y sí / sí... / ¿sí la llevas bien? / O sea*
Interviewee: aquí en esta chamba que / to' el tiempo la he llevao bien… /
Interviewer: *and yes / and yes / yes... / are you doing well? / O sea*
Interviewee: *here at this job that / all the time I’m doing well... /* (My translation)

Félix-Brasdefer mentions that in this case *o sea* is a politeness device used to invite the hearer to hold the next turn; this, he says, contributes to the negotiation of turns (p. 202). Based on the amount of data provided it is not clear from his explanation how the notion of politeness fits this practice; furthermore it is not clear how *o sea* itself offers the floor to the hearer. What is more, the turn that contains *o sea* also includes a direct question; hence, it would be the question that sets the conversational context for the hearer to take the floor and provide his/her answer, not the *o sea*.

To sum up, having proposed further observations to the previous analysis of *o sea*, one becomes aware of the analytic window that has not yet been explored: the study of the conversational contingencies that surround the use of *o sea* in interaction. The present analysis attempts to answer the research question used in CA:”Why that now?” (Sacks, 1992) for *o sea* in Mexican Spanish. In other words, this study focuses on the position

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6 The recurrent limitation encountered when re-examining excerpts from analysis that follow a different approach to interaction, as the above, is the insufficient conversational context provided.
of *o sea* in the turn, the type of sequence that *o sea* is part of; and the course of action that *o sea* belongs to; by doing so I aim to unfold the role of *o sea* in talk.

2. The data

The data consist of 64 hours of video recording of naturally occurring Mexican Spanish conversations. The data were collected in Toluca, Mexico. The participants were members of two families. The recorded interactions are conversations held between members of these families during lunch time or dinner; or when friends came over for a visit The transcription of the data is presented following the transcription system developed by Gail Jefferson\(^7\); the transcription has a three line structure: the first line is the utterance in Spanish, the second line is a gloss-line with the literal translation into English, and the third line, in bold, is the English equivalent.

3. *O sea* in Repair

3.1. Self-initiated self repair in the same turn

As we have seen, it has been suggested in the literature on *o sea* that this particle may involve correction or replacement (e.g. Corte Rodriguez, 1991); for example in excerpt (1):

(1) *O sea* V11 P6 1507  
[Ri is telling about his ex-boyfriend to some friends]  
01 Ri: Por eso ese día a mi regreso me acosté con él.  
That’s why that day when I came back I went to bed with him.  
02 (.5)  
03 Ri:=>*o sea* de dormirme con él.  
04 or be·it of sleep·1SG.DAT with him  
I mean I only slept with him

In extract (1), Ri prosodically completes his turn at the end of line 01; then there is a pause where no one else speaks; Ri at line 03 initiates repair with *o sea* replacing *me acosté con él* (“I went to bed with him”) with *de dormirme con él* (“I only slept with him”). In Spanish, *dormir* (to sleep) does not entail having sex opposite to “to sleep” in

\(^7\) Please, see appendix A and B which are the Transcription conventions and the Gloss-line abbreviations respectively.
English; so Ri with his repair is applying the maximal property of descriptions (Drew, 1992); that is, Ri is describing the most, in terms of behaviour, that happened that day with his ex-boyfriend: He only slept over at his ex-boyfriend’s house; he did not have sex with him.

In the introduction of this paper I offered some preliminary observations arguing that *o sea* can not only do correction or replacement but in general it can be considered to be part of the speaker’s self-adjustments of their talk. In the following I will point out the characteristics of these adjustments.

In terms of turn construction, I argued that *o sea* is located just after the speaker has interrupted the production of his/her turn or has produced a TCU; then with *o sea* s/he resumes it, as in excerpt (2):

(2)  O sea V2 P8 1350(13)
[B is talking about her first experience as a teacher in a rural area]
01 B:=>Si sufrí mucho porque así- (.) *o sea* yo decía
Yes suffer-1SG.PRET much because like-this or be-it I say-1SG.IMPF
Yes I suffered a lot because- (.) I mean, I’d say
02 “yo quisiera que hubiera una compañera
I want-1SG.IMPF that there-be-3SG.IMPF one colleague
“I wish I had a workmate
03 con quien platicar...”
with who talk-INF...”
to talk to...”

Extract (3) shows how after a series of modifications, *o sea* appears to be the final of the turn adjustments that speakers perform to their turn. This is done by M:

(3)  O sea V7 P2 1906(38)
[V asks about how were M`s holidays to Los Cabos]
01 V: Y qué tal se la pasaron en Los Cabos
And what so 3SG.DAT 3SG.FEM.ACC pass-2PL.PRET in Los Cabos
And how was Los Cabos?
02 M: Bi’en pues le digo a mi:- a quién le decía mi papá,
Good pues 3SG.DAT say-1SG to me to whom 3SG.DAT say-1SG.IMPF my dad
Good in fact I was telling my:- who was I saying this to
my dad,
03 =>ah pus a todos, que no= *o sea* no hay muchas
oh pus to all, that no= or be-it no there-be-3SG much
oh to everybody, that no= *o sea* there isn’t many
04 (h)cosas que hacer(h).
(h)things that do-INF.
(h)things to do(h).

It is worth noticing that in (2) and (3) *o sea* does not occur at a moment of turn possible completion (transition relevance place, hereafter TRP); that is, it is not located in a position where the speaker may indicate the completion of his turn, entailing that the hearer, following the organisation of turn-taking (Sacks, et al., 1974), may take the turn
without interrupting. The following section shows examples where o sea is deployed in environments of TRP.

3.2. Self-initiated self repair in transition space

(4) [AVC O sea V2 P1 (23-10)]
[Is is talking about new surgery methods]
01 Is:  Ya todo te lo operan sin abrirte el cuerpo.
Al (ready) all 2SG.DAT 3SG.MASC.ACC operate-3PL without open-INF+2SG.DAT the body
Nowadays they operate without opening the body.
02 (1)
03 => O sea que te van a quitar la apéndice
Or be-it that 2SG.DAT go-2PL to take-out-INF the appendix
That is if they are going to take your appendix out
04 te meten un tubito
they introduce a little tube
}[>pan pan pan pan<
2SG introduce-3PL a little-tube ]>pan pan pan pan<
}[>pan pan pan pan<
05 Ve:  [AY NO] [que horror
[AY NO] [what horror
[AY NO] [that’s horrible
06 Ma:  [a::h si si
[Oh yes yes
[O::h yes yes
07 Is:  Te van recorriendo todo hasta llegar
They go all around you until they get
to where[be-3SG the appendix, 2SG.DAT remove-3PL it...
to where[your appendix is, they remove it...

Excerpt (4) shows Israel (Is), at line 01, giving an informing to some members of his family; the informing does not generate any reaction from his audience even though a TRP has been created where any of the coparticipants could have taken the next turn. Interactionally, the lack of uptake is potentially problematic so after a one-second silence, line 02, Israel retakes the floor and prefaces with o sea a decomposition of his informing.

(5) [AVC: Casa de Richard (5) 7-46]
01 Ve:  =BRINCaste los dos? ((Ri's looking up))
Jump-2SG.PRET the two
=DID you reach two?
02 (.5) ((Ri downs his gaze and directs it at Ve))
03 => O sea brincaste dos o no'más uno?
Or be-it jump-2SG.PL two or no more one
I mean, did you reach two or only one?
04 Ri:  Dos
Two
Two

In excerpt (5), Ve launches a question which makes an answer relevant to be deployed in the subsequent moment of interaction; in other words, it is when Ve finished her question that the transition to next speaker is made relevant; however, there is a micro
silence, line 02, and after that Ve re-takes the floor and reformulates her question, prefacing it with *o sea*.

### 3.3. Other-initiated repair

The data gathered in this study show that *o sea* is also present in other-initiated repair sequences; namely, when the repair is not carried out by the speaker who initiates it. Excerpt (6) shows an example of such practice:

(6) O sea V3 P3 (09-03) (25)

[The speakers are talking about the members of a rock band]

01 Ve: Eso que no se sabe si es hombre o mujer,

- It that no 3REF know-3SG if be-3SG man or woman,

- *It’s like you don’t know if it’s a man or a woman,*

02 Genaro, cómo se llama eso,

- Genaro, how 3REF call-3SG.REF that

03 Genaro, how do you call that,

04 Ju: ( )

05 Ve: Andrógenos, el vocalista es andrógeno

- Androgens, the Singer be-2SG androgen

- *Androgen, the singer is androgen*

06 (.5)

07 Ve: Or trata de-[( )

Or try-3SG of-[( )

Or tries to-[( )

08 Az:=> [Cómo que no saben si es hombre o mujer?

- How that no know-3PL of if man or woman

- *How can’t they know if is a man or a woman?*

09 Ve:=> Sí, o sea como que su imagen quieren hacer

- Yes, or be-it like that their image want-3PL make-INF

- *Yes, I mean they want to make their image*

10 una imagen andrógena o sea que no se note si

- One image androgen or be-it that no 3REF notice-3SG.SVJ if

- *One image androgen or be-it that no one can notice if*

11 es hombre o mujer

- be-3SG man or woman

- *it’s a man or a woman*

In this case the repair is initiated by the recipient, Az, in line 08, and is carried out by Ve at line 09. This excerpt shows another *o sea* in line 10 which is a self-initiated repair in the same turn.

### 3.4 *O sea* as part of a revision

The main characteristic that the examples of repair provided so far is that *o sea* is located in the turn that carries out the repair. In all cases, except for the last excerpt, *o sea* initiates the repair. However, there are cases when the speaker revises previous talk
but does not necessarily initiate the repair/revision with *o sea*; still the particle is part of a revision to previous talk.

(7) *O sea* V1 P1 (12-24) Exorcismo

[Ma and Ju are talking about their experience they had in a retreat they attended]

01 Ma: ...por ejemplo no hubo liberaciones ni: (.5)
  ...For example no there-be-3SG.PRET liberations nor
02   ni tantas sanaciones y así.
   nor so-much healings and like-that
03   *O sea* aí nada más como que=
   Or be-it there only more like that
04   **That is** there were only like=
05   Ma: =>bueno *o sea tantas*. Como en (ese).
   Well or be-it so-much. Like in that
06   *Well I mean not as many. As in (that one).*
07   o sea como que se:: proyectó más
   or be-it like that 3REF project-3SG.REF more
08   *That is it was like: it projected more*

In excerpt (7), three *o seas* are identified; the ones in lines 03 and 08 are self-initiated-self-repair in the same turn. Our main focus here is the one at line 06. At line 04, Ju disagrees with Ma’s version of their telling, *No, sí hubo sanaciones* (No, there were indeed healings); after a micro silence, Ma revises her previous claim with *bueno* (well, cf. Pomerantz, 1984) and immediately after *bueno* she repairs and clarifies with *o sea* what she had stated in her previous claim *o sea tantas* (“I mean not that many”).

In the following example, *o sea* is not launched just after the beginning of the revision as in excerpt (7) but after some calculation made by the speaker. The excerpt starts with G asking J if she had a spare pair of glasses.

(8) *O sea* V3 P1 (12-30) (101)

[Ju is with her uncles Ge and Iv and her aunt En. They are having lunch at the dinner table. Ju has just told the story of how, last time she went on vacation to Los Cabos, she lost her glasses at the beach]

01 Ge: Y tenías- eso esos son nuevos o tenías (.). varios
  And you had- those are new ones or you had (.). **spare ones**
  repuesto
And have-2SG.IMPFF that those be-3PL new or have-2SG.IMPFF some spare
02 Ju: Tenía otro par, y allá en Los Cabos te hacen
  I had another, pair and over there in Los Cabos **make-3PL**
03 los los lentes como en: veinte mi::nutos
  the the glasses as en: twenty **minutes**
the glasses like in twenty minutes
are made in about twenty minutes

( . )

05 Ge: A poco?
To less [exp]
Really?

06 Ju: Que:: quedan muy bien
That stay-3PL very good
They are very well done

07 (2)

08 En: Y te hicieron unos allá?
And 2SG.DAT make-3PL.PRET some there
And did you have a pair made over there?

09 Ju: Sí: unos negros
Yes some black
Yes a black one

(2)

11 En: M:↓

12 Ju: Salieron en veinte minutos
Go-out-3PL.PRET in twenty minutes
They were ready in twenty minutes

13 En: M:↑

14 Iv: m heh

15 Ju: Bueno. en lo: que el doctor llegaba::
Well. in that REL the doctor arrive-3SG.IMPF
Well. the time that it took for the doctor to arrive

16 => o sea como una hora [ ( . ) más lo:s veinte minutos
Or be-it like one hour [ plus the twenty minutes
O sea like an hour [ (. ) plus the twenty minutes

17 [heh

18 Ve: Sin lentes no ves?
Without glasses no see-2SG
Without glasses you cannot see?

19 Ju: Sí sí veo pero-
Yes yes see-1SG but-
I can I can but-

Ju at line 02 informs that in Los Cabos glasses can be made in twenty minutes. En responds to the informing with a display of ritualized disbelief (Wilkinson and Kitzinger, 2006) at line 05. To counteract a possible assumption that a pair of glasses that can be made in twenty minutes may not be of good quality, Ju makes an assessment on the glasses she got in twenty minutes: quedan muy bien (“they are very well done”).

In the subsequent turns none of the recipients embraces the main point of Ju’s informing i.e. the rapidity with which glasses are made in Los Cabos. Ju re-launches the point of her informing at line 12 yet she only receives tepid responses from her audience: a receipt token from En and a bit of laughter from Iv. It is then when Ju revises her previous claim by treating it as not factual (Drew, 2003). Ju’s revision is marked by bueno and o sea prefaces the revised time it took to have the glasses ready.

Although the revision is not started by o sea, it prefaces the revised version of the item being corrected; what is more o sea is not deployed immediately after the start of the revision: there is an element, a calculation, that initiates the revision en lo que el doctor
3.5. Request for clarification and Display of understanding

*O sea* initiates sequences where the speaker, based on previous talk, may request clarification; the degree of clarification may vary; that is, the speaker may display his/her degree of comprehensibility. For instance, let us look at excerpt (9):

(9) *O sea* V9 P4 226 (53)
[Az and Is are talking about how young one of their relatives, who is in his seventies, looks]

01  Az:  Se ve como de sesenta.
      3REF see-3SG.REF like of sixty
      He looks like sixty.
02  Is:  =menos de cincuenta y cinco
      less of fifty and five
      =younger, like fifty five
03  [de cincuenta y cinco acabado
      [of fifty and five finished
      [fifty five but worn-out
04  Ca:  [Orale
      [Orale [EXP]
      [Wow
05  Az:  ah pues tu lo conoces ((addressing Ma))
      Oh pues you 3SG. ACC know-2SG him
      Oh you know him
06  Ca:  .hhh HEHEHEEH
07  Ve: =>*O sea, cómo? Hehehe hehe
      Or be-it How
      *O sea, what do you mean?
08  Is:  O sea cincuenta y cinco traqueteado
      Or be-it fifty and five *traqueteado
      I mean fifty five but aged
09  Ve:  O sea cincuenta y cinco pero que parece setenta
      Or be-it fifty and five but that look-3SG seventy
      That means fifty five but he looks seventy
10  Ge:  O sea que si te dice “cincuenta y cinco”
      Or be-it if 2REF say-2SG fifty and five
      That means if he says *fifty five*
11  si le dices  [“( )”
      Yes 3SG.ACC say-1SG ["You’d say
      [“( )”
12  Ve:  [“Ay se fue por terracería” diría mi papá
      [Ay 3REF go-3SG.PRET for *terracería* say-1SG.IMPF my dad
      [“He’s driven on a rough dirt track”, as
      my dad would say

At line 01, Az gives her assessment; at line 02 Is disagrees with Az and launches his assessment; Ca deploys ritualise disbelief at the same time Is reformulates his verdict at 03. Is’ second reformulated assessment does not coincide with his former claim about the man looking less than sixty; in fact Is’s final evaluation establishes that the man in
question looks older. This inconsistency is registered with laughter by Ca at line 06 and by an open class repair initiator (Drew, 1997) prefaced with o sea which is launched at line 07 by Ve. This last turn registers incomprehension at the apparent contradiction. Is carries out with the repair, at line 08; and at line 09 and 10, Ve and Ge respectively, display a greater degree of understanding on what Is meant to say.

In excerpt (10), below, seven year old Julia (Ju) is talking to her aunts and uncles about how old she has to be in order to have an eye operation to be cured of astigmatism and myopia.

(10)O sea V3 P1 (14-30) Dos operaciones
01 Ju: ...de la miopia cuando ( )
...of the myopia when
02 ...for the myopia when ( )
como cuando tenga::: doce años
Like when have-1SG.SVJ twelve years
Like when I’m twelve years old
03 Ge: mhm
04 Iv: Diez dijiste
Ten say-2SG.PRET
Ten you said
05 Ju: Diez para el as- astigmatismo
Ten for the astigmatism
06 Ten for as- astigmatism
07 Ve:=> O sea para cada cosa es una operación?  
Or be-it for each thing be-2SG one operation
Oh for each thing is one operation?
08 Ju: No.
09 Ve: A:↑:↓h
Oh
Oh
10 JU: Diez para el astigmatismo y doce [para la miopia
Ten for the astigmatism and twelve [for the myopia
It’s ten for the astigmatism and twelve [for myopia
11 Ge: [mhm

At line 07 Ve prefaces a clarification sequence with o sea, the turn-final prosody inviting confirmation. Ju at line 08 does not confirm it; then at line 09, Ve registers, with ah (similar to “oh” in English, [Heritage, 1984]) whose vowel is lengthened and has a rise and fall in its intonation contour, a change of state of knowledge or understanding. In this particular case I argue that o sea is also displaying a change in Ve’s current state of knowledge which she immediately request its clarification.

This practice can be considered repair since the speaker identifies previous talk as problematic; where the speaker, prefacing with o sea, deploys a next turn repair initiator in the form of a request for confirmation or an open class repair initiator.
As was demonstrated in excerpt (7), lines 09 and 10, *o sea* may preface a statement which displays understanding of the previous talk. In excerpt (9) a similar usage is unfold. The extract shows V telling her mother, M, that she has just bought a suitcase because her grey one is completely damaged.

(9) *O sea V10 P3 (54)*

01 V: Ahorita compramos una maleta
Now buy-1PL a suitcase

We just bought a suitcase

(1)

02 V: es que ya nuestra maleta gris, la que
Be-3SG that already our suitcase gray, the that

The thing is that our grey suitcase, the one that

03 su- la que llevamos (.)) ya se le rompió
its the that take-1PL already 3REF 3SG.DAT break-3SG.PRET

its the one that we took (.) it´s broken

04 ((Ge enters the room))

05 V: lo del candado [y este
the of padlock [and este

The padlock [and

06 Ge: [que ahorrta la baja
[that now 3SG.FEM.ACC down-3SG

[They will bring it down later

07 porque no la encuentran
Because no 3SG.FEM.ACC find-3PL

because they cannot find it

08 V: Se le descompuso el cierre de adentro
3REF 3SG.DAT break-3SG.PRET the zip of inside

The inside zip is broken

10 (.)

11 V: Ya estaba bien [rota ]
Already be-2SG.IMP very[break-PART.FEM

It was all [damaged]

12 M:=>

[O SEA no salió de muy buena calidad
[or be-it no go-out-3SG.PRET of very good quality

[So it wasn´t of good quality

13 [((M crosses her arms and lays back))

14 V: No.

14 No.

It wasn`t.

15 G: De qué?
Of what

What?

16 V: De la maleta gris
Of the suitcase gray

About the gray suitcase

15 G: De qué?
Of what

What?

16 V: De la maleta gris
Of the suitcase gray

About the grey suitcase
After V lists the faults of her grey suitcase, her mother, at line 12, deploys an upshot. The upshot which is prefaced by o sea addresses the previous talk and displays comprehensibility of why V just purchased a new suitcase. V’s mother accompanies her upshot with a body movement: she crosses her arms and leans back, line 13; I suggest the best translation of o sea into English in this case is “so” following Raymond (2004) who identifies that “so” is use to indicate the upshot of prior talk.

So far, I have demonstrated that o sea is part of the machinery of repair at the turn level: self-initiated-self-repair in the same turn and self-initiated-self-repair in transition space. It has been shown as well that o sea is involved in the structure of the repair sequence: other-initiated repair, o sea being part of the revision of previous talk, and when speakers request a clarification or they display understanding of previous talk. In general, o sea has a retrospective characteristic in that it is a particle that helps speakers to readjust/rearrange what has been previously said by them or by their coparticipants in their interaction.

4. O sea in Topic-shift

A different use of o sea which in a way preserves its retrospective feature is the role of the particle in topic-shift. Excerpt (10) shows the interaction between Ju, Ge, Ve, and Az. At the beginning of the excerpt they talk about an art exhibition they all are attending. It is important to mention that Ve and Ge have just arrived in Mexico after being away for a year. As we see later Ge has not yet seen any of his brothers, one of them is Ju’s father, Israel.

(10) O sea V3 P2 (5-13) Invitation
01 Ge: Ya te invitaron?
  Already 2SG.DAT invite-3SG.PRET
  Have you been invited?
02 (.)
03 Ju: A dónde
  To where
  where
04 Ge: Ahorita te va dar la invitación
  Now 2SG.DAT go-2SG give-INF the invitation
  Now he’ll give you the invitation
05 Ju: A:sí: ya me invitaron (.) bueno
  Oh yes already me invite-3PL.PRET well
  O:heyes I have been invited (. ) well
06 =>me invitó mi papá, me me me mandó un: correo
  My dad invited me, he sent me an email
  My dad invited me, he sent me an email
07 Ge: O sea y tu papá ni siquiera me ha venido a ver
  Or be it and your dad no even have-3SG come-PART to see-INF

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O sea you dad hasn’t even come to see me

08 Ju: No.
09 Ge: Qué malo
   What bad
   He’s bad
10 Ju: Sí. >Está en el trabajo<
   Yes be=3SG in the work
   Yes. >he’s at work<
11 Az: No has visto a Israel? ((A is in the kitchen))
   No have-2SG see-PART Israel
   Haven’t you seen Israel?
12 Ju: YO lo vi:-
   I 3SG.ACC see-1SG.PRET
   I saw him-
13 Ve: Y tu papá nos despierta dile que no nos despierte...
   And your dad 1PL.DAT wake-up-3SG tell-IMP him that no 1PL.DAT wake-up-3SG
   And your dad wake us up tell him not to do that...

The excerpt initiates with a question deployed by Ge inquiring whether Ju has been invited to the art exhibition. Ju responds with a next turn repair initiator, line 03, but the repair is not achieved. At line 04, Ge informs on Ju’s uncle activity who left the table before to get an invitation for Ju. At line 05, Ju initiates her turn with a change of state token which registers that she knows what Ge’s question is referring to and she responds affirmatively to it. Ju explains that her father has invited her by email. In a non-serious way, Ge, at line 07, deploys an o sea followed by a complain o sea y tu papa ni siquiera me ha venido a ver (“o sea you dad hasn’t even come to see me”). Ju, at line 08, agrees with the complaint. This is followed by an assessment deployed by Ge, Qué malo (“He’s bad”). Ju’s agrees with the assessment at line 10 and launches what can be considered an account on her father behaviour, Está en el trabajo (“He’s at work”). Then Az, at line 11, elaborates on Ge’s complaint, and deploys a disbelieve, No has visto a Israel? (“Haven’t you seen Israel?”) which Ju treats as a question for herself by projecting a response to it at line 12. At line 13, Ve abruptly initiates another complaint about Ju’s father which is addressed to Ju as well. The significance of this excerpt is to notice that Ju’s dad, Ge’s brother, is mentioned in the conversation by Ju at line 05; then at line 06, Ge brings him explicitly to the conversation initiating a shift in the topical trajectory of the interaction (from the art exhibition to the father issue); so I argued that o sea is acting to launch a turn topically “touched off” (cf. Jefferson, 1978) by prior talk.

The same usage is in excerpt (11), here Ri, Lu, Ve, and Ge are at the dinner table; Ri is telling Lu that he, Lu and Ge used to simulate a radio program and he recorded it on the computer.

(11) O sea x2 V13 F3 1627(72)
At line 03, while Ri talks about the software they used to record their radio program, he makes reference to “downloading”. At line 13 he brings to the conversation prefacing his turn with *o sea* the issue about how difficult it used to be to download a video from the internet and the fact that there was not YouTube. In the subsequent lines the topic about the radio program is abandoned and the one about YouTube starts to develop.

Excerpts (10) and (11) provide evidence to suggest that in the talk that precedes *o sea* there is some reference to the topic that *o sea* introduces; from this observation I argue that even in topic-shift *o sea* preserves its retrospective feature; that is, what follows *o sea* is linked to previous talk.

5. Turn-final *o sea*

Félix-Brasdefer (2006) pointed out that *o sea* in turn-final position is a polite way to invite the hearer to hold the next turn. However, I have argued above that the author
does not state clearly how politeness works in this interactional context; furthermore his examples may indicate that it is the direct question that precedes the *o sea* what makes effective the turn transition and that *o sea* might be the beginning of a reformulation of the question; which can be considered to be the beginning of a new turn constructional unit. The following except shows *o sea* in a similar turn-position. The excerpt starts with En, who is Az’s sister, suggesting that Az should make butterflies made of Foamy⁹ so that Az’s child can play with them.

(12) *O sea V3 (10-30)*

01 En: O hazlas de Fomi
   Or do-IMP of Fomi
   Or make them with Foamy

02 Az: Ay pero no ves que ya ha tenido
   Ay but no see-2SG that have-3SG have-PART
   Ay but can’t you see he’s had

03 de todos colores y sabores
   of all colours and flavours [exp]
   them in all sort of materials

04 En: Pero esas para qué las quiere
   but those for what 3PL.DAT want-3SG
   but what can he do with those

05 => si no las puede jugar o´sañ;
   if no 3PL.DAT can-2SG play-INF or be-it
   if he can’t play with them o´sañ;

06 Az: Pero si no las juega
   But if no 3PL.DAT play-3SG
   But he doesn’t play with them

07 En: A:y no estás diciendo que (no las agarre)
   Ay no be-2SG say-GER that no 3PL.DAT take-1SG.PRET
   Ay weren’t you saying that he mustn’t touch them

The excerpt shows that Az has resisted En’s advice and the argument has been escalating: at line 02, Az resists E’s suggestion with an account that contains an extreme case formulation ...*ya ha tenido de todos colores y sabores* (“he’s had them in all sort of materials”); En opposes the account given by deploying a further argumentation *pero esas para qué las quiere si no las puede jugar o sea* (“but what can he do with those if he can’t play with them *o sea*) which supports her former suggestion i.e. it is better to have plastic butterflies so the child can actually play with them. This example is different to Félix-Brasdefer’s instances in that what precedes *o sea* at line 05 is not a question. It is true that after *o sea* at the end of the turn the hearer takes the next turn; however, I believe that *o sea* does not specifically *invite* to take the turn, that is, *o sea* at the end of the turn does not select the next speaker. It is worth mentioning that turn-final position is the moment in interaction where transition is relevant (Sacks, et al., 1974). That is *o sea* in turn-final position only indicates the point of possible completion not an

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⁹ Plastic material used to do handicrafts.
invitation to speak. What is important to investigate here is what a turn-final *o sea* does in final position. That is, what makes *o sea* at the end of the turn recognisable as a point of turn completion by the hearer, and whether turn-final *o sea* indeed marks the end of a turn.

I have revealed so far that *o sea* is a particle that marks the beginning of some action, (e.g. repair in its different forms, topic shift), it has been shown as well that *o sea* appears in the initial position of a TCU (e.g. correction, reformulation, request for confirmation, etc.). I consider that *o sea* at the end of the turn maintains these characteristics; let us look at the following excerpts.

(13) O sea V13 P3 2324(73)
[V, L and G are telling the story of Grizzly Man to R. Grizzly Man is a documentary about a man who lived with grizzly bears.]
01 V: Grizzliman, es un señor que estaba loquito, Grizzlyman, be-3SG one sir that be-3SG.PRET crazy
02 y amaba a los osos, a los osos grizzli, And that love-3SG.IMPF to the bears to the bears grizzly
  And he loved bears, grizzly bears
03 .hh de:: este:- .hh from este
04 L:>= Pero no los amaba o sea]: But no 3PL.DAT love-3SG.PRET or be-it
  =But he didn’t love them I mean...
05 R: ‘Qué horror’ What horror
  That’s horrible
06 L:=>Los idola [traba o sea]: 3FL.DAT idol[ize-3SG.IMPF or be-it
  He idoliz[ed them o sea]:
07 V: [heheh he
08 G: Pensaba que eran, como personas Think-3SG.IMPF that be-3PL.IMPF like people
  He thought they were, like people
09 (. )
10 V: Ah [no no no deja que pesnaba que] [eran como personas
  Ah [no no no leave-IMP that think-3SG.IMPF that] [be-3PL.IMPF like people
11 L: (nods affirmatively) [no no no
12 V: según él yéndose a vivir entre los osos... According-to him go-GER live-INF among the bears...
  according to him leaving among the bears...

At line 04, L initiates repair on V’s statement (*amaba a los osos*, “he love the bears”); the repair has the formula “It wasn’t X, was Y” whose first element is deployed at line 04 (*Pero no los amaba*, “But he doesn’t love them”). Since the *o sea* that follows is uttered with falling intonation and its last vowel is lengthened, I argue that these two characteristics set the transition relevance place where another speaker may say something, as R does at line 05 or as Az does at line 06 in excerpt (12). Furthermore,
since *o sea* marks the beginning of something, *o sea* in this environment indicates that further talk may be produced; talk that will be associated to the turn where *o sea* was first deployed. In this case the further talk is the second component of the repair (*los idolatraba*, “he idolized them”) which is launched at line 06.

At line 06 the repair is completed but still L displays another *o sea*. I suggest that similar contingencies are at hand here: even though *o sea* may not be prefacing the completion of a given structure (e.g. “it wasn’t X, was Y”) it leaves the widow open for further talk on the same matter. The fulfilment of this task is open to any of the coparticipants, in contrast to the previous *o sea* where the speaker that was expected to complete the repair was L, the one who initiated it. There is no further reformulation or repair of the statement; instead G gives a further characteristic of the grizzly man which is carried out for discussion. I argue that turn-final *o sea* is subject to the contingencies of interaction where the participants are collectively shaping the conversation, so they may not provide the further talk that *o sea* projects; for example in excerpt (14) (which is taken from excerpt [13] above), the type of talk that *o sea* projects is lost since Az at line 06 continues resisting En’s advice and by doing so makes other actions pertinent to unfold in the next turn (En indicates a contradiction at line 07). The *o sea* deployed here is phonetically deducted: [o’sea] to [o’sea].

(14) *O sea V3 (10-30) Fomi(19)*

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Another characteristic of turn-final *o sea* is that it also helps to index a certain state:

(15) *O sea V14 P1(79)*

[In previous lines the speakers have been talking about how it is easy to put on weight after turning thirty; G has expressed concern about this since he turned twenty six.]

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First, one can identify the characteristics previously revealed that concern the use of *o sea* in turn-final position: at line 09 G emphatically follows the confirmation of V’s previous statement with an *o sea* with its final vowel lengthened and fallen intonation which indicate the transition relevance place. K then initiates an account at the following line but G, aligning with his previous *o sea*, delivers a telling, lines 12, 13. G
indexes with *o sea* a state of indignation that becomes evident with his telling. The indication is marked with the increment of volume and the gesture Ge performs after the *o sea*, line 10.

In excerpt (16) the speaker is talking about the time when he saw some people whom he used to admire getting drunk; in this case *o sea* in turn-final position accompanies the state of disappointment that Ju is conveying. Similarly to the previous example, it is observed that gestures and prosodic features are used by the speaker to display the state of indignation: the gesture at line 04 and the increment of volume and emphasis at line 03. The particularity of this example is that the *o sea* is part of the report speech.

(16) *O sea V7 P5 1341(45)*

[Ju is talking about the people he used to admire]

01 Ju Era una chava y un chavo (.) y un día

\[\text{be-3SG.PRET one girl and a guy and one day}\]

02 los vi así tomar borrachos

\[\text{3PL.DAT see-1SG.PRET like drink-INF drunk}\]

\[\text{I saw them getting drunk}\]

03 No pus me quedé así de- TODO así todo

\[\text{No put me stay-1SG.PRET like of- all like all}\]

\[\text{No I was like- EVERYTHING like everything}\]

04 lo que- ((Ju raises his hand and touches his head))

\[\text{the that}\]

\[\text{that}\]

05 Ve: =se te vino abajo ((starts nodding))

\[\text{3REF 2SG.DAT come-3SG.PRET down}\]

=**collapsed**

06 Ju:=>Abajo así (.) dije "no, no lo puedo creer, *o s`a*!;

\[\text{Down like (.) say-1SG.PRET no no 3SG.ACC can-1SG believe-INF or be-it}\]

\[\text{Down (.) I said “no, no I cannot believe it, *o sea*!;}\]

07 Ve: ((continues nodding))

08 Ju: mis ídolos haciendo eso" my idols do-GER that

\[\text{my idols doing that}\]

09 (.)

10 Ju: Y así ya pus:-

\[\text{And like already put}\]

\[\text{And like that put}\]

11 Vu: se te ca[[ll]]

\[\text{3REF 2SG.DAT fall-3SG.PRET}\]

\[\text{It [collapsed}\]

12 Ju: [Adios ídolos]

\[\text{goodbye idols}\]

\[\text{goodbye idols}\]

\[\text{11}=>\text{11}=>\]
I have claimed in this section that *o sea* in turn-final position does not explicitly *invite* the hearer to take the turn but it is rather an indicator of the transition relevance place. I have suggested that, apart from its position at the end of the turn, what makes *o sea* an indicator of a point of possible completion is its fallen intonation and the lengthening of its final vowel. The hearer may take the next turn after *o sea*; however, the speaker who deployed the *o sea* is entitled to continue talking since as it has been argued *o sea* indicates that more talk may follow; this talk may be aligned to the talk that *o sea* preaced or it may not. It has also been argued that *o sea* can contribute to indicate a given state (e.g. indignation, disappointment). In sum I propose that *o sea* in turn-final position is doing two jobs: on the one hand it is taking the turn to a point of completion, and on the other it is projecting that the speaker contribution is not over and that much talk on the same matter may come. *O sea* in this particular position is a turn constructional unit in its own right.

6. The translation of *o sea* into English

At the beginning of this paper I mentioned that *o sea* has been translated into English in the literature as “that is” or “I mean” however no account has been given on its interactional usage. In this analysis I have used other translations: “that means” and “so”. In the following I suggest an account of the different ways of translating *o sea* into English.

6.1. “That is”

*O sea* means “that is” when the speaker is doing repair and the speaker’s perspective or point of view is not involved, it can occur in transition space or not (e.g. excerpts [4], line 3; [6], line 09).

6.2. “I mean”

*O sea* means “I mean” when the speaker is doing repair in the turn (e.g. excerpt [2] line 01) or in transition space (e.g. excerpt [1], line 03); it can be used as well when giving accounts and the speaker own perspective or point of view may be involved (e.g. excerpt [5], line 03).
6.3. “That means”

*O sea* means “that means” when requesting clarification of previous turn (e.g. excerpt [10], line 07) or when the speaker is displaying understanding of prior talk (e.g. excerpt [9], lines 09 and 10).

6.4. “So”

*O sea* means “so” when it prefaces an upshot as in excerpt (9), line 12.

6.5. “Oh”

*O sea* can be translated as “oh” when it prefaces a request for clarification (e.g. 10, line 07).

The *o sea* that does translate easily into English is the one that operates with respect to the structure of the conversation i.e. turn-final *o sea* (except when the turn that proceeds *o sea* completes a repair as in excerpt 13, line 04) when *o sea* initiates topic shift; and when it is part of the next turn repair initiator phrase “*O sea cómo*?” (“*o sea what*?”).

7. Conclusions

In this paper I have demonstrated that *o sea* can be deployed at different locations in the interaction. I have shown examples where it was located turn-initially, turn internal, and turn-finally. On the whole the data used in this study has served to show that *O Sea* is mainly used to do repair, namely, *o sea* is a particle used to mark and initiate an adjustment to the speaker’s turn. *O sea*, within the turn, is used by the speaker when s/he has already initiated repair and wants to introduce a revision of their previous talk; *o sea* is utilised as well to carry out the repair that is initiated by another speaker. I propose that *o sea*, in turn-initial or TCU initial position is used to do repair in transition space. The speaker may preface a request for clarification with *o sea* or s/he may use it to display understanding after repair. It has been shown that *o sea* can be part of the machinery of topic shift since it is employed to initiate topic transition in conversation.
Finally, it has been demonstrated that, contradicting to what Félix-Brasdefer has suggested, when o sea occurs in turn-final position it does not explicitly invite the hearer to take the turn but rather it simply marks, with its falling intonation and the lengthening of its final vowel, the transition relevance place of the turn; more over I suggested that o sea may index a given cognitive state of the speaker.

All in all, this paper has been an attempt to explain the use of o sea in Mexican Spanish conversation. The examples presented here show that o sea involves different practices; mainly repair but it also serves to carry out other conversational actions. That is, o sea has a retrospective feature in conversation that serves to revise/adjust/correct, etc. the immediate previous talk or target previous talk to initiate topic-shift.

Appendix A: transcription conventions

Transcription Symbols\textsuperscript{12}

\(\Rightarrow\) Arrow in the left hand margin signal the specific part of the excerpt discussed in the text.

(1) The number in parentheses indicates a pause in seconds

(2) The number in parentheses indicates a pause in tenths of a second.

(.) The dot in parentheses indicates a micro pause.

[ Square bracket indicates the point at which overlapping starts.

\(=\) Equal signs ordinarily came in pairs – one at the end of a line and another at the start of the next line or one shortly thereafter. They indicate: (i) If the two lines connected by the equal sings are by the same speaker, then there was a single, continuous utterance with no break or pause, which was broken up in order to accommodate placement of overlapping talk. (ii) If the lines connected by two equal signs are by different speakers, then the second followed the first with no discernible silence between them, or was “latched” to it.

\textsuperscript{12} The transcription conventions were taken from Schegloff (2007) and Hutchby and Wooffitt (2008).
“More than” and “less than” indicate that the talk they accompany was produced noticeably quicker than the surrounding talk.

“More than” before an utterance or a word indicates that the segment initiates noticeably quicker.

Pointed arrows indicate a marked falling or rising intonational shift.

: It indicates that the prior sound is prolonged, the more colons the greater the extension of the stretching

The utterances between quotation marks indicate that the talk was produced with an intonation that denotes reported speech.

.hh It indicates in-breath.

.hh It indicates laughter the more “hs” the longer the laughter.

(h)word(h) Words between h’s indicate laughter infiltrated in the speech.

Wor- It indicates that a words is cut off.

Stat- It indicates that a statement or account is cut off.

Underline words or underline fragments of a word indicates speaker emphasis.

WORD Capitals indicates increase of volume.

(guess) Words in parentheses indicate a best guess as to what was said.

( ) Empty parentheses indicate that something has been said but not heard by the transcriber.

((word)) Words in double parentheses indicate descriptions of transcription events.

°word° Degree sings indicates that the talk is soft or quiet.

word? One question mark indicates question intonation.
Appendix B: Gloss-line abbreviations

1 First person  
2 Second person  
3 Third person  
ACC Accusative  
DAT Dative  
[EXP] Colloquial expression  
FEM Feminine  
GER Gerund  
IMP Imperative  
IMPF Imperfect  
INF Infinitive  
MASC Masculine  
PART Participle  
PRET Preterit  
REF Reflexive  
REL Relative pronoun  
PL Plural  
SJV Subjunctive  
SG Singular

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References