Language Research in Marketing

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Abstract

This manuscript aims to introduce researchers to the fascinating world of linguistics and to show how to conduct meaningful language research in marketing, exploring the way language influences behavior and how language can express thoughts, emotions, and mental states in marketing contexts. Ann Kronrod, who holds a Ph.D. in linguistics and conducts linguistic research in marketing, familiarizes the reader with fundamental concepts and prominent theories in linguistics, reviews the currently available research in marketing that examines language questions, lays out a guide to conducting compelling language research in marketing, and offers exciting future directions for developing new perspectives on language within marketing research. This manuscript can be used as a basic guide for beginning researchers who are interested to conduct language research in marketing, or as a summary for more seasoned researchers who already acquired linguistics education and would like to get up to date on recent streams in the research of language in marketing.

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Introduction

Can a product review influence a consumer's decision to purchase or not to purchase a product? Yes, it can. Can a single sentence in the review influence this decision? Yes, it can. Can one word change your mind? Yes, it can. Can a single sound or letter make a difference? Yes. It. Can.

My goal is to show you how language influences behavior in marketing, and how language can express thoughts, emotions, and mental states. I will review and summarize research on language in marketing and accompany my review with illustrations and examples. Research of language in marketing is developing, and has lately become a permanent topic in marketing research and teaching. Having earned my Ph.D. in psycho-linguistics, I am excited to share my extensive knowledge of linguistics and show you how it can be used in research of language in marketing.

This manuscript consists of four parts:

Part I will cover the basics of linguistics in simple terms and introduce readers to the most prominent linguistic theories, building a knowledge foundation that can help practitioners, researchers and students develop new ideas in marketing.

Part II will provide a comprehensive review of current research of language in marketing, identifying theoretical contributions, methodological approaches, and practical implications.

Part III will overview the most common methods in linguistic inquiry and lay out a step-by-step pathway to developing language research in marketing, starting from a marketing problem, raising new research questions, evolving into a new theory that can identify behavior and explain it, and materializing into a methodological approach that yields meaningful conclusions.

Part IV will summarize the manuscript and outline suggestions for future research of language in marketing.

It is my hope that readers will enjoy new discoveries while reading this manuscript and that the text will spur novel linguistic research contributions in the field of marketing.

Part I – Linguistics and Language Research

1. Introduction
2. The Components of Language
3. Prominent Theories in Linguistic

1. Introduction

Language is one of the most miraculous and unique skills of human beings, distinguishing humans from other forms of life. What do I mean when I say “language”? Language is defined as a systematic method of communicating ideas or feelings by the use of conventionalized signs, sounds, gestures, or marks that have understood meanings (Merriam Webster Dictionary 2021 https://www.merriam-webster.com/dictionary/language). Looking at this definition, we understand that language is a **system of rules for combining signs** to convey and understand **meanings**. There is an intriguing point to this definition: while there is a finite number of rules and signs in a given language, there is virtually an *indefinite* number of ways to use these rules to combine signs and create meaning. This important aspect of language is the main reason that language is so rich and endlessly developing. And the reason that it is so-so interesting!

To organize this widely explored human capacity, I employ a traditional approach to language research, dividing it into five aspects: phonetics (sounds), semantics and morphology (meaning of words), syntax and grammar (sentence structure), discourse (texts), pragmatics (use), and cross-cultural/socio-linguistics. In the following sections, I will describe each of these aspects of language and illustrate with relevant examples.

2. The Components of Language

2.1 Phonetics (Sounds)

2.1.1 Definition

Phonetics relates to the study and classification of the sounds of speech. Unlike other sounds, speech sounds (also called phonemes), are produced within the oral cavity with the intention to construct a sign (e.g., a word) that conveys meaning. Phonemes are the smallest unit of linguistic analysis, which are usually combined into words.

The common way to produce a phoneme is by exhaling or inhaling air while bringing closely together parts of the oral cavity or completely closing and then releasing them. This "shaping" of the air can be produced by using the lips, tongue, teeth, upper palate, and larynx. Some phonemes, like “n” or “m” involve air traveling through the nose. To write down a phoneme, we use the alphabet.

2.1.2 Classifications

Phonemes are usually divided into vowels and consonants. Table 1 portrays the main classifications of phonemes in English and offers examples. There are many other classifications and distinctions, but in this review I'd like to keep it simple and will therefore suffice with only a partial representation of classifications, focusing only on the English language. Vowels are most commonly classified by place (front, middle, and back). Consonants are produced by narrowing or closing, and then opening back parts of the oral cavity. The three most common classifications of consonants are:

1. Place of closure - front: lips and teeth; middle: tongue and palate; back: tongue base and larynx
2. Air flow and obstruction - fricatives allow some air flow, whereas explosives involve closing and the releasing the air at once.
3. Voice – whether the consonant is voiced or silent (produced without activating the voice chords)

Table 1. Phoneme classifications and examples from English language

Vowels:			
Place:	**Front**	**Middle**	**Back**
	i	*e, a*	*o, u*
Consonants:			
Place:	**Front**	**Middle**	**Back**
	j, f, b, m, s	*t, l, n, r*	*y, g, k, h*
Air flow:	**Fricatives**	**Explosives**	
	f, v	*p, b*	
Voice:	**Voiced**	**Silent**	
	v, b, g	*f, p, k*	

2.1.3 Form and Meaning

The voicing, the place of articulation, the order and the stress on certain sounds can change the meaning of a word. For example, stressing the first syllable in the following words turns them into nouns, whereas stressing the last syllable turns them into verbs*: desert*, *permit.* When retailers ask consumers: "*Like us on Facebook*", the correct way to read this phrase would be by stressing the word "*Like*". If the word "*us*" is stressed, the meaning will dramatically change to "S*imilar to us on Facebook*".

2.2 Morphology and Semantics (The Structure and Meaning of Words)

2.2.1 Definitions

Morphology is the study of the way phonemes can be combined into words using rules and exceptions. For example, the word '*proudly'* is constructed of the root '*proud'* and the suffix '*ly'*. Semantics is the study of meanings. Semantics is highly related to morphology, because the way we construct a word directly influences the meaning of that word.

2.2.2 Forms and Meanings

The morphological structure of a word is in fact a direct indication of it meaning. For example, adding "able" at the end of a verb yields a new word which means "can be done", as in: 'flame/flammable'; 'click/clickable'.

Usually a word has a root/stem, which is then morphed and altered depending on linguistic rules. For example, the root 'walk' has the meaning of moving on a surface by lifting and putting down each foot consecutively, one at a time. Adding 'er' – walker - makes up the meaning of 'a person who walks', as well as 'a device that helps a baby to learn how to walk', as well as 'a device to support a person having difficulty walking."

Morphological forms have a significant role in constructing meaning. For example, the role of the prefix "un" is cancellation of an adjective. For example, 'faithful' versus 'unfaithful'. The suffix *ing* when added to a verb can turn it into a noun, as in 'a meeting', 'a meaning' or 'a finding'. Thus, morphology is all about the way form creates meaning, and the link between morphology and semantic lies in this.

An interesting way to look at the link between morphology and semantics, or form and meaning, is through the examples of synonyms and polysemy.

Synonyms are different words that refer to the same (or almost the same) meaning. In other words, this is when different forms denote the same meaning. For example, 'happy', 'merry', 'cheerful', and 'joyous' are different forms denoting the state of contentment and positive mood.

Polysemy. Polysemy is the opposite case: when the same word has several meanings. In other words, when one form denotes more than meaning. Most words in a language have more than one meaning: a primary meaning, which is established through frequent use of the word with that particular meaning in mind, as well as other meanings, which vary in the extent to which they are salient to speakers. For example, the more common meaning of the word 'bank' is 'a financial institution'. But the word has several other meanings, such as the bank of a river, a pile of earth, or a row of similar things. Language users usually employ the context in order to know which meaning to infer.

2.3 Syntax and Grammar (Sentence Structure)

2.3.1 Definition

Grammar and syntax are the set of rules that guide language users about ways to construct meaning using the set of sounds and words in their language. Some grammatical rules are universal - for example, in most languages, thoughts are conveyed in sentences, and each sentence contains at least one noun and one verb. However, most of the grammatical rules are specific to a language and are responsible for the variation across languages. As mentioned earlier, language has a limited set of grammatical rules, with which language users can construct an indefinite number of sentences.

2.3.2 Grammatical and Syntactic Forms

Grammatical and syntactic rules relate to the way embedding different word forms in a particular order in a sentence produces meaning. The predominant grammatical and syntactic forms that influence sentence meaning are parts of speech (e.g., *nouns*, *verbs, adjectives*, *adverbs)*, punctuation (e.g., comma, question mark), tenses (e.g., past perfect, future), determiners (e.g., my, yesterday), connectors (e.g., because, and), and word order. These grammatical forms create endless combinations and sentence types, which denote any meaning we may think of. For instance, a statement, a question, a hedge, or a negation can convey the direct meaning of the words, but also irony or various moods.

A famous example of the way punctuation can change meaning is the phrase "Let's eat, grandma!" which, when punctuation is changed, can obtain a cannibalistic meaning: "Let's eat grandma!" Similarly, an everlasting debate between the genders is reflected in the following punctuation play: a. A woman without her man - is nothing! or b. A woman - without her, man is nothing!

Word order. The order of words in a sentence determines its meaning. For example, "Mary hit John" has a different meaning than "John hit Mary." With regards to language variability, it is interesting that while certain languages have a very rigid word order, so that putting the words in any other order will make the sentence lose its meaning, other languages have a very flexible word order. For example, in English the sentence 'the purple lamp fell off the yellow table' will have a meaning only in this order. However, in other languages (e.g., Russian), the sentence will make perfect sense even if the words are ordered like this: 'off the table yellow the lamp fell purple'.

2.4 Discourse (Text)

2.4.1 Definition

Language is composed of sounds, which combine into words, which combine into sentences, which combine into text. Discourse focuses on text as the unit of analysis, namely – anything longer than one sentence. The main interest of discourse analysis is how the text flows. Discourse studies examine forms and functions of text in social settings, and how the flow from one sentence to another conveys meaning.

2.4.2 Types of Discourse Research

Phenomena that are of interest in discourse research are: *coherence* – how the sentences stick together to form a unite topic; *turn taking* – how the conversation is managed by different speakers; *narrative* – how the sentences flow from one to another, progressing through the topics; and *genre* – how the type of discourse and its focus of interest might influence its language.

Coherence – coherence is achieved in two ways: by connecting between phrases, using conjunctions such as "and/or", and by referring in a sentence to the content of a previous sentence, to form what is called “continuity of senses”. For example, “Where are you going?” – “I am going to see a friend”. In this example, the repetition of the word “going” increases coherence. Speakers can increase coherence also by using synonyms. For example, the answer “I am driving to see a friend” could still be more coherent than the answer “a friend” which omits the verb altogether. Coherence is important for successful communication, comprehension, and the resulting social relationships. Therefore, speakers invest effort in using linguistic markers that indicate how each next part of the text is linked to the previous one (by way of contrast, repetition, expansion, temporal relation, cause-effect, etc.)

Turn taking – as the mind is unable to simultaneously process language and generate language, people lead conversations in turns. Conversation parties have ways, such as intonation, pausing, and phrasing, to determine when one party’s turn is over and the next party’s turn begins. To hold their turn while thinking how to phrase the next idea, speakers use vocal signs like “ummm” or “errrr” or “aaaa”. Speakers also sometimes interrupt each other on purpose, by starting their turn while the other speaker is clearly not done with their turn. While one party is talking, the other party would sometimes signal that they are listening, using signs like “aha”, “yes”, “mhm” etc., or signal their attitude without taking a turn, as in “no way!”, “really?”, “is that so?”

Narrative – to convey a flow of thought, speakers use various discourse markers (e.g., 'well', 'oh', 'but') and “manage” listeners, so to speak. For example, a speaker might say “Oh, guess who I met yesterday”. The “oh” signals to the listener that something unexpected is about to be said. When a speaker starts their turn with “Yes, but”, this marks to the other party that the following sentence will contradict the previous one. When the same source conveys a longer text, as in story-telling, experience sharing, speeches or articles, the speaker structures the text so that it flows from one point to another. The points may be points in time, logical points, or previously announced points. The narration linking between the points influences the meaning that listeners derive from the text.

Genre – the purpose of the text often determines its genre, and genre is reflected in the language that is being used. For example, the goal of political speeches is to persuade, and to gain power or indicate power. Therefore, political speeches are often aggressive in terms of the words they use, the flow of sentences (e.g. repetition) and other linguistic markers of power. A relevant example of genre is advertising, which is a form of mass communication with the purpose of persuading a large audience to do something (usually to consider an offering). This purpose dictates the use of specific linguistic aspects such as exaggeration (puffery), figurative language and other rhetorical tools.

2.5 Pragmatics (Use)

2.5.1 Definition

Pragmatics in language research focuses on the way people use language to achieve goals. Pragmatics is all about use and context. As opposed to the dictionary meaning of words and phrases, as defined and explored within semantics, pragmatics is interested in what is *beyond* the dictionary meaning. This fascinating field deals with the relationship between form - words and sentences - and the *intended meaning* lying underneath them. For example, when asked for the time, answering “Too darn early” does not directly answer the question, and instead conveys the speaker’s attitude towards the time rather the time itself.

The research of pragmatics examines the way speakers convey specific intended meanings within specific contexts, and the way addressees infer the intended meaning. Both speakers and addressees use their previous knowledge and the context in order to convey meanings and to decipher the intended meaning from uttered words. Although this process occur automatically in the mind, it is a rather complex task and therefore sometimes people successfully convey and infer the intended meaning, whereas sometimes the process fails.

2.5.2 Example of Pragmatic Success and Failure

Example 1. A to B (at the dinner table): “Can you pass me the salt?” B: “Yes”. This is an example of failed inference of intended meaning. A formulated a request as a question. B answered the question but did not infer the request and consequently did not fulfill it.

Example 2. A to B (at the dinner table): “Can you pass me the salt?” B: “What is the magic word?” A: “Now!”. This is an example of a successful inference of intended meaning by both A and B. First, A formulated a request as a question and B inferred that this is a request. Then, B asked A to use a politeness marker “please”, and then A inferred the intended meaning and reacted with a substitute that also had an intended meaning.

Note that the conversation in Example 1 is perfectly correct, grammatically. It is, however, a failure from a social-conversational standpoint. On the other hand, even though Example 2 seems like a bunch of unrelated phrases uttered by A and B, from a pragmatic point of view it makes perfect sense and even bears added value because it is humorous.

There are numerous examples of successful and failed pragmatic behavior. The most important take away is that pragmatics deals with what people mean and infer beyond the literal words.

2.6 Cross Cultural Linguistics and Sociolinguistics

2.6.1 Definition

The focus of socio-linguistic research is how culture, widely defined, influences the way people learn and use language. Culture is defined here as any group of people who share common attitudes, rules, or norms. For example, gender and age can define culture (e.g., children) as well as social groups (e.g., street gangs) or occupation (e.g., army, business).

The main assumption underlying socio-linguistic inquiry is that social groups can develop their own language, with words and rules that are shared among the members of the group. For example, the common perception that men swear, except when around women, because women cannot stand cussing has been recycled in many ways over the years, including women swearing as a way to rebel against this perception or to demonstrate their individuality (Austrew 2019). In other words, using swearwords in a sentence depends on social belonging, such as gender – which makes it a sociolinguistic phenomenon.

2.6.2 Topics of interest

Sociolinguistic research is interested in the way belonging to a social group or to a culture defines the linguistic variation of its members. This field is interested in all aspects of language:

Phonetics – for example, the famous British Cockney accent, which is characteristic of East London and associated with the proud working-class.

Semantics – for example, military-talk has a distinct vocabulary of acronyms and substitutes: “salad bar” refers to the service ribbons on a military uniform, and “bird” means helicopter. Another famous example is the way soft drinks are referenced in different places in the U.S.: pop in the Midwest, soda in New England, and coke in the South.

Grammar and syntax – for example, in spoken language WH-question sentences place the WH question word (who, when, why etc.) at the beginning of the sentence, as in “Who bought these shoes?” However in sign language the question word would typically be placed at the end of the sentence, as in “These shoes bought who?”.

A special topic of interest in cross-cultural linguistics research is how the characteristics of specific languages influence perceptions of speakers of these languages. For example, East Asian languages, such as Japanese, Chinese, or Korean, have a unique characteristic: they can be written horizontally or vertically, and the direction of writing can influence the meaning of what is written. For example, a text relating to the past is perceived to be farther in the past when written in a vertical direction than in a horizontal direction (Deng, Han and Wang 2019). Consequently, products that are described using vertically oriented text are perceived as more antique and traditional. Similarly, Kim, Moore and Murray (2020) found that consumers perceive review authors who use contracted negations (e.g., isn’t) as warmer, compared to full negations (is not), because contracted forms are less formal than full forms. As a result, consumers evaluate the reviewed product more positively. This finding is relevant only to languages that allow the contracted form of a word, such as English.

3. Prominent Theories in Linguistics

So far, I have described the levels of linguistic inquiry and the main questions of interest at each level. This section is devoted to the most prominent theories within linguistics. Understanding these theories will help the reader develop concepts about the way consumers and marketers use language and generate explanations for these uses.

3.1 Categorization Theory – Eleanor Rosch and Caroline Mervis 1975

How is the world organized in the mind, and how is this organization reflected in language? To answer this question, Eleanor Rosch and Caroline Mervis (Rosch 1983, 2002; Rosch & Mervis 1975) put forth a groundbreaking theory – Family Resemblance – which was supported experimentally numerous times. Family Resemblance Theory proposes that people possess an innate categorization system where objects (e.g., apple) are assigned into categories (e.g., fruit). Some category members are more prototypical members of their category, and therefore they are more representative of the category and are more likely to come up in the mind when thinking about the category. For example, a more prototypical member of the category “flowers” is a daisy, or a rose. Other members are less prototypical members of their category, and consequently they are less likely to come up when thinking about the category. For example, within the category of flowers, a camellia would be less prototypical.

The importance of this categorization theory lies in its ability to explain fundamental behaviors such as word choice in conversation, our ability to understand rules (e.g., game rules), ease of understanding texts, or analysis and liking of literary contributions.

3.2 Universal Grammar, Generative Linguistics & Linguistic Variation – Noam Chomsky

Beginning the 1950s, M.I.T. Professor Noam Chomsky made an influential suggestion that captured attention of linguists around the globe and revolutionized the field of linguistics. Chomsky's main idea, the idea of Universal Grammar, was that since children in different places naturally acquire different languages, their innate language acquisition mechanism must involve a balance between being highly specific to the local language, and being highly abstract so that it can account for the considerable variability of different languages. Therefore, the theory of Universal Grammar suggests that language contains general principles and parameters that reflect the structural possibilities of all languages, but these can be applied to any language by simple modifications. For example, a language can have prepositions (e.g., at, in) or another form that indicates the relations between objects in time or space, but every language will have some way to indicate these relations.

Chomsky, and the stream of research that followed his contributions, are mainly engaged with the search for a universal, context-free grammar, which is innately planted in each child's potential and is then applied in various ways within each specific language, so that speakers can tell between a grammatical and an ungrammatical sentence regardless of context.

3.3 Linguistic Relativity: The Sapir-Whorf Hypothesis

Among the most long-lasting debates in the research of language and psychology is the question of whether it is only that our life experiences and thoughts influence the language we use, or if it is possible that the language we use might influence thought and the way we perceive reality. Edward Sapir and Benjamin Whorf contributed an answer to this question, known as the Sapir-Whorf Hypothesis (Whorf 1956). Based on evidence that speakers of different languages differ in how they perceive and think, the theory suggests that languages involve fundamentally different "logics," which native speakers absorb during language acquisition, until these "logics" seem to them a natural way of understanding the world. An example of the way language may influence thought and perception can be found in languages with grammatical gender (e.g., Spanish, Russian, Hebrew, etc.). For instance, in Russian, a knife has a masculine form ("nozh") but a fork has a feminine form ("vilka"). Speakers of these languages associate masculine qualities with masculine nouns and feminine qualities with feminine nouns, so that the whole world is assigned into gender-related perceptions (Denbaum and Pérez 2021). Conversely, English speakers do not have gender assigned to knives and forks, and therefore do not associate them, or the rest of the world, with masculine or feminine qualities.

The Sapir-Whorf hypothesis faded somewhat with the introduction of Chomsky's argument for universal linguistics (as mentioned earlier, Chomsky argued that linguistic differences occur merely on the surface of use and do not represent differences in thought). In addition, follow up studies showed that speakers of different languages do not differ in cognitive capacities and perceptions, which brought about additional criticism against the hypothesis (e.g. Martinovic, Paramei and MacInnes 2020). Today, the proposal that language influences thought is expressed in a softer manner and is mainly used in social psychology and in therapeutic approaches as a means to alter perceptions. For example, the positive redirection approach suggests that using more positive language can sway initially negative thinking into more positive one.

3.4 Speech Act Theory - John Austin and John Searle

John Austin, in his book "How to Do Things with Words" (1962), suggested a revolutionary idea: people utter phrases not only in order to lay out words, but to actually make a change in their environment. For example, the words "I declare you husband and wife" turn two people from a loving couple to a lawful entity of marriage. John Searle followed Austin's logic and developed it into a full theory named Speech Acts (1969). These two works were among the first attempts to move from structural linguistics describing - the components of language and the correct and incorrect ways to combine them in sentences - to understanding language as a social behavior - a tool that people use in order to create a change in their environment, and in each other.

The main premise of Speech Act Theory is that people use language not only in order to describe reality, but perhaps even predominantly – to influence and alter reality. For example, when making a request, the speaker in fact attempts to bring the listener to do something for them. When uttering a warning, the speaker actually predicts what would happen if certain reality is not changed or certain conditions are not met. When extending an invitation, the speaker makes it possible for the listener(s) to plan and execute an activity, complying with the invitation. Finally, apologies are uttered with the intention to proclaim good will and to change the listener's attitude towards the speaker.

3.2.1 Indirect Speech Acts

A highly important notion within Speech Act Theory is that people can say one thing but mean another (Asher 2001, 2003; Searle 1979). For example, the question "What is your name?" is in fact a request to say one's name. Similarly, a parent asking a child "Have you done your chores today?" does not merely mean to inquire about this, but actually means a directive, as in "Do your chores, if you haven't yet."

The importance of understanding indirect speech acts lies in their omnipresence in daily use, and also in the ease with which people pick up on the intended meaning hiding in them. For example, A says "I am having a party tomorrow" and B says "Sorry, I am out of town". Even though the direct speech act in A's words seems to be a mere statement of facts, A actually extends an invitation for B to come to her party. B's utterance also seems to be a statement of facts. But in reality, B indirectly rejects A's invitation.

The case of indirect speech acts brings us directly to one of the most prominent theories in modern linguistics, which established linguistics as a social science, rather than merely a semi-mathematical semi-philosophical field. In what follows, I describe Paul Grice's theory of Conversation and the Cooperation Principle.

3.5 Conversation Theory and Cooperative Principle - Paul Grice

Why do people engage in conversation? Paul Grice, in his seminar series of lectures that were later published as a composition named Logic and Conversation (2004) claims that people use conversation as means to achieve a mutual goal. Other scholars suggested that conversation can also be used to fulfill individual goals (Austin 1962; Kasher, 1976, 1982). For example, if A wants to know the time, she may initiate a conversation with B, to ask for the time. If conversation can help people achieve their goals, then people should be interested in its success. Further, in order for a conversation to succeed, all parties need to do their best and be, as Grice terms, cooperative speakers. To be cooperative in a conversation means invest one's best efforts in trying to understand each other, and in trying to be understood (Lumsden 2008). Grice outlines four maxims (rules) of cooperative behavior in conversation. The maxims are:

- The maxim *of Quality* asserts that each participant in a conversation should say only what they believe to be true and accurate. In other words: don't lie.
- The maxim of *Manner* states that one should avoid expressions that are overly vague, complex, or too simplistic.
- The maxim of *Relevance* expects conversation participants to avoid mentioning irrelevant things, and to contribute to the conversation only relevant information – that which is related to the topic and aims of the conversation.
- The maxim of *Quantity* argues that participants should provide the right amount of information—neither more nor less than needed.

The basic cooperative behavior means that people should adhere to these four rules. For example, when A asks, "What's for dinner?" a cooperative respondent B would name the dish that is planned for dinner. If speaker B said, "I lost my wallet yesterday," this would be a violation of the maxim of relevance and speaker B would be considered non-cooperative. If a woman who has two children says, "I have three children," this blunt lie would be a violation of the maxim of quality. Ads that use expressions such as "better quality" to describe their products violate the maxim of manner because the statement "better quality" is too vague to convey any interpretable meaning. Finally, the expression TMI (too much information) is often used to indicate to a conversation partner that they are sharing information that is inadequately too detailed.

It seems that being cooperative in conversation boils down to complying with the four maxims. In fact, speakers disobey the maxims *all the time*. What's more, being cooperative in conversation actually entails vividly breaking the four rules, or in Grice's terms, flouting the maxims – violating the maxims in a way so that the other conversation parties are aware of the violation. How so? It turns out that people can achieve their goals through conversation in a much more efficient way if they flout the maxims. For example, if I tell my friend "You look wonderful this morning" but my friend and I both know that she hasn't slept all night, my words are a violation of the maxim of quality because my friend and I both know that I believe that actually she looks terrible. But in reality, my friend does not think that I am lying. In reality, my friend infers from my words that I *care* about her. She draws this inference because I vividly violated the maxim, and by doing so, I not only conveyed the thought that she looks exhausted, but also my *attitude* about it.

Cooperative speakers flout the four maxims when they want to convey additional meaning beyond the literal meanings of words (Lumsden 2008). In order to execute successful maxim flouting, the speaker must make assumptions about the listener. The speaker makes assumptions about the listener's previous knowledge and current thoughts, mutual knowledge, relationship hierarchy, contextual cues, etc. (Dumontheil, Küster, Apperly, & Blakemore, 2010; Lin, Keysar, & Epley, 2010). The listener, in an effort to understand the speaker, also makes inferences about the speaker's intended meaning, relying on contextual cues, previous knowledge, the speaker's knowledge and thoughts, etc. Since both the speaker and the listener hold the basic assumption about each other, that each conversation party is being cooperative in the conversation, they both believe that each of them will behave in a linguistically cooperative way and make all efforts to understand and be understood. The assumption of cooperation is key to communication success. Therefore, the search for an intended meaning is an integral part of conversational cooperation and speakers rely on this assumption when choosing language that flouts the maxims. For example, A asks, "What time is it?" and B answers "Too early." B's answer violates at least two maxims: it violates the maxim of relevance, because the answer is not relevant to the question, and it violates the maxim of manner because it is too vague. But this violation is vivid to the listener and implies, beyond the actual time, the speaker's *attitude* about it, which adds value to the conversation.

The following example of cooperative flouting of the maxims is an ad for *The Economist* magazine, which reads: "*Great minds like a think.*" The phrase, a variation on the saying "Great minds think alike," is grammatically flawed, thereby violating the maxim of manner. The violation, however, is vivid and therefore the phrase is cooperative, because it not only suggests that clever people like to think, but also that the readers of *The Economist* are clever people, and that the magazine *appreciates it*. The magazine chose a clever way to show this: understanding and appreciating this word play requires some extra thought, which is exactly what clever people presumably like to do. Thus, the phrase, by its very essence, suggests that it is meant for people who like reading this kind of phrase, and who would understand it.

In sum, conversational cooperation assumes that people either adhere to the four maxims of cooperation, or flout them in a way that is vivid to the listener. People who want to deceive or who are being non-cooperative in conversation, will violate the rules in a concealed way. For example, a parent asks a child "How many candies did you have?" and the child answers "I had three". In fact, the child had six candies. This is not a strict lie, because the child indeed had three candies, but this is a violation of the rule of quantity because the child intentionally provided less information than needed. Since the parent does not know that the child is being non-cooperative, the parent assumes that the child adheres to the maxims and concludes that the child had exactly three candies and not "at least" three candies.

The Principle of Cooperation and Conversational Logic laid the basis for today's language philosophy. The modern view of language is that users employ language to convey meanings and to achieve their goals. One prominent case of indirect use of language is the case of figurative language. I describe it in the next section.

3.6 Conceptual Metaphor - George Lakoff and Mark Johnson

Figurative language is defined as words and expressions that convey ideas or thoughts beyond their literal dictionary meaning. Humor, irony, metaphor, simile, hyperbole, or sarcasm are all examples of figurative language. Many researchers (e.g., Gibbs 1994, 2008) are fascinated by the ability of language users to effortlessly comprehend non-literal, figurative expressions, such as "This math problem is piece of cake" (meaning that the problem is easy to solve). The Cooperation Principle can explain why conversation parties flout conversation maxims to add value to the conversation by saying more than the mere literal meaning of words, and invest efforts in understanding figurative language. A different explanation relates to the reason that speakers do this with such ease. George Lakoff and Mark Johnson, in their book 'Metaphors We Live By' (2003), suggest that metaphors are not just a linguistic feature, that is, a special way of transmitting meanings, but in fact behind a metaphor there lies a cognitive change. If a speaker uses an expression like “We had some ups and downs in our relationships”, then this actually reflects the speaker’s way of thinking about the relationship. Conceptual metaphors are defined as mappings from a cognitive source domain (geographical location) to a target domain (relationships), which represent cognitive perceptions of meaning. The cognitive advantage of conceptual metaphors lies in their ability to represent abstract concepts like love with more tangible concepts like geographical locations (e.g., ups and downs). Therefore, figurative language is a more vivid, and hence a clearer way to convey meaning. As a result, language users frequently and effortlessly come up with figures of speech and process figurative language (Gibbs 1994, 2008).

Conclusion

My main goal in this part was to provide the reader with an overview of what linguistics is about. I described the main elements of interest for linguistic inquiry – from sounds, through words, to texts – and the major theories that tried to explain how language is organized in our mind, and how we use language in everyday life. There are numerous theories and phenomena that the reader can learn independently, once these fundamental theories are understood. The study of linguistics can perhaps be summarized as follows: language consists of a list of elements like sounds and words, and a list of grammatical and syntactic rules. Employing this finite number of elements and rules, language users are able to make up an indefinite number of variations. Context, previous knowledge, thought, and social relations play a role in the formation of linguistic output (e.g., what people say or write) and in the process of comprehending language. Language, therefore, has universal aspects as well as local, context-specific aspects. Part II of this manuscript is devoted to a review of research of language within the field of Marketing and Consumer Behavior. The review is structured by order of the elements of language outlined in the current part, and relates to some of the theories I mentioned here. Further, some of the phenomena described in Part II are universal language phenomena, whereas some are context specific, reflecting the major approaches in linguistics.

Part II – Language in Marketing: research and practice

1. Phonetics
2. Semantics
3. Grammar/Syntax
4. Discourse
5. Pragmatics
6. Sociolinguistics

People read, write, and talk about consumption. They talk about their needs and wants, and brand managers learn about these needs and wants and develop positioning statements that correspond with them. Advertising agencies create ads representing product features that relate to target audience needs. Consumers respond to marketing communications about products and services, participate in focus groups and discuss ideas for new products and product upgrades, and chat with one another about products they use or own; Consumers and marketers compose and read product reviews and participate in social media conversations about consumption experiences. And so on. How does the language employed in all these activities influence decisions and behavior? And how do the emotions, thoughts, and goals of all stakeholders influence the language they use? The purpose of this part is to review work in marketing and consumer behavior that considered linguistic aspects of consumption. I will follow the five elements of linguistic inquiry outlined in Part I – phonetics, semantics, grammar/syntax, pragmatics, and sociolinguistics – and describe the major research contributions within the marketing field that focus on these elements.

1. **Phonetics**

Researchers of phonetic effects in marketing have predominantly focused on the way phonetics play a role in the way brand names are perceived. Within brand name phonetics research, there are several sub-foci:

Phonetic symbolism: phonetic symbolism refers to the phenomenon whereby the sounds of a word can signal meaning. Numerous works have been published on the effect of a brand name's sound composition on the meaning that consumers form about it (see Spence 2012 for a review), and some works have shown that the phenomenon is universal (e.g., Shrum et al. 2012). The main conclusion from these works is that the place of articulation, the voice-ness, and the order of sounds in a brand name signal various meanings about it (e.g., Roche, Shrum and Lowrey. 2016; Yorkston and Menon 2004). For example, in some of the more seminal works Klink (2000, 2001, 2003) shows that objects named with silent consonants (e.g., t, p) are perceived as smaller, lighter and sharper, and voiced consonants (e.g., g, d) elicit perceptions of bigger, heavier and blunter objects.

Extending this notion to brand preferences and following research showing that front vowels (i, e) signal small, sharp and fast whereas back vowels (o, u) signal large, blunt and slow, Lowrey and Shrum (2007) show that when the sounds of a brand name signal properties that are congruent with the product, this increases consumer preference for the product. For example, preferences for a knife with the brand name 'tiddip' were higher than when the brand name was ‘toddip’. Similarly, Kuehnl and Mantau (2013) show preferences for certain car models depending on the sounds constituting their international brand names. Beyond preference, Lowrey, Shrum and Dubitsky (2003) also show that phonetic symbolism can influence memory. In another work, Coulter and Coulter (2010) found that certain sounds in a price might convey a lower or higher amount than it really is, thereby altering consumer perceptions of the actual magnitude of the price.

Investigating environmental marketing and the way brand name sounds can influence perceptions of a product’s environmental friendliness, Joshi and Kronrod (2020) found that brand names for green products that consist of silent consonants (e.g. Sokat, where all three consonants are silent) convey environmental friendliness to a greater extent than if they contain voiced consonants (e.g. Zogad, where all three consonants are voiced). The main reason for these effects is that the low pitch vibration of voiced consonants metaphorically conveys dominance, threat and aggressiveness, whereas the high frequency of silent consonants conveys calmness, mildness and harmlessness. The authors further show that the process of making sense of brand name sounds involves metaphorical perceptions of human characteristics associated with these sounds, such as good-heartedness or honesty. Also focusing on voice-ness of consonants, Pathak, Calvert and Lim (2020) showed that voiced (b, d, g, z, v) versus voiceless consonants (p, t, k, s, f) convey a product’s harshness or softness and influence consumer inferences about the product’s quality (for example the gentleness of skin lotion or the efficiency of a toilet cleaner).

Further, Pogacar et al. (2021) show that certain phonetic structure such as length, initial versus ending stress or certain sounds, may make a brand name sound more feminine, which in turn can influence brand perceptions (e.g., warmer). Similarly, people preferred a butter cookie (less healthy) when it was named Ramune (voiced consonants) and a muesli cookie (healthier) when it was named Asahi (silent consonants; Fenko, Lotterman, and Galetzka 2016).

Everything in moderation: The literature reports a host of inverted-U effects, whereby brands are at an advantage when they adopt a moderate, as opposed to too little or too much of, sound similarity, congruence with perceptions, or sound familiarity. For example, Cunha, Forehand and Angle (2014) explored the influence of brand name similarity on more and less well-known brands in the context of co-branding and found that for the less-known brand, similarity of its name to a well-known brand improved its market performance, but for the well-known brand this similarity was not beneficial. Also exploring brand name similarity, Kronrod and Lowrey (2016) find that when a new brand name in the marketplace is too similar to an existing brand name (e.g., Orea is too similar to Oreo), the excessive similarity is boring and does not contribute to the new brand’s liking. On the other hand, when a new brand name is too dissimilar to existing names (e.g., Uroi is too different from Oreo), it does not remind consumers of anything familiar and loses the positive effect of the familiar. The researchers find that a brand name that is moderately similar to a familiar brand name (e.g. Eroe is moderately similar to Oreo) elicits the most positive brand attitudes and brand choice, because it reminds of the familiar and at the same time introduces novelty (Berlyne 1954). In international branding, brand names that use sounds that are too similar, or too different from local language, are less liked, compared with moderately similar ones (Agnihotri and Bhattacharya 2021). In sum, this literature suggests that at least some phonetic effects are not linear, and therefore may have a limit to their effectiveness, or even an inverted effect at some point.

Brand name and brand personality: The place of articulation of a brand name's sounds can influence its personality. Specifically, front vowels (i, e) create a feminine brand personality, whereas back vowels (o, u) make a masculine brand personality. Further, congruency between a brand name's gender, as signaled by its sounds, and the gender of the brand itself elicits greater preference for the brand, and generally favorable responses (Wu, Klink and Guo. 2013). Looking at the effects of mere length of brand names, Pathak et al. (2019) find that longer brand names increase perceptions of brand luxuriousness, because longer words are more rare in linguistics (see also the definitions of Zipf's law, e.g. Aitchison, Corradi, and Latham 2016), and therefore longer brand names evoke the perception of more rare, and hence more luxury, brand. Extending this notion, Pathak, Calvert and Lim (2017) investigated phonetic structure and found that unusual phonetic structure in brand names (e.g., more affricates, such as 'ch', 'j') elicits perceptions that the brand name is more luxury. Investigating brand extensions, Tsai et al. (2014) find that consumers make inferences about brand dominance and market strength from the position of brand extensions (e.g. "Bomy by Pringles" versus "Pringles' Bomy"). Specifically, they find that consumers associate the brand in the initial position in the sentence with having a greater role in the extension.

Sub-conscious effects of sounds: Most of the literature described earlier does not explain how exactly these phonetic effects occur. But some research focused specifically on the processes that make some sounds more influential than others, and showed that these effects are not conscious. For example, Lowe and Haws (2017) find that sound pitch can influence perceptions of product size, so that lower pitch is associated with larger products and higher pitch is associated with smaller products. Relatedly, exploring the way brand names are written, Kim and Maglio (2021) found that, reflecting inner stereotypes, consumers associate upper case letters with masculine attributes, and lower-case letters with feminine attributes. Pogacar et al. (2015, 2018) show that people have subconscious preference for sounds that occur more frequently in top brand names (like S or E), which may also suggest the opposite effect, that the frequency of certain sounds in top brands could reflect phonetic preferences. Baxter, Kulczynski and Ilicic (2014) and Baxter et al. (2017) found a boundary to the automaticity of phonetic symbolism: they found that the effect becomes automatic around age 10-13, when phonological awareness is developed, and that for younger children the effect requires more conscious effort. A row of works (e.g., Kronrod, Lowrey and Ackerman 2015; Topolinski, Lindner and Freudenberg 2014) focused on the order of the sounds in a word, in terms of their place of articulation. They found that the way the vowels and consonants of a brand name are ordered influences what people make of that brand name and how they evaluate it. The articulation direction effect suggests that when a brand name starts with back sounds and ends with front sounds, the articulation of the word resembles food rejection (spitting) and this projects on reactions to the brand name. Conversely, when a brand name starts from front sounds and ends with back sounds, articulation of the name resembles swallowing food and may positively influence attitudes towards the brand. Following a similar embodied cognition explanation, Kniffin and Shimizu (2016) find that certain sounds activate facial movement that mimics a smile, and this effect makes consumers more likely to help and act pro-socially towards people with names containing these sounds.

A different approach to phonetic effects can be learned from Argo, Popa and Smith's work (2010), which focuses on the positive effects of repetition. The researchers find that a brand name that has repeating sounds elicits more favorable consumer responses, because repetition induces pleasure in the familiar. Examining the effect of accent on brand name perceptions, Baxter and Lowrey (2014) show that accent and vowel position can signal product properties, and that these signals influence brand preference. Together, these works illustrate the subconscious deep effects of phonetics in perceptions of brand names, via cultural, bodily, auditory, and psychological processes.

Phonetics beyond brand names: phonetic effects are researched not only with regards to their appearance in brand names. For example, Davis and Herr (2014) and Baxter, Ilicic and Kulczynski (2017) explored homophonic words in marketing communication, such as "bye" and "buy", and pseudo-homophonic nonsense-words that sound similar to meaningful words (e.g. 'whyte'). The similar sound of these words primes the meanings of the original meaningful words. In the early 2000's a duty-free shop sign in an airport read, "Don't leave without a good buy". This use of homophony demonstrates the effect whereby customers are inevitably thinking about a farewell, even though the spelling suggested a purchase. Thus, using homophones in marketing bears added value and may be superior in eliciting positive consumer responses, compared to using literal words and meanings. Baxter, Ilicic and Kulczynski (2015) and Ilicic, Baxter and Kulczynski (2015) examine spokespersons first names and find that congruence of name sounds and product category or product attributes may be important for a spokesperson's successful marketing communication - for example, the spokesperson is deemed more credible. In addition, a recent work (Botner, Mishra and Mishra 2020) finds that certain phonetic elements, such as fricative consonants or back vowels, make a name sound more calm (e.g., Maluma), whereas other sounds, like explosive consonants and front vowels, make a name sound more volatile (e.g. Taketa), and that people are more likely to go with safer options when they have calmer names, and riskier options when they have more volatile names. Phonetic elements were examined not only with regards to names, but also within slogans.

Phonetics - Conclusion. To sum, much of the research of phonetics in marketing is concerned with the way the composition, the position, and the order of sounds in brand names, personal names or slogans can convey meaning about product attributes. The explanations for these effects span from phonetic symbolism – the ability of sounds to convey meanings, through bodily effects such as embodied cognition, to fundamental psychological processes, such as familiarity, similarity and congruency between stimulus and product characteristics. If the ability of sounds to convey meaning might sound surprising, it is only natural for words to be able to convey meaning. In the next section I will review works that focus on the way words convey meaning, and how these effects are explained in marketing literature.

2. Semantics

How consumers derive meaning and how meaning affects consumers. Consumers use semantic knowledge to find, evaluate, and make decisions about products. They construct meaning of words or texts in order to make sense of the world and respond to it. Marketing communication consists of signs, letters, punctuation marks, words, sentences and texts. Consumers use all of these elements to construct meaning. Semantic effects refer to those meanings, and research has been focusing on the way meaning is derived and the way it influences consumer responses. For example, Patrick and Hagtvedt (2012) investigate the way declining an invitation by saying "I can't" differs from saying "I don't". The authors show that "I don't" serves as stronger support for refusals than "I can't", because "I don't" means that the refusal comes from an internally powered decision rather than external circumstances, and therefore the refusal is more final and less reversible.

The ease with which consumers are able to derive the meaning in language comprehension is often related to as **fluency**. Pogacar, Shrum and Lowrey (2018) propose a conceptual framework which maps marketing communication on language complexity and processing mode (automatic or controlled) and suggest ways in which fluency can affect product perceptions. Resonating with this concept, research shows that, generally speaking, fluency can have positive influence on consumer responses, because it creates a sense of pleasure, comfort and positive affect (Lee and Labroo 2004; Nunes, Ordanini and Francesca 2015; Pancer et al. 2019). For example, Srivastava and Kalro (2019) show that when a product review contains shorter words, less complex language and sentence structures, and is generally easier to understand, it drives more positive consumer responses. Further, Alter and Oppenheimer (2006) show that the easier pronunciation of stock abbreviations, such as KAR, compared with RDO for example, elicits perceptions of fluency which, in turn, increases positive affect. As a result, at least in the short run, stocks of firms with easier to pronounce stock abbreviations performed better than stocks of firms with less fluent abbreviations. In addition, Luna, Carnevale and Lerman (2013) find that brand names are better remembered when they are easier to spell and can be more accurately spelled when written down. These are examples of the way consumers construct meaning from linguistic features, as basic as ease of pronunciation or spelling. Interestingly, these examples also show the positive effects of disfluency, as it evokes interest and overcomes potential boredom (see also Alter 2013).

The Strong Effect of Single Words. Sometimes a single word can have a vast influence on consumer perceptions. For example, saying “thank you” instead of “sorry” can help services in crisis management and reparation of service failures (You et al. 2020). Also, merely mentioning the word “new” on a product’s advertisement serves as a novelty cue to consumers, may interest and curiosity about the product (Sung et al. 2016) and result in more positive reactions to business offers as they are perceived as novel and exciting. Liu, Lee, and Srinivasan (2019) conducted a large scale text analysis of product reviews for various products and found that merely mentioning price in the review may increase sales for that product. Patrick and Haws (2014) also showed that a mere change in a word can elicit dramatically different inferences about an offer. Specifically, the word “and” connecting a product and an accessory, elicited inferences that the accessory can be bought in addition, while placing the word “with” between the product and the accessory elicited inferences that the two items were included in the single offer. Finally, Cheema & Patrick (2008) showed that using “only” in a description of a period to consider an offer, elicited perceptions of a restricted offer, while using “any” instead, elicited perceptions of non-restricted offer, even though the period length was the same in both promotion texts. Examining product reviews, Packard and Berger (2017) found that when consumers read explicit product recommendations (e.g., *I recommend it*), compared to more implicit ones (e.g., *I liked it*), they are more likely to perceive the author as proficient, which in turn drives higher purchase intentions. Interestingly, the authors find that the more direct recommendations are in fact more likely to be composed by novices, who are less confident. Finally, merely giving food a different name (*pasta* vs. *salad*, or *broccoli* vs. *tree of life*) can influence perceptions about its nutritional value, healthfulness and taste, and impact actual consumption patterns (Irmak, Vallen, & Robinson, 2011; Kronrod et al. 2020).

Non-linear semantic effects. So far, I reviewed research illustrating the way semantic meanings directly influence consumer perceptions and attitudes about products. However, recent works show that semantic meaning can indirectly influence the way consumers infer about product attributes. For example, Zhi et al. (2020) explored the way including brand-related versus unrelated keywords in paid search influences online sales. They find that brand-related keywords can increase product sales in some cases, but not in other cases. In another work focusing on the ability of non-focal semantic elements in ad headlines to attract consumer attention, Nielsen, Shapiro and Mason (2010) show that highly emotional advertising elements can attract attention, especially in highly cluttered environments, because people are predisposed to pay attention to, and to process emotional content. Similarly, Berger and Milkman (2010) show that emotional elements in consumer reviews attract more attention, and are more likely to be transmitted on and become viral. Extending this notion further, Baskin and Liu (2021) show that when consumers encounter meaningless words (for which they do not know the meaning), they infer that the product is not typical to its category, which in turn influences judgments of product quality and price. Finally, Galli and Gorn (2011) show that semantic associations (e.g., white and rice) occur on a subconscious level, which suggests that communicating about products might benefit from such associative signals of meaning. The non-absolute effect of semantically relevant textual elements demonstrated in these works is important for understanding of the non-linear way that meanings can influence perceptions and decisions.

Beyond Semantics: metaphorical perception and deriving indirect meanings. Relying on the theory of conceptual metaphor (see Part I), Zhang and Li (2020) explored the way in which consumers translate the metaphorical meaning of carrying weight and heaviness to judgment of importance. The authors show that the concept of importance semantically activates weight concepts, and vice versa. This finding means that marketers can use not only direct semantic meanings to activate perceptions about products, but in fact metaphorical meanings can be even stronger in that respect. Works by Edward McQuarrie and colleagues support this notion, showing that figurative language in marketing communication induces aesthetic pleasure (McQuarrie and Mick 1992, 1999, 2003; McQuarrie and Phillips 2005; Phillips and McQuarrie 2009). Kronrod and Danziger (2013) also show that in addition, figurative language elicits the pleasure of realizing the intended meaning. The combination of aesthetic and intellectual pleasure can increase positive affect when processing metaphor and other figurative language, and perhaps this is one of the main reasons for its prominence in marketing communication. Bertele et al. (2020), however, show that not all metaphors are created equal and that in certain contexts too much figurativeness may backfire. Specifically, they find that for new products or services, too much figurativeness or too sophisticated metaphors in product descriptions are harmful, perhaps because of the overwhelming effect of having to process the novelty of the product and the novelty of the language in its description.

Categorization. Category Resemblance Theory (Mervis and Rosch 1981; Rosch 1983, 2002; Rosch and Mervis 1975; Rosch et al. 1976) proposes that people possess an innate categorization system where objects (e.g., truck) are assigned into categories (e.g., vehicles). This semantic system serves to assign meanings to words. At the top of each category there are more prototypical members (e.g., Rose in flowers) whereas lower members are less representative of the category (e.g., Bird’s Nest in flowers). This natural categorization system impacts the categorization of objects around us and may affect brand perceptions and attitudes (Hunt & Agnoli, 1991; Schmitt & Zhang, 1998; Zhang, Schmitt, & Haley, 2003). For example, brand extensions that share less category resemblance with the parent brand are perceived as more independent and distinct (Parker et al. 2018). These perceptions have potential implications for consumer behavior. For example, perceptions of lower category resemblance can slow satiation with recurring product experiences (Lasaleta and Redden 2018). Relatedly, Chernev (2011) finds that objects that are evaluated consecutively might be contrasted against each other, rather than compared, if they belong to different semantic categories.

3. Grammar/Syntax

The way words are organized in the sentence – sentence grammar - can influence the meaning the sentence conveys. Current directions of research in marketing language focus on grammatical aspects such as pronouns, syntax, parts of speech, and tense.

Pronouns. Pronouns are referring expressions, such as ‘she’, ‘his’, ‘us’, which encode gender, number and at times identity of the referent (e.g., ‘it’ indicates non-human referent). We can learn from the way people use pronouns how they perceive themselves and others. For example, the choice of self-referencing personal pronouns puts the responsibility on the speaker (I broke the vase), but the choice of other-referencing pronouns removed responsibility from the speaker (The vase broke). Research in marketing investigated how the choice of personal pronouns can influence consumer reactions to brands or customer interaction in service encounters. For example, the choice of pronoun in firm communication with consumers on social networks can influence consumer engagement with brand content, such as shares or likes (Labrecque, Swani and Stephen 2020). When firm representatives, negotiators, or business meeting participants choose to say “we” instead of “me” and “you”, their conversation partners perceive their relationships as being more cooperative, more united and “on the same side of the fence” (Sela, Wheeler, and Sarial-Abi 2012). This, in turn, evokes trust, which is crucial for business relationships. Personal pronouns can influence not only trust, but also emotions. For example, Packard, Moore, and McFerran (2018) show that in situations of complaint resolution, when customers hear a company representative saying “I” instead of “We”, they perceive the service provider as more empathetic, more willing to listen to their problem and ultimately more likely to solve it. Similarly, the use of formal second person address, such as the plural form of “you” in French or Russian or the use of *usted* versus *tú* in Spanish, makes people feel that the company is more competent, whereas the use of informal second person address makes the company feel warmer (Bayyurt and Bayraktaroglu 2001). Note that these outcomes may have different results, depending on the context. For example, restaurants may benefit from using informal address and signaling warmth, whereas law firms might want to use pronouns that reflect more formal address to signal competence. An even stronger effect of personal pronouns was found by Antioco and Coussement (2018). They found that managers might misinterpret consumer dissatisfaction in online product reviews because of the personal pronouns that consumers use when they express product evaluations. It turns out that using more third-person pronouns like “they” can sharpen managers’ interpretation of the reviews as being negative and appreciate consumer dissatisfaction.

Tense. The choice of tense in communication is sometimes dictated by the intended meaning. Interestingly, the process is bidirectional: the choice of tense can also influence what meaning is derived from the sentence. For example, in a work about managerial interpretation of consumer dissatisfaction expressed through product reviews, Antioco and Coussement (2018) found that when consumers express behavior intentions or future plans by using future tense verbs in their product reviews, managers interpret negative reviews as being more positive than they actually are. This is possibly because future tense relates to optimistic and problem-solving orientation.

Parts of Speech. Another grammatical element commonly addressed in language research in marketing is the use of parts of speech. Parts of speech refer to the role that a word plays in the sentence grammar, and the meaning it bears. Examples of parts of speech are: nouns, adverbs, verbs or adjectives. Nouns and verbs are used to set the basic scene and intended meaning. Adjectives and adverbs are used to describe the nouns and verbs, respectively. The role of adjectives and adverbs is important in influencing emotions, because of their ability to signal intensity or extremity (Sun et al. 2015). For example, a sentence containing the adverb "extremely" or "a little" can signal the intensity of the action to which the adverb is attached. When non-verbal signals of intensity, such as facial expression, voice or gestures, are not available, adjectives and adverbs are even more important because they create a clearer picture and convey more accurate meaning. Related to parts of speech are syntactic structures, such as contractions. Examining the effect of contracted negations (e.g., "do not" versus "don't"), Kim, Moore and Murray (2020) found that consumers perceive review authors who use contracted negations as warmer (because contracted forms are less formal than full forms) and as a result evaluate the reviewed product more positively.

Sentence types: statements and questions. A key distinction in language that is reflected in its syntax is between sentence types, for example questions versus statements. The different syntactic structure of questions and statements marks different meaning. In addition, the different sentence types can influence emotions, and even further – they can be interpreted differently, depending on emotional states. For example, excited (emotionally aroused) consumers evaluate products more positively if they appear in ads with statements rather than questions (e.g., "the pen for you"), because the statement makes the ad clearer. But when not excited, people react more positively to ads phrased as questions, because questions evoke interest and curiosity, which are important motivators in these low-arousal states (Hagtvedt 2015).

4. Discourse

Sometimes just talking about your experience can influence perceptions of the experience itself, as well as emotions and attitudes in general. Pennebaker, Kiecolt-Glaser and Glaser (1988) even show that writing about emotional turbulences can positively influence the writer's immune system. In a similar vein, Moore (2012, 2015) shows that when consumers explain their hedonic and utilitarian consumption choices and experiences, the mere act of explaining can influence the intensity of product evaluations of the writers, as well as the readers of reviews containing explanations. These works demonstrate the impact that certain discourse types, such as explanations, can have on consumption processes.

Narrative

The narrative of a text, whether a story, a formal or cause-and-result structure, indicates the narrator's intention and may signal social relations. Research on narrative structure in brand communication shows that brands can increase consumer engagement via likes on social media by signaling warmth through integrating more personal first-person narration with warmer images or by signaling competence by combining less personal third person narration with images expressing competence (Chang et al. 2019). Narrative structure can also be useful for human brands, such as chefs or personal trainers, as they drive higher online engagement (Aleti et al. 2019). In consumer generated content, as well as in brand communication, telling a story can intensify the receiver's attitudes about products, because the receiver is transported into the story, which increases their involvement about the product or service and interest in it (Adaval and Wyer 1998; Hamby and van Laer 2022; Murphy et al. 2013; Toubia, Berger and Eliashberg 2021; van Laer et al. 2014, 2019). However, Dessart (2018) found that, conversely, storytelling video ads that generate greater narrative transportation might *reduce* consumers' identification with the characters in the ad and decrease brand attitudes.

Research about discourse formality in marketing suggests that more formal language in online communication increases perceptions of speaker competence but, at the same time, people tend to like and trust speakers who use informal language because they appear warmer and closer (Na, 2018). In cultures where language formality signals honorific hierarchy, such as Korean, formal language can influence consumer attitudes because they influence the inferred meaning of the message itself (Han, Sohn and Yoo 2015). In addition, matching formal/informal and emotional discourse style (using language that is similar to the linguistic style of other conversation parties), increases positive emotions and sense of identification/unity and enhances trust, resulting in greater purchase intentions (Moore and McFerran 2017; Ludwig et al. 2013, 2014) and more efficient resolution of potentially harmful spread of negative Word of Mouth about the firm (Herhausen et al. 2019). Additional findings about linguistic style matching (Liu, Xie and Zhang 2019) show that the degree to which the language style of a restaurant review matches the language style of its typical patrons, the review is deemed more helpful by its readers, which in turn may have implications on the restaurant's business success. These results are also supported by research showing that movie synopses that use language which matches the movie genre may substantially increase box office revenue for the movie (Hung and Guan 2020).

5. Pragmatics

Truth to be said, pragmatics research in marketing is rare. This offers multiple opportunities to develop this fascinating area. Research of pragmatics in marketing relates to the way language is used to achieve goals, the way meanings are intended, framed, and derived, and the way context influences these processes. In this section, I describe those few areas in marketing research that feature works focusing on pragmatics.

Assertiveness. Language research in marketing suggests that it is important to note not only *what* is said but also *how* it is said. In other words, the tone of communication can influence interpretations of what is being said (Grinstein and Kronrod 2016; Kronrod, Grinstein and Shuval 2021). One stream of research exploring how the tone affects consumers focuses on assertiveness – the extent to which communication is forceful and commanding, or gentler and more suggestive. Assertive tone imposes an action and leaves the consumer no freedom to refuse. For example, Nike's slogan "Just do it", or the action button on some websites saying "Buy now". Non-assertive tone is gentler, as it merely suggests an action and respects consumer freedom. For example, the well-known slogan "*An apple a day keeps the doctor away*", or Avis's slogan "We try harder". Literature on tone assertiveness in marketing has explored various conditions when a more commanding or a gentler tone is more effective, and various aspects of human behavior that assertiveness may influence. As assertiveness is a linguistic intensifier of whatever is being said (Grinstein and Kronrod 2016), the successful use of different levels of assertiveness may depend on culture (Kim et al. 2017; Terlutter, Diehl and Mueller 2010), perceived issue importance (Katz et al. 2016, 2018; Kronrod, Grinstein and Wathieu 2012b), effort investment (Baek, Yoon and Kim 2015), brand relationships (Reavey et al. 2018; Zemack-Rugar, Moore and Fitzsimons 2017), perceptions of power (Wang and Zhang 2020), product type – hedonic or utilitarian (Kronrod, Grinstein and Wathieu 2012a), or message framing—scolding or praising (Grinstein and Kronrod 2016; Kronrod, Grinstein and Shuval 2021). For example, Wang and Zhang (2020) found that when consumer motivations are driven by wants and perception of power (control for their decisions), a more commanding tone elicits greater consumption. Conversely, when motivations for consumption are driven by what a consumer *should* do and perceptions of being powerless, a gentler tone should be used. Similarly, Kronrod, Grinstein and Wathieu (2012a) found that in hedonic consumption – a context driven by power of will – a commanding tone is more effective in driving consumption decisions. Conversely, in utilitarian contexts, where consumers do not feel much choice, a gentler tone is more effective. A related point was made by Belkin, Kurtzberg, and Naquin (2013), who found that emotional language can signal dominance: using language that expresses anger increases perceptions of the speaker's dominance. Conversely, language expressing happiness can signal submissiveness. Thus, assertiveness can be conveyed not only by using more/less assertive language, but also in other means, such as more/less emotional language.

Speech Acts

John Austin (1962) suggested that we do not just say things, but rather, that by saying things we actually DO things. Austin's suggestion opened up a new perspective on language as action. Later, John Searle (1969) developed Austin's theory into a theory of Speech Acts, and suggested that all utterances can be categorized into a type of action they perform. For example, saying "please come to my house tomorrow night" is in fact performing the speech act of an invitation. Other examples within the Speech Act taxonomy are promises, warnings, questions, requests, commands, refusals, declarations, announcements, pleas, greetings etc. In an attempt to characterize the sentiment expressed by consumers when discussing products online, Ordenes et al. (2017) employed Speech Act theory and showed that certain speech acts, such as directives (e.g., requests/commands) and commissives (e.g., promises/vows) are more explicit expressions of sentiment and therefore have a stronger influence on emotions, compared with assertions (e.g., statements), because the latter speech acts convey emotional states more implicitly. Continuing the exploration of speech acts, Ordenes et al. (2019) show that consumers tend to share with other consumers certain speech acts expressed in marketing communications, more than other speech acts. Specifically, when a brand communicates assertions or expressives (e.g., attitudes), the message is more likely to be shared than a message containing a directive, because assertions and expressives apply to a wider audience, as they are not directed at a particular receiver. Directives, on the other hand, are targeted at a particular receiver and therefore it is awkward to share them.

Language Abstractness and Concreteness

Literature offers very different definitions of language abstractness and concreteness. For example, one definition refers to the extent to which a word represents a material/tangible object (e.g., Heath and Heath 2007), and another definition refers to the extent that the word represents a large group of possible referent objects (e.g., Krishnan, Biswas and Netemeyer 2006). According to the first definition, the word *psychology* is more abstract than the word *book, but* not more abstract or concrete than the word *science*. According to the second definition, however, *psychology* is more concrete than the word *science*, but it is unclear how it relates to the word *book*. This plethora of different definitions of abstractness/concreteness resulted in a rich ground for developing research in multiple ways to explore this complex construct. Consequently, literature offers a host of various discoveries about the role of language abstractness/concreteness in marketing.

One stream of research was interested in the relation between abstractness and valence. These works find that more positive attitudes are often described using more abstract language, whereas expressing more negative attitudes is likely to employ more concrete language (Beukeboom and Semin 2006). Relatedly, Schellekens, Verlegh and Smidts (2010) explored the way consumers write product reviews and found that people use more abstract language when they describe consumption experience that are in line with their attitudes towards products (whether positive or negative) and more concrete language when the experience is in contradiction with their perceptions of the product.

A different stream of research is interested in how the device consumers use to communicate about products influences the level of their linguistic abstractness. The physically constraining nature of smartphones, for example, encourages consumers to focus on the essence of their experiences, resulting in more succinct and more abstract language (Melumad, Inman, and Pham 2019). However, other work finds that content created on mobile devices tends to be more concrete (Ransbotham, Lurie, and Liu 2019).

The use of more abstract or more concrete language may influence consumers as well. When people hear or read positive product reviews, the use of more abstract language in those reviews signals that the person sharing the review has a more positive attitude towards the product and has higher intentions to purchase it (Schellekens, Verlegh and Smidts 2010). In their work on customer service interactions, Packard and Berger (2021) show that service representatives who use more concrete language are perceived to be listening more to consumer needs, which in turn may improve service encounters. Interestingly, when more concrete language is used in communication over mobile devices, it can boost purchase because it seems more effortful to produce (Grewal and Stephen 2019). Namkoong, Ro and Henderson (2019) also find that abstract language can increase consumer engagement on social networks such as Twitter. This suggests that abstract language may generally boost conversation, whereas concrete language may shrink it. Consumers in more concrete/abstract mindsets generate more concrete/abstract language. As a result, marketers can gauge consumer mindsets by analyzing the degree of concreteness/abstractness of the language they use in online communication, and employ marketing communication devices, such as ads or sponsored links, that use corresponding language abstractness levels to achieve optimal effectiveness (Humphreys, Isaac and Wang 2020).

Context changes meaning

In Part I, I explained how pragmatic effects are context-dependent. Context can vastly modify the way we interpret language and change meanings. A simple example of the way context influences meaning is positive and negative language. Positive and negative words can influence emotional states and result in consumption outcomes. For instance, Ludwig et al. (2013) found that while greater increases in positive words in online product reviews do not influence sales too much, negative language does, to a greater extent. In other words, we tend to be influenced by negative meanings more than by positive ones. This finding aligns with research showing that people tend to be more alert to, and process more deeply, negative content (Baumeister et al. 2007; Cohen, Pham, and Andrade 2008), perhaps as a survival mechanism. The result is interesting from a linguistic point of view, because people interpret the same language differently, depending on the context.

Another example of the way context influences meaning can be found in Lee and Kronrod (2020), who show that the way people interpret *what* is said on social networks depends on *who* says it. The researchers examine how consumers interpret consensus language (e.g., everyone loves this movie, everybody thinks so) that their contacts use to validate their opinion. They find that, although strong ties, like family and friends, are usually more influential than weak ties, like acquaintances, when strong ties use consensus language they are less influential than weak ties. This happens because, since weak ties belong to a wider social circle, when a weak tie refers to consensus – agreement among a large group - consumers interpret it as larger, and therefore the opinion as more valid.

These were examples of the way the same language can be interpreted differently, depending on the context in which they were said. The ability to use context in order to convey and interpret language is one of the main abilities special to human mind. Among other things, the context influences assumptions about conversation parties, as well as norms of conversation and conversation parties use these assumptions to interpret what is being said. In the next section I will explain this point.

Conversational norms

The outcomes of language use depend on conversational norms, or what is expected to be said, how and when (e.g., Kronrod 2016; Kronrod, Grinstein, and Wathieu 2012a, 2012b; Miller and Kahn 2005; Xie and Kronrod 2012). Relating to this fundamental notion, Miller and Kahn (2005) show that when a message deviates from expected language norms, receivers infer that the message source intended to convey a meaning that goes beyond the uttered words. This increases positive product evaluations due to a perception that the communicator has made an unusual effort to contribute to the conversation. Investigating the effect of norms on the use of precision in green advertisements, Xie and Kronrod (2012) find that using more precise words in ads of environmentally friendly products, signals to consumers that the firms is more competent (i.e., it knows what it is talking about). Conversational norms can drive reactions to marketing messages in various contexts. For instance, relying on research suggesting that people in a positive mood use more direct language and also expect blunter and less polite language, Kronrod, Grinstein, and Wathieu (2012a) show that marketing communication about hedonic products is more persuasive when it uses more blunt, assertive and direct language. Finally, Zhang and Schwarz (2013) show that when the extent of granularity of numerical information in marketing communication (365 days versus 1 year) fits with consumer expectations, consumers are more likely to believe the communication and to confide in its accuracy.

6. Sociolinguistics

The focus of sociolinguistic research is the way culture influences language use and comprehension. Researchers of the effect of culture on language in marketing predominantly explored effects of switching from one language to another in marketing communication, and how bilinguals process ads that use their dominant language, their secondary language, or both. In this section I will also provide examples beyond the typical definition of culture as related to geographical origin, explaining how age, gender, or product culture can influence language perception and performance.

Cross-cultural and cross-linguistic effects

The works cited in this section will illustrate the main issue related to moving from one language or culture to another - that there is no one-to-one translation between cultures and languages. The relationships are complex and require a great deal of exploration to describe and to derive conclusions.

Cross-lingual effects in marketing

About 60% of the world's population – the majority – is bilingual or multilingual (Ansaldo et al. 2008). For this population, language behavior and linguistic effects can take an especially complex form. Cultural norms, various linguistic structure, and the mere fact that an individual consumer may belong to several, sometimes contradicting, worlds, all make up the cultural effects of language. For example, while the Hebrew language puts the experiencer in the *object* position within a sentence and tends to use bodily descriptions of the experiencer losing control or being controlled by emotions, such as "anger shook me", English language includes descriptions that mostly put the experiencer as the *subject* of the sentence and entail experiencer control, as in "I shook with anger" (Kidron and Kuzar 2002). These linguistic differences have downstream effects on emotions and perceptions of both the transmitters and the receivers. I will describe research in brand name phonetics, bilingual consumers, code switching and culture research beyond country of origin.

Brand name phonetics

A growing number of articles deal with the way brand names are spelled, misspelled and translated influences perceptions of these brands by consumers belonging to various cultures. For example, Wu, Sun, Grewal and Li (2019) show that languages differ on the way phonemes are mapped onto meaning, such that logographic languages (e.g., Chinese) have looser relations between sound and meaning, compared with phonographic languages (e.g., English). They also show that, depending on this correspondence between sound and meaning, a brand name can gain higher or lower popularity in a certain country. Relatedly, Chao and Lin (2017) show that, when brand names are being translated, a plain phonetic transliteration is not perceived favorably, whereas a semantic translation (i.e. one that conveys the original meaning) is more successful, especially when attaching foreign brand names to local brands. Similarly, Agnihotri and Bhattacharya (2021) found that brands from India were positively evaluated by foreign consumers when a moderately congruent brand name (i.e., when the country name was embedded in the brand name and the brand name was in English) was used instead of a completely congruent brand name (i.e., when the brand name was in a native Indian language) or an incongruent brand name (i.e., when the brand name was in English with no country name).

Bilingual Consumers

Puntoni, de Langhe, and van Osselaer (2009) found that texts (such as advertising slogans) in a person's first language are perceived as more emotional than texts in a second/foreign language. Similarly, de Langhe et al. (2011) show that bilinguals tend to provide more extreme ratings on scales appearing in their second language versus in their first language because words in an individual's native language are intrinsically more emotional, due to the higher frequency with which words are used and heard in first- versus second-language contexts. In another study, Alcántara-Pilar et al. (2017) asked British and Spanish participants to browse a website in their first language, or in their second language (Spanish for British and English for Spanish). The authors find that processing information in one’s first language can contribute to feelings of certainty to a greater extent than browsing in a second language.

Importantly, bilingual consumer associations with the language in use can influence perceptions of what is being said (Ryall and Luna 2011). For example, when the language of a slogan is the majority’s main language, consumers evaluate the brand or product more positively. The opposite is found for languages with negative associations (Luna and Peracchio 2005a, 2005b). Relatedly, Kubat and Swaminathan (2015) show that the extent to which a brand symbolizes a cultural group can influence perceptions of bilingual advertising by bicultural consumers. Bilingualism also influences consumer perceptions of the self, and of products. Consumers may switch social identities (e.g., from individualistic to collectivistic) when they switch languages (Luna, Ringberg and Peracchio 2008), and processing product information in a foreign language decreases affective intensity of consumer responses, which in turn lower evaluations and sense of psychological ownership for products (Karataş 2020).

Bilingualism has also effects in service, branding, packaging and content created by consumers. For example, Investigating service interactions, Zolfagharian, Hasan and Iyer (2017, 2018) found that the way service representatives choose and use the customer’s native or second language can influence the way customers perceive interaction quality, and result in customer loyalty, identification with the brand and transmitting positive Word of Mouth about the brand. Language may also influence perceptions about the brand. For example, using a foreign language can cue a brand’s origin and associate it with certain country-related qualities (Hornikx and van Meurs 2017). Stereotypes about countries can then influence perceptions of brands with brand names spelled as if they originate from these countries (Melnyk, Klein and lckner 2012). For example, relying on categorization theory and congruity notion, Salciuviene et al. (2010) show that, as products with French brand names are perceived as more hedonic, using a French sounding brand name can categorize it as a more hedonic product in customer perceptions. Beliefs about the effect of culture on consumption have been found to influence evaluation of multilingual product packaging. Specifically, Gopinath, Glassman and Nyer (2013) find that people who believe that Hispanics purchase low-quality products also have low evaluations of product packages that display Spanish. Overall, culture related stereotypes drive much of the responses to multi-lingual marketing communication (e.g., Alvarez, Uribe and De-La-Torre 2017). Investigating product reviews on Amazon online retailer’s multinational platforms, Barbro, Mudambi and Schuff (2020) find that reviews written in the reader’s native versus second language may extremize helpfulness ratings of the reviews and even the product’s star rating.

Code-switching and jumping from one language to another

Code switching refers to switching between the use of both native and foreign language in one communication. For example, an actor in a Mexican beer commercial says, “Amigos, I’ve never tasted anything better”. in this example, the actor switched from the Spanish word “Amigos” to the rest of the sentence in English. Code switching takes advantage of the target audience’s familiarity with several languages and uses these languages for a rhetorical effect. There are several purposes to code switching in marketing. First, as mentioned earlier, using the recipient’s native language enhances emotional effect of the communication. Second, using a language that represents stereotypes can instantly convey meaning about the offering. Additionally, code switching increases attention and memory because of the unusual use of language introduced through the switching (Domzal, Hunt and Kernan 1995). Finally, when an object is described in a language that corresponds with the object’s cultural origin (e.g., Mexican beer and Spanish), the object stays in memory longer and the object-language fit may attract positive attitudes (Yener and Taşçıoğlu 2020). One of the questions regarding code-switching is what language the switching goes from and to, and what is the result of switching direction. Addressing this question, Ahn, Ferle, and Lee (2017) find that code-switching from Korean to English (in both spoken and written texts) elicits more positive reactions than code-switching from English to Korean, perhaps because switching from a native to a nonnative language is easier than in the other direction, as the native language instantly gives richer context that then helps comprehend the nonnative language.

Investigating the way commercials can use code-switching, Brasel and Gips (2014) show that same-language subtitles (that match the spoken language in the ad) can enhance advertising effectiveness for television commercials, compared to translation-subtitles, because brand recall and memory of other verbal information is enhanced with the attention people devote to the same-language subtitles. Similarly, Wagner and Charinsarn (2021) find that using foreign language letters on product packaging that fit with the brand’s perceived country of origin bears a positive influence on product attitudes. In these cases, cognitive processing is significantly enhanced by the matching between what is said and what is written.

Importantly, research outcomes for bilinguals may turn out differently if applied to monolinguals. Exploring the effect of familiarity with a foreign language on the effectiveness of code-switched ads for *monolingual* consumers, Lin, Wang, and Hsieh (2017) find that for monolinguals code switching generally has negative effects, especially when advertising a local brand. For foreign brands, code switching was effective, but only if consumers were familiar with the foreign language. Relatedly, Gerritsen et al. (2010) find that advertisements in Western Europe that used English had no effect on consumers, partially because consumers did not understand about 40% of the English words and phrases in the ads. Thus, naturally, code switching effects are useful only when consumers know the second language well enough to comprehend it.

Beyond culture as country of origin

We commonly refer to culture as determined by an individual’s or a group’s country of origin or a geographical origin. While many cultures indeed originate from certain areas on our planet, culture can also be determined by a host of other aspects of human life, such as age, gender identity, profession, political orientation, or even brand loyalty. Research on the effect of such aspects on language has adopted various definitions of culture and proposed unusual findings. From Hopkinson (2015), who investigated graffiti as a discourse used to communicate the truth in an indirect manner, to Mai and Hoffmann (2014), who examined accent in business interactions, the premise of this literature is to define, characterize, and derive predictions about language behavior in marketing contexts, as it is influenced by culture. For example, paralanguage refers to the use of non-textual elements, such as emoticons or punctuation marks, to convey information about emotion, audio, visual or other senses, beyond the written text. Luangrath, Peck and Barger (2017) propose an elaborate taxonomy of paralinguistic elements in written and spoken texts, and discuss ways in which paralanguage influences consumers of Word of Mouth about consumption experiences. Lafreniere and Moore (2018) investigated another sociolinguistic topic – swearwords in product reviews. They find that swearwords in product reviews have a positive but diminishing effect on purchase intentions, such that one or two swearwords convey useful information about the product's attributes and the intensity of the speaker's feelings; however, too many swearwords dilutes these meanings.

Researchers in the marketing field are also interested in the way product evaluation depends on language structure in different cultures. Schmitt and Zhang (1998) and Huang and Chan (2005) found that, since objects in certain languages, such as Chinese, have names that represent their form or other attributes, perceptions of these products also differ between Chinese and English speakers. Moreover, the way consumers categorize products when comparing them depends on these different linguistic categorization arrangements and may influence the positivity of product evaluations. Investigating the way tense structure in different languages influences consumer behavior, Chen (2013) demonstrates that languages in which the future and present are grammatically associated[1] promote future-oriented behavior, such as greater likelihood to save for retirement or more preventive health behavior, such as smoking less, or avoiding obesity. These examples demonstrate the way culture, whether defined by geography, country of origin, or by the context of the interaction, can influence the way people use language, and the way language influences thought, perceptions and behavior.

In sum, the most predominant links in cross-cultural and cross-linguistic research of language in marketing are that processing information in one's native language facilitates fluency and increases emotional intensity, especially for positive emotions; that country and culture stereotypes can be activated using foreign or non-native language, and in turn influence perceptions about brands, products or service representatives; that the congruency between language, culture, and product or brand has an important role in product evaluations; and that switching from one language to another within the same marketing communication instance may have diverse effects on multi-lingual consumers, and might turn out different for monolingual consumers.

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[1] For example, the English phrase "we are buying a car next month" is grammatically defined as present continuous tense, but its meaning refers to the future.

Part III – Developing Research of Language in Marketing

1. **Methods in linguistic inquiry:**
   1.1 Qualitative Methods
   1.1.1 Collecting Data for Qualitative Analysis
   1.1.2 Qualitative Methods for Corpus Analysis
   1.2 Quantitative Methods
   1.2.1 Collecting Data for Quantitative Analysis
   1.2.2 Quantitative Analysis Methods

2. **A Proposed Process of Designing Language Research in Marketing**
   2.1 **Identifying a language-in-marketing problem**
   2.2 **Developing a multi-method research approach to test the theory**
   2.3 **Conducting the research and deriving practical conclusions**

An important difference between research in linguistics and in marketing is that the scope of linguistic research is often descriptive, whereas the goal of research in marketing is predictive. In other words, linguistic inquiry describes the way language is developed, used, processed, and produced. Marketing research not only describes phenomena in the marketplace, but also strives to provide predictions for the way these phenomena may replicate or alter in other situations or times. Therefore, the main and major contribution of researching linguistic theory in marketing is in substantiating the original descriptive approach, which is predominant in linguistics, with a predictive one, and in this way enhancing our understanding of the marketing arena and enriching linguistic theory itself. In addition, the research of language in marketing is by nature interdisciplinary, as the researcher would combine literatures from at least linguistics and marketing, but possibly also from psychology, organizational behavior, communication and business (e.g., Carnevale, Luna and Lerman, 2017).

In this section I will describe the main methods applied in linguistic inquiry, and then outline my suggestion for a process to research language in marketing, using these methods.

1. Methods in Linguistic Inquiry

Language analysis involves encoding textual data by categorizing words/phrases and identifying the relationships among these words/phrases. Language analysis can be performed either using qualitative approaches or via quantitative statistical data analysis. Qualitative methods are mainly inductive – we make conclusions based on the data we analyze. In this sense, qualitative analysis conclusions are relevant to the analyzed sample only, because they are highly tied to the context of production and acquisition of this sample. Quantitative methods are deductive in nature: we develop hypotheses based on a theory, which we then try to support via an empirical investigation of linguistic behavior. In both cases, researchers may analyze the following levels of language, which correspond with language fields mentioned in section 2:

Vocabulary [Semantics] – analysis of words and phrases. Example: political ideology, levels of discourse formality, or metaphorical content.

Grammar [Syntax] - analysis of the way sentences are constructed can indicate certain intended meanings “between the lines”. For example, active or passive voice can indicate taking responsibility for an action.

Narrative Structure [Discourse] – the way people structure the text can create emphasis or weaken certain points. For example, placing an argument in the beginning or at the end of the text may help increase its salience in memory.

Genre [Discourse] – various genres assume certain language structure conventions that can then reflect certain communicative intentions. For example, news reports have typical terminology, sentence structure and order of argument in a text, which is aimed at conveying a report of actual events in a dramatic way.

Conversations [Pragmatics] – analyzing conversational aspects of the discourse, like turn-taking or interruptions, can reveal aspects of cultural conventions, hierarchy or social roles.

Intended meaning – gauging the intended meaning behind articulated words or phrases requires understanding both linguistic features of the analyzed content, and the socio-psychological processes behind them. Therefore, in some way, intended meaning is a cross-disciplinary aspect of language analysis.

The purpose of this section is to familiarize the reader with the major methodological approaches in research of language behavior. Language is a complex behavior which includes cognitive, social, structural, and formal aspects. Therefore, language research can be performed in both quantitative and qualitative form, and the objects of research can be behavioral (language use), cognitive (language processing), neurological (brain activity) or cultural (comparative). In this section I will describe qualitative and quantitative methods, and how they can be applied to various research questions regarding the different objects of linguistic inquiry.

1.1 Qualitative Methods

Qualitative research involves the gathering and analysis of non-numerical data (e.g., words, sentences, narratives etc.) to understand concepts, thought, or experiences. It is often used to gather in-depth insights into a topic and help researchers generate new ideas for research or more specific research questions.

1.1.1 Collecting Data for Qualitative Analysis

To collect the data for qualitative analysis the researcher may, for example, conduct interviews, observe free conversations among participants, or gather instances of texts produced in certain situations, such as political interviews or recordings of interviews with passersby in the news. Once a dataset of textual instances is collected, it is commonly termed a ***corpus*** *(plural: corpora)*. Researchers then analyze the corpus based on research questions and topics of interest. One tradeoff that needs to be addressed when choosing the method to collect data for corpus analysis is the extent to which the language was produced spontaneously or in a more structured way, versus the extent to which the resulting corpus is tailored to the researcher's needs (e.g., whether participants discussed topics that are of interest to the research). The various methods to gather corpora can be summarized as follows:

Observation – the researcher allows participants to interact freely and registers (or records) the interaction. The outcome is a relatively non-structured set of sentences and phrases, with certain general turn-taking order, but the researcher does not have much control over participant behavior, such as topic choice, extent of participation (e.g., some participants may choose to be silent), and any specific linguistic aspects of the interaction. On the other hand, the natural occurrence of language in observations is often very useful for drawing conclusions because of its authenticity. This method is sometimes considered the closest to natural language, because the analysis occurs after the interaction took place, which means that the interactants were not aware of the analysis to be done and behaved mostly spontaneously.

Interviews – the researcher conducts an interview with one or more participants at a time. Interviews usually include questions posed by the interviewer and answers provided by the interviewee. In many cases, interview questions do not specify particular answers. Especially in less structured interviews, the researcher intentionally allows for the conversation to flow freely. Nevertheless, interviews are often more structured than observations, because the interviewer prepares questions and topics in advance, and has a certain agenda in mind. Therefore interviews allow researchers to collect corpora that are more accurately tailored to their research questions. On the other hand, interviews are by virtue less spontaneous and therefore the corpus may be less representing natural language. For example, Nilsson 2019) used observations and interviews with five marketers in order to understand how marketers understand their work. Taking a rhetorical perspective, the author finds that marketers use rhetoric related to relationship discourse and customer need discourse when describing or discussing their business, and concludes that these may represent inner dilemma and solutions.

Open-ended responses in questionnaires – researchers may choose to design their questionnaire such that participants answer some of the questions using free text (spoken, written or typed). These free responses are then gathered into a single corpus and can be analyzed on their linguistic aspects, beginning with length of responses, via complexity of the phrases used, to narrative structure and topics mentioned.

1.1.2 Qualitative Methods for Corpus analysis

The most prominent qualitative method in language analysis is called discourse analysis or corpus analysis. This is an interpretive method of analyzing language, where conclusions are drawn based on both the details of the material itself and the researcher's contextual knowledge. discourse analysis is a research method for studying written or spoken language in relation to its social context. The approach that involves discourse or text analysis uses existing corpora, such as books, letters, recordings of meetings in a corporation, advertisements, websites, social media, product reviews or user posts and blogs. The analysis of these types of discourse takes into account the fashion in which the corpus was created, the participating parties and their relationships with each other, the topic and tone of the interaction, or its time. This method can be applied both to large volumes of material and to smaller samples, depending on the aims and timeline of the research. For example, in a series of interviews with American and Chinese respondents, Caldwell-Harris, Kronrod and Yang (2013) discover reasons for reluctance to say *wo ai ni* (*I love you*), especially to family members, among Chinese respondents, compared to a high frequency of using the phrase among American respondents. Based on the interviews and on extant literature, the authors propose that cultural differences – Chinese being a high context culture and American being a low context culture – are partially responsible for these differences. These differences can also explain disparity in emotional responses to advertising in China, compared to the U.S. (Crigler et al. 2012).

To conduct discourse analysis, the researcher goes through the following steps:

Step 1 – define the research question. Researchers should define research questions as clearly as possible, but allow for flexibility in conclusion making due to the wide range of possible outcomes from the materials to be analyzed.

Step 2 – select the material that is relevant and appropriate to investigate this question. This step is crucial because the origins of the material and its contents might have a vast influence on the conclusions to be drawn. Therefore, an obligatory step in the process is the next one:

Step 3 – describe the material in terms of factual information, such as the time, place, conditions, method or context in which the material was produced and received

Step 4 – conduct thorough literature review to guide conclusion making while going over the material

Step 5 – analyze the content of the material looking for patterns or common topics. This requires a close examination of the different elements of the material (see earlier – vocabulary, grammar etc.) and relating them to topics, themes, and common patterns that are relevant to the research question and to previous literature on these patterns.

Step 6 – review the conclusions about patterns and topics and map them into a logical conceptual framework.

1.2 Quantitative Methods to Analyze Language

Quantitative research involves collecting and analyzing numerical data for statistical analysis. Most of the issues that arise when applying quantitative methods to language research originate in the transition from natural language produced by people and its operationalization for the purpose of analysis. An example may be the operationalization of language concreteness/abstractness. As mentioned in Part 2, there are multiple definitions of this linguistic feature (see Kleinberg et al. 2019 for a review). As a result of the multiplicity of definitions, there have been various methods developed to measure of language concreteness/abstractness, such as Brysbaert, Warriner and Kuperman (2014) or Kronrod, Lee and Gordeliy (2017). These methods do not necessarily correspond with each other, which poses a challenge for researchers to select an appropriate method to analyze language concreteness/abstractness.

To help the reader appreciate the quantitative methods used to analyze language behavior, I will first mention the most common issues of quantitative research of language. These are:

Quantifiability – how do you quantify text? consider for example the following thread of posts:

User 1: Here’s how we are spending the weekend! User 2: Nice way to spend the weekend! User 1: Yes indeed! User 3: Where is that? User 2: What will you do with all this bunch? User 1: It was the Very Berry Farm 😊

The first post in this thread was accompanied by a photo of a basket full of berries. It is possible to extract this content from the text, but this requires manual content analysis, which is not always available to researchers. Other challenges in analyzing this content are: should posts by the same poster be combined or analyzed separately? How to extract the intended meaning of each post? How to deal with references to missing information? How to account for repetitions in this sample? Which of the multiple ways to analyze this text is the most appropriate? Do the posters adjust their language to each other? Do they use literal language, or figurative language? Should the interrogative sentences be analyzed separately from the statements? What is the role of non-verbal information in the thread, such as emoticons and photos? The question-answer sequence is sometimes interrupted – would that influence the analysis? Is any of the users guiding the conversation? What aspects of the posts should we analyze (e.g., sentence length, grammatical structure, sequence of posts, common expressions, specific parts of speech such as verbs or nouns, emotionality)?

Some of these questions can be answered via qualitative analysis. But others can be solved via quantitative analysis. The great advantage of quantitative research is that it enables us to compare relatively large text samples using statistical methods and provides numerical data that can yield conclusions which are stable across samples. However, two common aspects of every measure – reliability and validity – are hard to achieve when the data is produced by non-recurring, non-automated human brains.

Reliability refers to whether the measure repeatedly delivers the same results, given similar conditions of repeated testing. In an ideal world, using the same measure with the same people under the same conditions should yield the same result over and over. More accurate science fields such as physics or chemistry can indeed approximate the same results in consecutive testing. However, language behavior produced and perceived by humans provides inevitably varying results, due to internal processes. That is, even if all circumstances are similar, it is hard to achieve the same linguistic result from all participants in the sample. Therefore developing measures that will not create variability by themselves is especially important. In section 1.2.1 I refer to the issues surrounding building questionnaires. This is one of the most common measures causing diversity in language behavior. For example, merely phrasing the questionnaire in a gendered manner might influence participant responses because some participants might react to the gendered address differently from others (for instance in Hebrew, “you” has a different form when addressing a female or a male).

Validity refers to whether our measure actually measures what it is supposed to measure. In language research, validity is a constant issue and researchers invest efforts in testing, retesting and re-validating measures of linguistic behavior in order to improve their validity. The concern about measure validity stems from the difficulty of operationalization of linguistic features and behavior and turning abstract concepts such as *emotional language* into measurable quantities. In order to validate a measure of language behavior one would commonly need a very large sample, a series of sophisticated tests and a very accurate definition of the concepts to be tested. In many cases, however, researchers do not invest sufficient efforts in validating measures of linguistic behavior and rely on single use of a measure that might have been poorly developed. The outcome of this approach is that the results reported in literature may in fact represent behaviors other than those described in their articles.

1.2.1 Collecting data for Quantitative Methods

In order to analyze language behavior using quantitative methods, the researcher would want to collect data about language behavior and create an appropriate sample for analysis. The most frequently used research designs in quantitative language research include observation, text analysis, and various experimental designs.

Observation – observation includes recording and transcribing sessions of naturally occurring language behavior. As mentioned earlier, observing naturally occurring language behavior is one of the most useful ways to gauge natural language and to achieve conclusions close to reality. It is hard to observe behavior without the participant’s knowledge, as such research requires consent, but previous experience shows that participants often forget that they are being recorded within a few minutes of the start of a session, especially if recording equipment is not salient in their environment. One difficulty in observation methods is that naturally occurring language behavior is not structured and therefore it is difficult to later put it into a quantifiable dataset. However, if language behavior is well-defined before the session, it is then possible to use the definitions in order to create a dataset that can be then analyzed using quantitative methods. The foci of observation may be, for example, customer support locations where in-person, via online chat, or over-the-phone conversations occur; or recordings of team meetings in companies. These observational methods provide rich data for various analyses, including both quantitative and qualitative approaches.

Text analysis – text analysis refers to quantifying and analyzing existing texts such as product reviews datasets, news items or conversations on social networks. Collecting the dataset for text analysis has become easier with the development of automatic computational techniques. Researchers gather textual data from existing sources such as books, news websites and archives, advertising datasets, scraping social networks, blogs, company websites, accounting reports, or databases of consumer recommendations and product reviews. This data also occurs spontaneously and therefore researchers oftentimes need to revise definitions and redefine analysis approaches, but, as mentioned for data obtained via observation, the resulting texts are close to reality and therefore conclusions may be considered reliable.

Experimental design – the major advantage of observations and analyzing existing texts is that these two methods allow the researcher to approach real, unabridged, natural and spontaneous behavior to a great extent. However, these methods suffer from one central disadvantage: they provide researchers the ability to make correlational conclusions about current linguistic behavior in the marketplace, but strictly speaking they do not allow for predictions regarding any future behavior of the same population, or others. Experiments are one of the most useful tools to support predictions and therefore experimental design is one of the most widespread research methods in language behavior research. Without getting too deep into common experimental designs in psychology research, I will describe below several more specific designs aimed at discovering linguistic behavior.

- ***Language production***. Language production experiments create conditions that are controlled by the experimenter, but allow for spontaneous language use, so that the resulting output can be considered unconstrained and relatively natural language. The researcher creates conditions for participants to write, type or talk. This linguistic output is recorded and then analyzed on various linguistic aspects, depending on the research question. For example, a researcher wants to learn if people who are under time pressure use more emotional language or more rational language than when they experience no time pressure. To test this research question, the researcher conducts an experiment where participants are asked to describe their previous day (the researcher can test speaking, writing or both modalities). Participants are randomly assigned to one of two groups: half of the participants are told that they can take as much time as they want to talk about their day, and the other half are told that they have two minutes to tell about their day, and after that they would need to leave the room or move to the next task in the experiment.
- ***Language comprehension***. Testing language comprehension can take an explicit or an implicit form.
  - The explicit form of language comprehension tests involves comprehension questions. For example, a researcher wants to learn about the ease of comprehension of poetry among native and non-native speakers of a language. The researcher would ask a group of native speakers and a group of non-native speakers to read a poem and then answer comprehension questions about the poem, such as “what is the prevailing emotion that the poet was conveying”. Comprehension questions are useful when topics are simple and easy to discuss, and when participants feel comfortable talking about them. in addition, comprehension questions are useful when the question itself is not ambiguous. However, by their nature, comprehension questions might be interpreted in different ways. This puts the validity of explicit comprehension questions in doubt, because the answers to the same question might in fact represent answers to different interpretations of the question. Finally, another disadvantage of explicit comprehension questions is that participants might use deliberation in answering the question and provide answers that do not represent what they actually think, but rather what they assume that the researcher wants to hear or needs to know.
  - To avoid different interpretations of the same question, to eliminate biased answers, or to deal with embarrassing or loaded topics, researchers can use implicit comprehension methods. These often involve measurement of reaction speed tests.
- ***Reaction time***. in cognitive linguistics, reaction time (RT) is used to measure the duration of time it takes a participant to process language. The output of RT measurement is the duration of the interval between presentation of a stimulus (e.g., a word on a computer monitor) and the participant’s response to the stimulus (usually hitting a specific key on

the computer keyboard). There are roughly speaking two types of RT design: ***reading time*** and ***lexical decision***. ***Reading time*** refers to the time a participant takes to read the linguistic stimulus (a word, a sentence or a passage). Usually the participant has to hit a key for the linguistic stimulus to appear on the screen (at which point the count begins) and then the participant should hit a key as soon as they are done reading (at which point the count ends). For this sort of task, the researcher prepares linguistic stimuli that are similar in the number of syllables or other measure of text length, and pretests the average reading time before, or during the experiment. The other type of reaction time design involves ***lexical decision***. In this design, there is a linguistic stimulus that appears on the screen with no time limits, and then another, related stimulus appears and the participant needs to make a lexical decision whether the new stimulus is an actual word in their language, or it is a non-word (gibberish, nonsense). The main use of lexical decision tasks is to gauge the extent to which certain meanings are accessible in the participant's mind after reading the non-timed stimulus. For example, a researcher wants to test the hypothesis that drinking water while processing the word "bank" may increase the salience of the meaning "shoreline", compared to not drinking water, because of the proximity of water to rivers. However, the accessibility of the meaning "financial institution" will not be influenced by drinking water. To test this hypothesis, the researcher will design a reaction time experiment where participants will read the word "bank" while drinking water or not, and after that they would hit a key that would bring up the word "money", the word "river" or a nonsense word like "hobat". Participants will be instructed to decide if the stimulus is a word in English and hit a key on the keyboard representing a "yes" or a "no" as quickly as they can. If lexical decision time for the word "river" is quicker when participants were drinking water than when they were not, this may be evidence for the higher accessibility of the meaning of "shoreline" in their minds after drinking water. The researcher would expect no differences in lexical decision time for the word "money".

Reaction time experiments are very useful as implicit measures of language processing, inference-making for intended meanings, implicit measures of reactions to linguistic stimuli, and a host of participant behaviors that the researcher wants to measure without directly asking for participant self-reported responses.

- ***Metalinguistic research.*** Metalinguistic research seeks participant evaluation of their own, or others' language behavior. Questionnaires are a very frequent method to collect data about language behavior due to one of their major benefits: they can, potentially, generate a large amount of data that is relatively simple to analyze. While interviews are cumbersome and time consuming, questionnaires are simple, uniform, and quick. Therefore, questionnaires are frequently used to measure people's attitudes to and perception of language and include questions about one's own or others' linguistic behavior. For example, if a researcher wants to discover how people react to the use of idioms, the researcher may design a questionnaire where a text will be interwoven with idioms and then seek responses representing reactions to this text, such as "How interesting is this text?". There are issues surrounding the use of questionnaires, such as question phrasing, the sequence of questions and the use of different response scales. To achieve high reliability and validity of a questionnaire, the researcher needs to pretest it on issues like the clarity of the questions phrasing, the number of questions and their order (so that each question does not influence the responses to the next one), the unbiasing format of the answers, and in addition – the analyzability of the data that this questionnaire would produce. In addition, when cross-linguistic topics are investigated involving multi-lingual samples, additional methodological questions need to be addressed, for example that participants tend to give more intense ratings of emotions on scales in a non-native language than in their native language (e.g., de Langhe et al. 2011). See also Weijters, Baumgartner and Geuens (2016) and Weijters, Puntoni and Baumgartner (2017) for additional issues regarding multi-lingual questionnaires. To learn about all these aspects the reader may consult with questionnaire design handbooks and educational material (e.g. Cummings and Katsos 2019; Goodall, 2021).

- ***Neurolinguistic research***. While outside the scope of most language behavior research, neurolinguistic research is an effective method to support other behavioral research. This method involves neurological tools such as brain scanners, which can show brain activity while processing language. For example, Soroker et al. (2005) find that during the comprehension of requests there isn't one designated "requests" area in the brain that is being activated. Instead, two areas are activated: commands and questions. This finding is fascinating as it supports the philosophical definition of requests as semi-commands, semi-questions: when making a request, the requestor is telling the addressee what they want the addressee to do, but at the same time asking whether the addressee would do it. Combining the study of marketing and cognitive neuroscience, Vance and Virtue (2011) supported previous research on hemispheric dominance when processing metaphor and showed that the right hemisphere is more active in this process, suggesting that consumers process advertisements in a similar manner to the way they would process spontaneous language.

1.2.2 Quantitative Methods to Analyze Language

The steps to conduct quantitative analysis include:

Step 1 – as in the qualitative method, the first step is defining the research question.

Step 2 – define the variables and operationalize linguistic behavior into measurable quantities. As mentioned before, one of the main challenges in quantitative research of language is operationalizing theoretical concepts such as language concreteness or emotional language. Therefore the clearer the definition, the more reliable would be its measure and the higher would be its validity.

Step 3 – decide and implement the appropriate means to measure the focal linguistic behavior and the relevant experimental design (see previous section). In most cases the research question is helpful in defining the measurement approach. For example, if a researcher is interested in the way people make inferences about intended meanings, reaction time might be the most accurate measurement approach. However, instead or in addition, a researcher may choose to employ a questionnaire where participants would choose between the intended meanings. The explicit action of choice may inhibit natural processing, but since the participant is still unaware of the purpose of the experiment, the explicit manner of response in itself does not necessarily impede the reliability and validity of the measure.

Step 4 – use validated, pretested measures. As mentioned before, since language is primarily a non-recurring process, and people come up with new linguistic forms all the time, it is important to make sure that the measurement of linguistic behavior employs validated and pretested tools. Many tools are available in the literature, but researchers may choose to make up and implement new tools that are better tailored to their specific needs.

Step 5 – Analyze the data using statistical analysis tools. Once the data is collected, researchers may turn the textual data into quantities such as word count, calculated emotionality, or Likert-scale responses to questionnaires, and then common statistical analysis software can be applied to analyze the data and make conclusions.

2. A Proposed Process of Designing Language Research in Marketing

This section provides a suggested step-by-step process to conduct language research in marketing. My goal is to empower readers on any level of expertise in linguistics to conduct language research in marketing, and therefore I will keep the examples and illustrations in this section on a relatively simple level of linguistic theory, to help readers picture the components of the process without difficulty. Naturally, however, one needs to possess some previous knowledge in linguistics in order to successfully conduct research involving linguistics.

The suggested steps to conduct research of language in marketing are:

2.1 Identifying a language-in-marketing problem.

Marketing is an applied field. This means that research questions in marketing stem from real-world issues that arise among actual stakeholders in the marketplace. Identifying a language-in-marketing problem is therefore key to successful research of language in marketing. This step can be completed in two ways: (a) identification of a marketing problem and exploring it from a linguistic perspective, and, (b) identifying a linguistic question and exploring its application in marketing. Examples of approach (a) would be: Consumers tend to ignore the fine print in marketing communication, and later claim deception – how can the salience of the “small letters” in ads be increased, without increasing their size?; Consumers can rely on marketer-issued information about products, and on Word of Mouth by other consumers – what linguistic aspects of the content influence reliance on each of these sources? Examples of approach (b) would be: Consumers sometimes use slang in product reviews – how does slang influence readers of these reviews? How does the frequency of personal pronoun use in service encounters (specifically comparing “I” to “you”) influence service evaluation?

Distinguishing between the two approaches described above will help the researcher to develop the next steps. For example, the first question in approach (a) may require background in advertising law, deception theory and attention, whereas the first question in approach (b) might require a deep dive into linguistic theory about the use of slang, its meaning and its influence in different cultures.

a) Concretizing a research question(s) and developing a theory to explain the marketing problem using linguistic behavior

Once a more general language-in-marketing problem is identified, the researcher will use literature in marketing, psychology and linguistics to develop more concrete research questions, theory and predictions. To develop more concrete research, one may focus attention on a certain linguistic behavior,[2] such as:

**** Psycholinguistics* –** the psychology of language production and comprehension. The type of questions a researcher would investigate will focus on the way psychological processes such as emotions or attitudes influence the way people use language, and the way language can influence these processes.
For example, Kronrod, Grinstein and Wathieu (2012a) relate to the finding that people in positive mood tend to use more direct, blunt language, and show how this link between mood and language materializes in consumer reactions to marketing communication about hedonic products.

**** Cognitive Linguistics* –** revolves around the way language is processed in the mind. Researchers who choose to investigate marketing from a cognitive linguistics approach will focus on discovering what goes on in the minds of language users while processing language. For example, Alter and Oppenheimer (2006) show that processing fluency – the ease with which linguistic information is processed - can increase investment decisions in companies with stock market acronyms that are easier to process (e.g., BABA) than when they are more difficult to process (e.g., AUY). Cognitive methods such as reaction time will be appropriate to use when investigating cognitive linguistics questions.

**** Neurolinguistics*** – as described below, this field focuses on relating brain activity to content and context of language comprehension and use. Researchers interested in neurolinguistic aspects of language in marketing will use tools such as fMRI brain imaging in order to detect activation of areas in the brain while processing certain language. These measurements then will serve as support for theory regarding meanings and their processing. Esch et al. (2012) conducted an fMRI study, where brain areas activated while processing information about familiar and unfamiliar brands revealed that consumers use memory of previously experienced emotions to evaluate brands, rather than marketing communication provided by the brand. These results highlight the importance of consumer experience with the brand to build brand relationships.

**** Pragmatics and intended meaning*** – this subfield of linguistic inquiry focuses on the way people signal intended meanings without necessarily saying them directly, and the way others infer the intended meaning based on contextual cues and previous knowledge. For example, Lee and Kronrod (2020) found that people draw different inferences about the meaning of the same expression, depending on who shares the information with them (e.g., weak or strong tie). Similarly, consumers make different inferences about service agents, depending on the level of concreteness of the language they use (Packard and Berger 2021).

The subfield of pragmatics ties together cognition, psychology and language, and therefore entails multi-faceted literature knowledge, which involves psychology, linguistic philosophy and marketing/consumer behavior research.

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[2] Fields of inquiry such as psycholinguistics etc. examine cognitive, neurological or social aspects of language *behavior*. This distinction is different from the language elements described in Part I: phonetics, semantics etc.

**** Cross-Cultural Linguistics and Sociolinguistics*** – questions under this subfield relate to processes that occur when businesses go internationally, when anything is being translated from its original language, or questions relating to cultural influences on psychological processes. For example, Kuehnl and Mantau (2013) find that first language can influence preference for specific vowels in brand names (e.g., native speakers of English develop more positive attitudes to brands with front vowels like "e"). Han, Sohn and Yoo (2015) showed that the hierarchical structure of Korean culture, which influences linguistic choice for more/less formal language also influences perceptions of language in advertising, such that more formal language fits utilitarian products whereas more informal language fits with more hedonic products.

2.2 Developing a multi-method research approach to test the theory

Depending on the focus of interest, the researcher can choose various methods to investigate the proposed theory, or a combination of them. Below is a list of methods described earlier in this section, and an application of each of these methods to investigation of the same research question, as an illustration.

Suppose that the research question we are interested to explore is how promises act as catalysts of product consumption. The theory may introduce promise as a speech act which has the intended meaning, "it will surely be done/happen". Promises bear an intended meaning of commitment to execute what was promised. Therefore, we theorize that a promise increases consumer confidence in the product's performance, and generally, consumer's confidence in the future, and may influence confidence in purchase decision, thereby speeding up the decision and its execution. To investigate this (or any other) prediction, the researcher may involve the following methodological approaches:

- **Reaction time** – the researcher will design a study where participants would first read content, such as product reviews or marketing communication. The content (stimulus) will contain a promise, as in "You will not need a new umbrella for the next ten years" or no promise, as in "This umbrella can hold up for 10 years". After that, participants will complete a lexical decision task where their reaction time to words related to the purchase decision will be recorded. The purchase-related words may be *transaction/credit card/buy/shopping cart* etc. The prediction would be that after a promise participants will react faster to purchase-related words, because these words are more accessible in the mind following a promise, compared to a non-promise (a statement).

- **Neurological research** – to augment the results described above, the researcher may run a brain image study, testing the prediction that a promise activates areas in the brain related to immediate action.

- **Language comprehension** – As explained earlier, testing the way people comprehend language can use implicit or explicit measures. To explore the way promises are understood, the researcher may explicitly ask participants if the content they read was a promise or not, or, alternatively, the researcher may compose questions that implicitly tap on promise perceptions. For example, "Following this (content), to what extent do you expect to replace your umbrella in less than 10 years?"

- **Language production** – The researcher may rely on reciprocity literature and test whether participants react to the promise with a promise of their own, or ask participants to re-tell the content and test whether participants include a promise in their language, or whether their language is more confident.

- **Automated Text analysis and Computational Linguistics -** a new methodological field that is quickly developing in marketing is text analysis. Researchers from various backgrounds analyze texts using existing text analysis packs, or writing their own code. Some of the new techniques are pretty straightforward and do not require extensive definition and operationalization of concepts. For example, to test the research question illustrated in this section, a researcher may make a list of all words related to promises, such as promise, will (verb), assure, guarantee etc., and then count the frequency of occurrence of these words in participants' texts. However, the researcher can use a more sophisticated approach which involves a definition, operationalization, computational quantification and analysis of a linguistic feature of the text. For example, the researcher will define that language expressing confidence in the future should involve higher future references, greater proportion of verbs related to the future, more active (than passive) tone etc. Then, the researcher will develop a computational approach that will reflect this definition in an operationalized way, and use the formula in analyzing participant text following reading the promises.

- **Qualitative analysis** – researchers who choose this approach would use interviews or other qualitative methods to collect data and interpret it, building a deeper understanding of reactions to promises in marketing. For example, a researcher may ask participants their expectations for promises from marketers, or inquire about the way they make decisions about products and how marketing content influences those decisions.

- **Psycholinguistics** – as explained earlier, this area focuses on the links between psychological processes like emotions or attitudes, and language. A researcher who adopts this method will test the effect of promises on decision making using questionnaires and observation methods to measure consumer satisfaction, emotions, attitudes and so on. For example, the researcher may use Likert scale items gauging expectations from the product after reading a promise or a statement about it.

2.3 Conducting the research and deriving practical conclusions

As mentioned before, marketing is an applied research field, and research is conducted with a practical purpose. Linguistics, however, is not by definition an applied field. The subfield of applied linguistics is an exception. Therefore, Once the researcher has executed the planned research program, conclusions should contribute both to linguistic theory and to marketing theory and practice. Using our illustrative example, a researcher may conclude that promises indeed increase decision speed and serve as catalysts of actions, and in addition there is the contribution of a newly developed method to gauge promise language and resulting linguistic aspects of reactions to promises. Further, results of this research program may contribute to the practice of marketing communication about products, to understanding what attitudes or emotions stand behind certain consumer generated contents, and how including promises in marketing communication about products can influence consumer decision making.

Conclusion

To sum, using language theory in marketing research can be executed in a host of ways, from using language as stimuli, using language as measurement (e.g., frequency of first person pronouns in participant self-disclosures as evidence for objectivity, Spiller and Belogolova 2016), to language as the focus of interest – approach (a) suggested earlier (e.g., Patrick and Hagtvedt (2012) show that saying “I don’t” as a refusal is more convincing than saying “I can’t”), and advancing marketing theory by employing linguistic theory (e.g., the phonemes in a brand name can convey symbolic information about the brand, Lowrey and Shrum 2007). Researchers interested in executing language research in marketing may follow the steps suggested in section 2, choosing and implementing any of the methods described in section 1. The main point of language research in marketing is to provide a linguistic explanation to marketing phenomena and to help marketing researchers and practitioners in achieving better understanding of the field, using novel sources of knowledge and methods.

Part IV – Summary and a Look into the Future

3. **Summary**
   1.1 What does it take to do language research in marketing?
   1.2 Common pitfalls to notice
4. **Where do we go from here? Evolving Directions of Language Research in Marketing**
   2.1 Text Mining and Text Analysis
   2.2 Computational Linguistics
   2.3 AI in Service
   2.4 Developmental Linguistics

1. Summary

1.1 What does it take to do language research in marketing? Theory, literature, predictions, methods

Theory and literature. Linguistic theories are wonderful idea generators, because they focus on deep processes underlying behavior. To do language research in marketing, the researcher would strive to be well-versed in linguistic theory. This would include understanding the fundaments of language, starting from phonetics, through morphology, semantics, grammar, syntax, pragmatics, and cross-cultural linguistics. Some researchers choose to focus on one element from this list, but since each element serves as the foundation for the following element, learning only one part of linguistics may put the researcher at a disadvantage. It is therefore recommended that a researcher interested in language research in marketing familiarizes herself with all elements of linguistics theory. My goal in Part 1 of this manuscript was to help readers get familiarized with the most well-known approaches and theories in linguistics.[3] In part 2, I aimed to summarize the current literature that investigated language within the marketing field.

Fuller knowledge of linguistics is also useful for posing a research question and for merging multi-disciplinary literature into a sensible theory. In addition, as the main focus of the research relates to marketing questions, the researcher should be proficient in marketing theory and literature.

Predictions. Posing the right research question, which starts from a practical marketing issue and aims to suggest a resolution of that issue via linguistic inquiry, will help the researcher to move beyond descriptive research to predictive research. By this, the researcher will also contribute to linguistics in the process. Through this process, the researcher will generate new ideas that can improve existing marketing findings and theories, measurement and manipulation, or generate brand new linguistic ideas about marketing phenomena. Thus, researchers of

[3] Researchers wishing to develop a strong linguistics foundation may undertake reading articles in linguistics and some basic handbooks, such as the Handbook of Pragmatics (Hord and Ward, 2006) or the Handbook of Psycholinguistics (Fernández and Smith Cairns, 2017).

language in marketing are especially well positioned to use the marketing context in order to convey and interpret language - one of the main differentiating aspects of human behavior.

Methods. In Part 3 of this manuscript, I described a variety of methods that are used in linguistic research. Some of them are familiar to the reader from other fields of research, some are new to the reader. Being knowledgeable about various methods opens the researcher up not only to new linguistics methods, but also widens the researcher's horizons for research questions and theory. Similarly to the way being familiar with various paths in the forest allows the traveler to arrive at different spots, knowing various ways to test theory enables the researcher to arrive at more diverse research theory and predictions.

Taken together, proficiency in both marketing and linguistic theories, literature and methods will make up a well-rounded researcher of language in marketing.

1.2 Common pitfalls to notice

Not all that glitters is gold. Perhaps not every research that deals with words should be called language research. For example, research on gain and loss framing in health (e.g., Covey 2014; Zhao and Pechmann 2007) examines whether communication promoting healthful behaviors is more effective when it mentions gain motivations (e.g., You will live longer if you quit smoking) or loss motivations (e.g., You will die sooner if you keep smoking). While clearly the difference between the two messages is defined by language, the research question here is not linguistic, because it does not deal with any of the areas of language inquiry: phonetics, morphology, semantics, pragmatics or sociolinguistics. In other words, the question is not whether the phonetic/morphological structure of the two messages influences consumers, nor whether the meanings of the two messages are responsible for consumer reactions to them. Instead, the research question here is purely communicational – whether mentioning gains or losses is more effective in modifying behaviors.

A researcher interested in conducting language research in marketing should carefully consider the actual question they would like to pose and explore. If the question is not about a linguistic aspect of text or behavior, perhaps a different angle is more appropriate to investigate it.

Asking the right question – and testing the right question. Related to my previous point, I'd like to suggest another consideration: at times, a researcher may ask the right question – for example, whether personal pronouns convey a different meaning than other pronouns – but when it comes to testing the question, the researcher defaults to what might be closer to their research methodology comfort zone, and ends up testing a different research question. For example, the researcher would focus too much on the outcomes of using certain, over other, personal pronouns. This sort of research would be characterized as consumer behavior research, but hardly a linguistic one. The linguistic question here is how consumers construct meaning based on personal pronoun use. For instance, I mentioned before the different agency meaning of "It broke" versus "I broke it". The use of first person pronoun in this example signals intentionality, taking personal responsibility, and power. Importantly, the linguistic question here is how exactly pronoun choice influences implied meaning. To answer this question, the researcher would integrate literature and explore the way sentence structure can alter meaning, and the way the word “it” changes agency depending on its grammatical position in the sentence.

Relevance and the “so what” question. As mentioned before, while linguistics is mainly a descriptive area of research, marketing is predominantly predictive, and academics usually conduct research bearing practical implications in mind. With that said, when a researcher sets to inquire into a question regarding language in marketing, one possible pitfall to avoid is remaining within a linguistic mindset and devoting insufficient attention to the marketing aspect of the question. One immediate outcome of this is reduced interest towards the research from the marketing research community. To address this challenge, the researcher would consider starting off with identifying a marketing problem (rather than a linguistic problem) and then developing an explanation and solution based on linguistic theory. In part III, section 2a, I brought examples of research questions stemming from a marketing problem, or an application of linguistic issues in marketing. While both approaches are useful for research of language in marketing and can yield substantial contribution to marketing theory and practice, starting from a marketing problem can prove an easier way to help a less experienced researcher to remain relevant to marketing.

2. **Where do we go from here? Evolving Directions of Language Research in Marketing**
   2.1 Text Mining and Text Analysis
   2.2 AI in Service
   2.3 Computational Linguistics
   2.4 Developmental Linguistics

2.1 Text Mining and Text Analysis

Developments in the technology and tools for big data analytics have germinated marketing research focusing on text mining and text analysis. The recent years have seen an exponential growth in publications that employ text analysis tools to inquire into marketing phenomena (for a summary see Humphreys and Wang 2018). Indeed, text analysis can provide insights about the authors of text – be it consumers or firms – and about its potential influence on recipients. Text analysis can also help researchers understand marketing processes and generate predictions (Berger et al. 2020). Within the realm of text analysis there are largely two approaches adopted by researchers in marketing: one involves developing lists of topic-related words, like certainty words, and the other involves machine learning – a data-driven approach that helps researchers detect commonalities and derive conclusions based on these commonalities. Hartmann et al. (2019) compare the performance and usability of ten text analysis approaches that involve text/word lists or machine learning and about 40 datasets in various languages. The authors provide conclusions regarding the approaches that provide more successful and accurate output to understand marketing behavior. In particular, the authors suggest that some word-list based approaches are always inferior to machine learning[4].

Today, text analysis often involves both list-based word searches and machine learning approaches. One of the first works, by Netzer et al. (2012), demonstrated the power of automatic text analysis tools to detect relevant, practically useful textual elements that tell a story about consumer experience with the product. In the same year, Tirunillai and Tellis (2012) found intriguing relationships between the language in user-generated content and stock price. They found that negative emotional content has a significant and long-lasting negative effect on abnormal returns, while positive emotional content does not influence stock abnormal returns. Echoing these findings, Ludwig et al. (2013) found that larger increases in positive emotional language in product reviews do not have a vast effect on increases in sales. However, when negative emotional language increases, it influences sales (negatively) to a great extent. Another finding in the same work is that a match in linguistic style between a review and common style used within the community where it was posted can make the review more influential, ultimately driving more sales.

Since then, the field of marketing research has seen developments in both the tools or software for text analysis, and the way researchers integrate those tools for innovative conclusion making. For example, Lee, Hosanagar and Nair (2018) conducted content analysis of ads on Facebook and found that including certain aspects like price, emotional content and brand personality elements in the ad can influence user engagement with the ad (likes, clicks, shares etc.). Preoţiuc-Pietro et al. (2015) find that people with higher income use more complex language, which indicates higher perceived education and intelligence, as well as more extensive expression of fear and anger. While these two works are not strictly linguistic, as they do not analyze a linguistic phenomenon, they can serve as fruitful ground for the development of linguistic research using text mining. Berman et al. (2019) analyzed a dataset with millions of tweets about political debates posted towards the 2016 U.S. presidential elections and found that emotional language in tweets posted during the debate drove less shares and other reactions, but the effect of emotionality increased when the debate was over. These findings can be generalized to other contexts that involve before-and-after user-generated content, and future research can explore how the language of such content changes depending on the immediacy of the experience/event. Rocklage, Rucker and Nordgren (2018a, 2018b) used human judges to evaluate the degree of emotionality of various adjectives, such as “awesome” or “excellent” to build and test an online tool (The Evaluative Lexicon) that can detect the intensity of emotion in text, by the words it uses. The researchers Büschken and Allenby (2020) use conjunctions like ‘and’, ‘or’, ‘but’ in order to detect changes of topics discussed in product reviews. The ability of automatic approaches to categorize large datasets into sub-topics is useful for marketers, but consumers who read product reviews naturally use grammatical elements such as conjunctions to learn about offerings, as one would do in a conversation. Therefore, the analysis of conjunctions can be insightful to understand consumers.

Text analysis can be applied not only to consumer-generated content but also so Marketer-generated communication. for example, Colladon (2018) developed The Semantic Brand Score (SBS) – a new tool to measure brand importance by using textual data. A work

[4] Note however that some research identifies mistakes in machine learning approaches that might influence results of research conducted in marketing (e.g., Watts and Adriano 2021).

involving text analysis of communication on Facebook and Twitter coming from *brands* (Pezzuti, Leonhardt and Warren 2021), shows that certainty-related words, such as always or everything, make the brands seem more powerful and consequently drive higher consumer engagement in terms of likes, comments, or shares and retweets.

As a developing field, the field of text analysis within marketing has yielded several attempts to share, instruct, guide and educate researchers on text analysis tools and approaches (e.g., Berger et al. 2020; Hartmann et al. 2019). For example, Zaki and McColl-Kennedy (2020) proposed a step-by-step text mining analysis process applied to service marketing. The authors suggest ways to choose between analysis tools and illustrate possible insights that can be driven from these techniques. In addition, over the years there have been numerous workshops, courses and conference forums conducted with the purpose of enriching the research community. Future developments in these areas can involve database sharing and code sharing – practices that are common in the computer science community.

2.2 Computational Linguistics

Sophistication of the field of Natural Language Programming, Machine Learning, and Computational Linguistics has opened the opportunity for researchers to engage in more complex computational tasks than text analysis. Computational linguistics extends the capabilities of text analysis by adding a way to measure and analyze linguistic phenomena such as language concreteness, figurative language, language diversity and so on. This field is new to marketing research, and therefore only a handful of articles that involve computational linguistics have already been published. One interesting work deals with the definition and computation of narrative structure. Van Laer et al. (2019) developed a computational method to calculate the narrativity and its capability to evoke narrative-transportation in consumer-generated product reviews. For example, the approach involves mathematical computation of certain grammatical aspects of the text, together with certain word classes. Another work, interested in deception detection in product reviews (Kronrod, Lee and Gordeliy 2017), involves computation of language concreteness, using a combinatorial formula common in other fields such as physics and mathematics. Moon, Kim and Iacobucci (2020) also involved computational methods to detect and characterize the language of fake reviews. These are three examples involving computational linguistics for a more accurate automated measurement of language behavior and effects in marketing. In the future, researchers in marketing may develop their own computational methods to measure linguistic aspects in marketing and derive conclusions about marketing phenomena.

2.3 AI in Service

Advancements in technology humanization have evoked growing interest from marketing practitioners and researchers (e.g., Davenport et al. 2020; Huang and Rust 2021). Research in marketing has been focused on consumer acceptance of AI conversation agents and service technology (Carmon et al. 2019; Kim, Schmitt, and Thalmann 2019). One particular focus of interest involves external appearance of service machines (e.g., Mende et al. 2019). For example, Rese, Ganster and Baier (2020) measure the acceptance of the text-based "Emma" chatbot who is able to provide natural language response to consumer shopping-related questions. The authors surveyed millennial participants and found that acceptance of the chatbot is governed by considerations such as conversation authenticity, usefulness and enjoyment, as well as privacy.

Very recent works have begun to turn our attention to AI communication and interaction abilities. With the development of natural language processing and simulation, conversational AI today are exploring new possibilities, such as addressing meaningful emotional needs of customers (*Carvalho and Scornavacca 2020;* Puntoni et al. 2021). However, research directly exploring the language used by AI systems and consumers who interact with them, are currently only under development. For example, Bakpayev and Kronrod (2020) rely on the ability of figurative language to signal social presence (Delfino and Manca 2007) and investigate the use of figurative language such as idioms, metaphor or humor, and its effects on the success of customer-AI agent service interactions. When accomplished, these developments will open the door for linguistic analysis of consumer interactions with AI systems, and in this way put a finger on the most pulsing artery of current industry challenges for humanization of AI conversation.

2.4 Developmental Linguistics

A subfield of linguistics that has not been mentioned in this manuscript yet is developmental linguistics – the investigation of the way children acquire language and develop linguistic knowledge and usage skills. Developmental linguistics is different from research of bilingualism, which focuses on the way one's first and second language correspond with each other while the individual is processing and responding to linguistic stimuli around. Developmental linguistics is centered around early childhood processes, which occur during the first 5-7 years and are time sensitive. For example, research on language mistakes that young children make supports the notion that children are prone to inductive learning – a child's tendency to infer a rule from a single occurrence (Demetriou et al. 2021).

Researchers interested in exploring developmental linguistics in marketing would integrate literature on marketing & children (e.g., Echelbarger, Gelman and Kalish 2019; Maimaran et al. 2019 or Maimaran and Echelbarger 2020), together with linguistics literature and marketing literature. Such endeavors promise to be rich in opportunities for exploration and conclusion. Notably, researchers do not necessarily need to involve children as research participants in order to derive conclusions about developmental processes. For example, Pathak, Calvert and Velasco (2017) find that luxury products work better with brand names consisting of phonemes that are typically acquired at a later age (e.g., g, k, f), rather than earlier age (b, d, m), because phonemes that are acquired at a later age are more likely to occur in less frequent words in the language and therefore brand names constructed of these phonemes are perceived as more rare.

Manuscript Conclusion

My goal in writing this manuscript was to introduce researchers to the fundamentals of language research in marketing. I started off with explaining the basic concepts and subfields of linguistic inquiry, and describing the most prominent theories in linguistics (Part I). Then I provided an extensive review of literature in marketing that that explored language in this way or another (Part II). After that, I laid out a proposed pathway to conduct research of language in marketing and suggested various opportunities to consider when setting out to conduct such research (Part III). Finally, in Part IV, I offered a look into the future of language research in marketing, suggesting several areas that may benefit from further exploration. It is my hope that this manuscript can be used as a basic guide for beginning researchers who are interested to conduct language research in marketing, or as a summary for more seasoned researchers who already acquired linguistics education and would like to get up to date on current streams in the research of language in marketing.

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