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## **Sensory Modalities Vocabulary in Culinary Shows**

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## Abstract

This paper explores the complex relationship between sensory perception, language, and the representation of food in popular cooking shows. Drawing on scholarly works on sensory linguistics and media analysis, the study investigates how cooking shows utilize language to construct a multisensory experience for viewers, even though they cannot directly interact with the food.

The traditional five-sense model (sight, taste, smell, touch, and hearing) serves as a foundational framework for understanding human sensory perception of food. However, the limitations of this model are acknowledged, particularly the concept of “ineffability” – the difficulty of fully expressing certain sensory experiences through language. The study delves into the concept of multisensory integration, where different senses interact to create a unified perception of food.

The analysis focuses on two contrasting genres of cooking shows: travel documentaries and avant-garde culinary programs. By examining programs like “SALT FAT ACID HEAT” and “Hell's Kitchen,” the research explores how the use of sensory language varies within these genres. Travel documentaries, for example, may emphasize cultural context and evoke a sense of place through vivid descriptions of local ingredients and traditional dishes. In contrast, avant-garde shows might utilize more technical or experimental language to describe innovative culinary techniques and unconventional flavour combinations.

The findings of this research contribute to our understanding of the complex relationship between sensory perception, language, and food media. The study sheds light on how cooking shows leverage multisensory language to create an engaging spectacle, educate viewers about diverse culinary traditions, and influence their perception of food. By acknowledging the interplay between sensory perception and language, we gain a deeper appreciation for the artistry and communication inherent in the art of food presentation.

**Keywords:** Sensory perception, multisensory experience, cooking shows, sensory language, modality, ineffability

## Анотація

У роботі досліджується складний взаємозв'язок між сенсорним сприйняттям, мовою та зображенням їжі в популярних кулінарних шоу. Спираючись на наукові праці з сенсорної лінгвістики та медіа-аналізу, було розглянуто, як кулінарні шоу використовують мову для створення мультисенсорного сприйняття для глядачів, навіть якщо вони не можуть безпосередньо взаємодіяти зі стравами.

Традиційна модель п'яти відчуттів (зір, смак, нюх, дотик і слух) слугує фундаментальною основою для розуміння сенсорного сприйняття їжі людиною. Однак варто зазначити, що ця модель має певні обмеження, зокрема поняття «невимовності» – складність повного вираження певних сенсорних відчуттів за допомогою мови. У дослідженні розкривається концепція мультисенсорної інтеграції, коли різні органи чуття взаємодіють для створення єдиного сприйняття їжі.

У фокусі дослідження - два різні жанри кулінарних шоу: документальні тревел шоу та авангардні кулінарні програми. Розглядаючи такі програми, як «SALT FAT ACID HEAT» та «Hell's Kitchen», дослідження вивчає, як використання сенсорної мови варіюється в межах цих жанрів. Наприклад, документальні тревел шоу можуть підкреслювати культурний контекст через яскраві описи місцевих продуктів і традиційних страв. Натомість авангардні шоу можуть використовувати більш технічну або експериментальну мову для опису інноваційних кулінарних технік і нетрадиційних смакових поєднань.

Результати цього дослідження поглиблюють наше розуміння складного взаємозв'язку між сенсорним сприйняттям, мовою та кулінарними шоу. Дослідження проливає світло на те, як кулінарні шоу використовують мультисенсорну лексику задля залучення глядачів. Визнаючи взаємодію між сенсорним сприйняттям і мовою, ми глибше розуміємо майстерність комунікації, що властива кулінарному мистецтву.

**Ключові слова:** Сенсорне сприйняття, мультисенсорний досвід, кулінарні шоу, сенсорна мова, модальність, невимовність.

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## INTRODUCTION

Human sensory experience varies across the globe. However, all people share a common sensory system with a common anatomical structure.

Due to the vital necessity, we are facing the sphere of gastronomy every day. In the modern world, there is a rapid development of culinary art. Chefs are constantly looking for new exclusive recipes, creating new dishes, modifying ingredients for them, trying the most unexpected combinations of flavours, as well as modernising technical kitchen equipment. Such changes cannot but affect the language, as they stimulate the emergence of new words related to the field of gastronomy, which, in turn, is reflected in its vocabulary, as it is the most variable component of language.

In this work, we are also exploring sensory perception, which is a complex phenomenon, and language offers valuable insights into how we experience and communicate about the world around us. By studying sensory modalities in language, we can gain a better understanding of the nature of sensation, its relationship to human culture, and how our brains process sensory information.

It should be mentioned that at different times such outstanding scientists as B. Winter (2018, 2019), A.D. Belova (2023), D. Lynott (2009, 2010, 2014, 2016), L. Connell (2009, 2010, 2014, 2016), A. Majid (2014, 2016), S. Levinson (2014), A. Viberg (1983), I. Croijmans (2016), C. E. Schroeder (2001), F. Strik Lievers (2015, 2016) and others devoted their scientific works to sensory linguistics.

Furthermore, such scientists as M. Louwarse (2011), L. Connell (2018), L.J. Speed (2017), C. Spence (2001, 2015), M.E. Nicholls (2001), J. Driver (2001), M. Dingemanse (2012) and D. Lynott (2009, 2013) studied the issue of sensory modalities and perceptual modality.

**The aim of the research** is to define the characteristics of genre of cooking shows and explore how sensory linguistics is used in the context of glutton discourse. Moreover, we are going to focus on multisensoriality as one of the main problems for categorising the senses.

The following **objectives** were determined in this paper:

- to identify the specific vocabulary and techniques used to describe visual elements, taste sensations, aromas, textures, and sounds in culinary shows based on the list of sensory vocabulary units taken from the shows of two different genres (travel-documentary and avant-garde shows);
- to classify the vocabulary units of five main sensory modalities in culinary experiences;
- to analyse the aspects of multimodality, multisensory and ineffability;
- to examine how this language is used to construct a multisensory experience for viewers, even though they cannot directly interact with the food.

**The object** of the paper is sensory modalities vocabulary in cooking shows.

**The subject** of the research is analysing the peculiarities of sensory modalities vocabulary in cooking shows of two contrasting genres: Travel documentaries and Avant-garde cooking shows.

**Research methods** are as follows:

- lexical analysis;
- stylistic analysis;
- method of component and contextual analysis;
- method of typological comparison;
- empirical methods (comparison, analysis of results);
- method of systematisation and generalisation.

**The novelty of the study** lies in the systematisation and analysis of sensory vocabulary in Modern English and semiotic strategies used to convey flavour. While previous researchers have explored sensory language in food writing, this study examines how competitive cooking shows and travel documentary shows utilise language to create a multisensory experience for viewers, focusing on the use of urgency and competition-driven vocabulary alongside sensory description in the first type and using culture focused elements and vivid description to convey in the best way culinary experience in the second one.

**The practical value** of the work is that it will be useful to linguists, teachers, and students, as well as all those who seek to know the essence of such a linguistic

phenomenon as sensory linguistics, particularly sensory modalities vocabulary in culinary shows. Research materials can be used in the process of further research on studies of sensory modalities and the influence of sensory vocabulary in culinary shows on the target audience. The findings of this work will contribute to our understanding of how language shapes perception in the context of food media, with potential implications for various fields such as sensory science, communication studies, and marketing.

The work includes an introduction, two chapters, conclusions, references and appendices.

## **1. SENSORY LINGUISTICS in the 2020s**

### **1.1. Current studies of sensory modalities**

An essential component of our perception of the world is sensation. Because they enable us to comprehend our surroundings and protect one another, senses are vital to us.

Language provides us with an important understanding of how people perceive and communicate their senses. For this reason, research on the senses in language is essential to our understanding of the nature of sensation, the relationship between sensation and human culture, and the relationship between human perception and the cognitive system (Majid & Levinson 2011: 7).

Perception, however, remains structured. As an illustration, colour is sensed by the eye, a sensory organ that also concurrently detects motion through space, shape characteristics, and distance and size. Since they are perceived by the same sensory organ and appear to us simultaneously, these perceptual characteristics are associated with our experience. Although sound experiences are primarily distinct from visual experiences, such as in the dark or when one's eyes are closed, humans are also capable of perceiving motion through sound. Furthermore, sight is linked to a specific neurological subsystem, such as the primary and secondary visual cortices, even if it may interact with other senses in perception. The terms “sense” and “sensory modality” designate a subset of perceptual experience linked to a certain sensory organ and the brain's own cognitive apparatus (Winter 2019: 12).

Every living being depends heavily on their ability to perceive their surroundings in order to survive and make sense of their surroundings. The five senses – sight, hearing, touch, taste, and smell – which are commonly referred to as the “Aristotelian” or “five senses folk model” – were once studied by scholars over 2,000 years ago, but Sensory/Sensorial Linguistics only came to light as a prominent trend at the beginning of the twenty-first century. In addition to being useful for research on fundamental linguistic issues like semantic universals, lacunas, and sensory modalities in world languages, studies of embodied cognition – the conceptualisation and categorisation of sensory sensations evidenced through languages – and sensory vocabulary in English

and other languages can also be beneficial for the food industry, food science, advertising, and marketing sectors (Belova 2023: 52).

Although the question of the number of senses is one of the fundamental for the study of sensorics, it continues to be controversial for many centuries and has not found an unambiguous solution. It is traditionally believed that the human sensorium has a five-part structure and includes sight, hearing, touch, smell and taste. The authorship of this five-part model belongs to Aristotle. He identified four basic senses, associating each of them with one of the four elements: sight corresponds to water, hearing to air, smell to fire, and touch to earth. Aristotle considered taste to be a special form of touch and recognised touch itself as the main, primary sense since it is peculiar to all living beings and with its help the body can feel the properties of all four natural elements, such as heat or cold, dryness or humidity (Sorabji 1971:59).

Despite the fact that the five-part model looks convincing and rests on the principle of common sense, which is important for phenomenology, its scientific validity has been repeatedly questioned.

Viberg's hierarchy of the sense, which is based on his 1983 study of perception verbs, is another concept in the science of perception that the senses may be arranged in. Viberg considers three general components (i.e., applicable to other verbal semantic fields): activity, experience, and copulative or phenomenon-based. Viberg establishes the five sense modalities listed above as its field-specific components while examining the mechanisms at play in the act of perception (Viberg 1983: 123).

In the sentence "I am tasting the cake," the first component, activity, refers to "an unbounded process that is consciously controlled by a human agent." The second component, experience, on the other hand, describes "a state (or inchoative achievement) that is not controlled," e.g. "I tasted the cake" (Viberg 1983: 123). The third component, copulative, qualifies as a verb that "takes the experienced entity as a subject," such as in the sentence "The cake tastes amazing." First, there are experiencer-based verbs, which take the living being experiencing the subject of the sentence; second, there are phenomenon-based verbs, which take the subject of the sentence to be the entity being experienced (Viberg 1983: 124).

In the first two, the three scenarios are distinguished lexically: hearing encompasses three forms: “to listen to,” “to hear,” and “to sound,” while sight includes three forms: “to look at,” “to see,” and “to look.” Though “to feel,” “to taste,” and “to smell,” respectively, cover every scenario, these three sense modalities always use the same form. When it comes to taste and scent, context can distinguish between experience and activity, e.g., “Tom tasted the soup” and saying, “The soup tasted good.”

Thus, Viberg identified fifteen perceptual scenarios that language may lexicalise with various phrases by fusing the general and field-specific components. He thereafter examined fifteen phrases from fifty different languages that illustrated the scenarios he had discovered. Using the findings of this cross-linguistic analysis, he developed the universalist conclusion known as the hierarchy of sense modalities: sight > hearing > touch > taste, smell (Viberg 1983: 136).

The idea that sight is the primary sense and the order in which senses are ranked have been explored in a more contemporary study by San Roque, which examined the frequency of perception words in a sample of thirteen different languages. After extending the search to include all references to perceptual modalities (rather than just the verbs), they found that the most common forms of verbs in twelve of the thirteen languages were related to sight. Moreover, in all thirteen languages, references to vision were more common than references to the other senses. Ultimately, their research indicates a universal preponderance of visual experience that is consistent across cultural boundaries, providing significant support for the vision dominance concept (San Roque 2015: 19).

According to Van Putten, there are just two verbs that may be used to describe the perceptual experience: *mò*, which means “see,” and *nu*, which means “hear/feel/taste/smell,” which can be understood as referring to all non-visual sensory modalities. There doesn't seem to be a standard way to communicate about touch, even if when *nu* is used for either tasting or smelling, the precise meaning intended is made clear by the grammatical form that is selected. Van Putten therefore draws the conclusion that there are other classifications of perception besides the folk model of

the five senses and that the results pertaining to the linguistic encoding of the sensory modalities demonstrate that the Aristotelian five senses do not always correspond to the underlying concepts on which the encoding of perceptual experience in a language is based (Van Putten 2020: 458).

Additionally, Winter questions as well as the five senses model. He states that the five-fold method of segmenting the sensory space does not quite match up with what is known about neurophysiology and perceptual psychology. Numerous subcategories that do not cleanly fit into the categories of sight, hearing, touch, taste, and smell are recognised by scientists. For instance, scientists acknowledge that pain is distinct from other touch-related dimensions: Underlying brain processes that distinguish pain perception from ordinary touch perception support it (Winter 2019: 13-14).

Attempts to categorise the senses are further complicated by the presence of strong crossmodal interactions among them. Where to draw the line between two senses is unclear if there are distinct senses yet they interact behaviorally and through common neural substrates. For instance, there is a strong relationship between taste and smell (Spence et. al., 2015: 266). Multisensoriality thus presents an additional challenge to the classification of senses.

Moreover, we may group the senses according to the kind of energy they display, such as light energy (seeing), mechanical energy (touch, sound), or molecular energy (taste and smell). As an alternative, we may describe a sense as something that relates to an easily identifiable body part, like the tongue or nose, or we could define the senses in terms of the many kinds of sensory receptors that are involved (Winter 2019: 14).

## **1.2. Sensory vocabulary in English**

Food items represent a distinct category among consumer goods due to their capacity to engage all human senses: sight, touch, hearing, smell, and taste. Prior to consumption, individuals perceive aromas, anticipating the forthcoming flavours. As food enters the oral cavity, taste sensations and food flavours are perceived, with olfactory input received via the retronasal pathway. Sensations of texture, including

roughness, smoothness, stickiness, or slipperiness, are felt on the tongue, while mastication offers insights into the product's thickness, hardness, elasticity, and stiffness. Auditory experiences accompany consumption, ranging from crunching and crackling to softer sounds like smacking and slurping during chewing and swallowing (Schifferstein 2020: 294-295).

You may even occasionally be able to feel food moving inside your mouth. For example, you might be served Katsu ika odori-don (also known as the “dancing squid bowl”) in Japan, which means a bowl of rice or noodles topped with freshly killed cuttlefish. The squid appears to squirm when soy sauce is added because its muscles flex in reaction to the sodium in the sauce (Ishak 2023).

Another instance involves sherbet powder, employed in Kaktus ice cream, functioning akin to Alka-Seltzer. Comprising a blend of powdered acid and base, this powder reacts upon contact with moisture, inducing a fizzy sensation in water or a tingling effect when mingled with saliva on the tongue (Schifferstein 2020: 295).

Sensory vocabulary refers to words that describe our experiences through the five “Aristotelian” senses: sight, hearing, touch, taste, and smell.

**Sight** includes words that describe color, size, shape, light, and dimension, e.g., vibrant, glimmering, colossal, minuscule, and trapezoidal. It can be also expressed through metaphorical expressions such as crystal clear (like a sparkling stream), luminous (like a firefly's glow), velvety (like a soft blanket), and glistening (like morning dew).

Vision significantly contributes to the food experience by allowing individuals to perceive attributes such as colour, size, shape, quantity, and surface texture. The natural hues of fruits and vegetables provide chefs and consumers with cues regarding ripeness levels, ranging from unripe to overripe or spoiled (Schifferstein 2019: 100). Moreover, visual perception plays a pivotal role in influencing consumer preferences by shaping what is considered visually appealing (Schifferstein 2019: 107). In the culinary realm, chefs often describe visual appeal as the art of plating, wherein dish components are creatively arranged on the plate to enhance consumers' initial interactions with the food. Examining images from cookbooks across various eras and

culinary traditions indicates that plating, akin to art and fashion, evolves with trends. Recent trends in food presentation include stacking ingredients for heightened visual impact, employing molecular spherification for sauces, meticulously segmenting dishes conceptually, serving tapas-style dishes for communal enjoyment, and crafting visually captivating dishes suitable for social media sharing (Rabidoux 2024).

**Hearing** includes words that describe the volume, pitch, rhythm, and texture of sounds, e.g., deafening, melodious, rhythmic, and crackling. To metaphorical expressions belong: sizzling (like excited whispers), crackling (like a bonfire), crisp (like the snap of a new book), muffled (like a distant conversation), bubbly (like laughter).

While the influence of sound on food perception may not be immediately apparent, it significantly shapes various tactile experiences. Considering the crispiness of potato chips, the crunchiness of cookies, and the fizziness of soft drinks – all are intertwined with auditory cues. For example, potato chips are perceived as crisper and fresher when the overall sound level of biting and chewing is amplified. Similarly, the carbonation level of beverages is gauged by the intensity of sound when opening a can. Likewise, the crispness of an apple is discernible from the sound of someone biting into it. Employing sound strategically can enhance the overall culinary experience in diverse ways.

**Touch** includes words that describe texture, temperature, and pressure. For instance, velvety, searing, feathery. Also silky (like smooth hair), velvety (like a rose petal), crisp (like a cool autumn breeze), rough (like a rocky path), and sandy (like warm beach sand) can serve as metaphorical expressions of touch.

When discussing food, the term “mouthfeel” often arises, referring to how food sensations unfold in the mouth, from exploring its surface to biting, chewing, and swallowing (Goodwin 2022). Attributes of mouthfeel encompass hardness, softness, roughness, smoothness, crunchiness, chewiness, creaminess, stickiness, or sliminess. Similar to the challenge of describing scents, certain intricate food textures also defy easy description. Cultural influences may shape texture preferences; individuals of Western descent may favour loosely textured meatballs, while those with an Asian

background may prefer smooth, pureed mixtures moulded into tight, springy balls, known as the “Q texture”, characterised as chewy, gummy, or rubbery. Asian cuisine sometimes incorporates tasteless elements to achieve this texture, such as tapioca balls in bubble tea (Schifferstein 2020: 312).

Sauces serve as a means to enhance the complexity of flavours in a dish. Yet, when chefs aim to elevate the visual appeal of a dish, controlling the placement of liquids on the plate poses a challenge. Consequently, chefs have devised various methods to impart volume, texture, and stability to sauces and liquids, facilitating better control over their arrangement on the plate. Some chefs utilise food additives to create foams, gels, and emulsions, with ingredients such as sodium alginate, xanthan gum, tapioca, and maltodextrin commonly found in the toolkit of food scientists, while others, like flour, gelatin, and eggs, are readily available at grocery stores. By introducing additional texture to sauces, the overall mouthfeel of the dish transforms (Mouritsen 2017: 286).

**Taste** includes words that describe the basic flavours (sweet, sour, salty, bitter, umami), and the richness or intensity of flavours, e.g., tangy, zesty, decadent. There is an SNQHU model that was first introduced by Carl Pfaffmann in 1941 (Pfaffmann 1941: 249) and later developed by James Fulton (Fulton 2020: 7):

*S-group*: sweet or sugary (sweet, honeyed, candied, caramelised)

*N-group*: salty, and specifically “salty based on the presence of Na<sup>+</sup> ion” (briney – describes a salty taste similar to seawater, often found in cured meats, olives, or certain cheeses; salty, etc.)

*Q-group*: bitter, letter derived from the relevance of quinine (bitter; chocolaty – describes a pleasant bitterness associated with dark chocolate; espresso – describes a strong, intense bitterness like that of espresso coffee)

*H-group*: acidic (tart – describes a sharp, but pleasant acidity like that found in citrus fruits or yoghurt; tangy – refers to a lively, zesty acidity often found in fruits or salad dressings; vinegary – describes the sharp, acidic taste of vinegar).

*U-group*: umami, a potential taste apparently unique to monosodium glutamate in some scholars' eyes (savoury – describes a rich, brothy taste associated with meat,

cheese, or certain vegetables; meaty – refers to the savoury taste of cooked meat, even in vegetarian dishes that mimic the flavour, cheesy – describes the savoury taste associated with aged cheeses).

Moreover, the following taste registers can be distinguished:

- physiological taste – the sensation of sweet, salty, bitter, sour, or sharp (Li et. al., 2024: 2);
- organoleptic taste implies, in addition to physiological taste, the recognition of consistencies and effects – juicy, homogeneous, fibrous, tender, crumbly and sticky, tart, spicy, burning and cold (Zhubantaieva & Papunidi, 2023: 168);
- gastronomic taste – the ability to perceive harmonies and disharmonies of cuisine, flavours and tastes, when taste sensations are complemented by aromas, and flavour (Perullo 2023: 249);
- aesthetic taste – the ability for critical judgement, understanding and emotional evaluation of life phenomena from the position of the beautiful, the ability to judge artistic values (Uysal Ürey 2023: 487).

**Smell** includes words that describe pleasant and unpleasant odours, e.g., fragrant, putrid, pungent, floral (rose, lavender, jasmine), fruity (citrusy (lemon, lime, orange), berry (strawberry, raspberry), tropical (mango, pineapple)), spicy (peppery, cinnamon, clove), herbal (minty, grassy, earthy), sweet (vanilla, bakery (bread, cookies), sugary) and rotten (spoiled, putrid). Such metaphorical expressions as fresh (like a spring meadow), musky (like old leather), zesty (like a burst of sunshine), sharp (like clean linen), sweet (like blooming flowers) and others can be used to express smell.

Historical scientist Diane Ackerman stated: “Smell is the mute sense, the one without words.” (Ackerman 1990: 17). According to Almagor, each person's subjective experience of smells has its own unique language, and there is an integral conflict between what an odour means to a person and what society expects of it. (Almagor 1990: 256). So, unlike a colour or sound, an odour originates from personal experience rather than being created collectively (Engen 1987: 498).

The significance of subjectivity presents a challenge in olfactory language research, as methodologies and theories borrowed from vision may not readily apply to smell. A key concern revolves around the notion of a veridical label, or a true descriptor, for objects in the olfactory domain. Unlike in vision, where objects often have clear, agreed-upon names, individuals often struggle to associate specific names with odours, despite vivid recollections. Experimenters typically expect participants to provide precise labels for odours, assumed to be the veridical ones, corresponding to common sources evoking similar olfactory sensations. However, discrepancies frequently arise between experimenters and participants regarding these labels, posing significant obstacles when endeavouring to construct a semantic theory of olfaction (Mantel 2021: 29).

Dubois and Rouby suggest a reevaluation of several aspects pertaining to smell. Firstly, they argue that a name may not always correspond to an objective entity in the world. Secondly, individuals may not consistently possess a lexicon of stored semantic representations necessary for accurately recalling labels. Lastly, they propose that an odour might not necessarily signify a cognitive representation of tangible objects, but rather a portrayal of volatile odorants present in the surrounding air, which may lack direct associations with specific entities. Hence, it becomes imperative to reassess the nature of the connection between olfactory representation and olfactory language, devoid of reliance on lexical theories developed from other sensory modalities (Rouby et al., 2002: 284).

Therefore, if not by their veridical names, how do individuals articulate odours? David explains that the predominant factors utilised include the source, intensity, linked memories, pleasantness, impact on the individual, and purpose, with particular emphasis on the source and impact (David 2002: 84). This collective encounter often materialises through consistent reactions to a specific odour, the adoption of a communal lexicon, or the shared interpretation of a descriptor (Baccino et al., 2010: 444).

Baccino et al. explored how individuals communicate subjective odour experiences to others. They had 36 participants describe odours to someone else, who

then attempted to identify the scent from a set of options. Recognition rates were only about 50%, despite detailed descriptions covering source, intensity, valence, and effect. Interestingly, more elaborate descriptions correlated with lower recognition rates, possibly due to unfit descriptions and perceptual misunderstandings from both parties involved (Baccino et al., 2010: 447).

In the realm of odour naming, Huisman and Majid found that odours with high-frequency, familiar, and edible attributes are more easily named (Huisman 2018: 580). In a separate study, Iatropoulos et al. revealed that commonplace odours are typically described using common, non-olfactory-specific terms – often vague or borrowed from other senses – rather than rare, olfactory-specific terms (Iatropoulos 2018: 41).

Evidence suggests that the olfactory system has limited connections with linguistic areas of the brain. Olofsson and Gottfried note that compared to other senses, the cortical processing of odour representations is restricted, resulting in vague formats that trigger nonspecific activation of semantic concepts and more naming errors for odours. However, when visual cues are introduced, feedback from the ventral visual stream to the olfactory regions improves the coding of odour objects, leading to enhanced naming abilities for odours (Olofsson 2015: 316).

Thus, when it comes to expressing sensory perceptions, we realise that language is limited. In some cases, it is very difficult or even impossible to translate sensory perception into words. Thus, the notion of “ineffability” is introduced. According to the Cambridge Dictionary adjective “ineffable” means “causing so much emotion, especially pleasure, that it cannot be described” (Cambridge Dictionary n.d.).

Ineffability is defined as “the difficulty or impossibility of putting certain experiences into words” by Levinson and Majid (Levinson & Majid 2014: 408). The idea of ineffability as put out by Levinson and Majid has to do with whether or not specific language material exists for a certain perceptual characteristic (Levinson & Majid 2014: 411).

Sebastian Gäb states that the term “ineffable” has two distinct meanings that must be distinguished: (a) weak ineffability or inexpressibility. From the perspective of a theory of meaning, something which is weakly inexpressible is inexpressible

because, in a given language L, there isn't a single expression that, following L's semantic norms, indicates what is to be stated. (b) A strong inability to express or communicate. According to the notion of meaningfulness, something is ineffable if it is highly ineffable since no sign could possibly convey the meaning needed to describe the ineffable. What is profoundly ineffable cannot be expressed as a result (Gäb 2020: 1829).

The perception of food is multimodal and multisensory. Determining the knowledge repositories that are activated when sensory descriptors are used could aid in defining the semantic representation of sensory language and improving our comprehension of how perception is conceptualised. It is also necessary to classify the word list based on some perceptual dimension, such as the sensory modality to which each word corresponds, in order to analyse the distinctions between the five senses. The previously noted fact that certain sensory phrases are highly multisensory makes this last step more difficult (Diederich 2015: 4). Thus, it means that they include more than just one sensory modality. For instance, how can be adjectives such as *roasted* and *fishy* classified? Do they belong to gustatory, olfactory, or both sensory modalities? In his work, Diederich mentions the word “crunchy”. Ronga for example treated it as an auditory sensory modality (Ronga 2016: 57). Bodo Winter in his turn assumes that it can also possess the characteristics of tactile, and perhaps gustatory sensory modalities (Winter 2019: 194).

### **1.3. Cooking shows as a genre**

Televised cooking shows have a history that dates back nearly to the advent of television; thus a lot of famous scholars such as H. Curnutt (2016), L.I. Shevchenko (2023), D.V. Dergach (2023), M.G. Onorati (2020), P. Giardullo (2023), and L.F. Brost (2000) devoted their studies to defining the peculiarities of this genre, tracing the development stages and exploring what helped them survive social and cultural changes and preserve their popularity. Culinary shows have become a popular genre in the entertainment industry, offering a unique blend of cooking demonstrations, culinary competitions, and food-related storytelling.

In modern linguistics, more and more attention is paid to the study of different types of discourse and methods of their analysis. This is due to the fact that language is dynamic, and therefore there are lexical and semantic changes in the system of each type of discourse. In addition, the range of definitions of “discourse” and “text” is too wide, it does not cover the specifics of each of the existing types of discourse and the peculiarities of their texts, because any discourse is a complex linguistic concept.

In our study, we will consider cooking shows, which are part of the glutton discourse, which is also can be called gastronomic discourse because human life is inevitably associated with the preparation and consumption of food. Linguists have begun to study glutton discourse relatively recently, although scientists have dealt with food issues long before.

I. O. Derzhavetskaya, researcher of gastronomic discourse, notes that today we lack terminological unity concerning the field related to food. Moreover, she claims that it is quite difficult to give the exact definition of glutton discourse (Державецька 2014: 69).

Within the current research of various discursive practices, the study of discourses that are directly related to the conceptual sphere of “Food” occupies an important place. Glutton discourse is one of the main types of communication, is one of the basic elements in everyday communication, and also has an individual and even status character. The process of gastronomic communication incorporates an extensive system of interconnected linguistic signs with a gastronomic focus.

I. O. Derzhavetskaya describes glutton discourse as “characterising cooking as an art that requires special scientific knowledge and skills, as well as an understanding of the details of cooking, evaluation of the taste of food and, of course, consumption” (Derzhavetska 2014: 69).

While domestic linguists introduced the concept of “glutton discourse” into scientific circulation, foreign linguist Steven Van Den Berge uses the term “gastronomic discourse” (Van Den Berghe 2010: 241), Linda Rossato suggests using the term “culinary discourse” (Rossato 2009: 31), and Mitchell Davis introduces the

term, which none of the scientists distinguishes as a separate type of discourse – “restaurant discourse” (Davis 2009: 153).

By *glutton* (gastronomic) discourse, we mean a special kind of verbal-social discourse, the purpose of which is to achieve a certain type of communication, namely *glutton* one. *Glutton* discourse includes textual structures associated with the nutritional process, which takes into account the participants, conditions, methods of communication, the environment in which the conversation takes place, the place and time of communication, goals and motives, as well as the genre and style of speech.

Olha Zaluzhna and Alina Roller stated that at the same time, the culinary discourse can interact and intersect with other numerous types of discourses (for example, entertainment or professional, media or advertising, literary or film discourse, etc.), forming a complex entity that, given its multifaceted nature, poses a number of challenges in the process her research (Zaluzhna & Roller 2023: 147).

The genre of cooking shows originated on American radio in the 20s and subsequently migrated to television in the early 40s. He has come a long way from programs that gave recipes that any viewer could cook at home. In addition to the genre, the angle of presentation also changed, and with it the approach to choosing dishes. While the goal of the original cooking shows had long been to introduce viewers to new cooking techniques, introduce new foods, and debunk the myths of standard home cooking methods, the emphasis later shifted, starting in the 1980s. Culinary shows have turned into entertainment.

In recent years culinary-related content has become increasingly popular due to its special symbolic meaning and semiotic power. According to Carole Counihan and Penny Van Esterik, food deals with all spheres of our lives. Every economy is built on food. It plays an important role in political tactics. Food denotes social distinctions, borders, ties, and tensions. Eating is a constantly changing embodiment of gender, family, and community interaction (Counihan 2018: 216).

As stated by Dmytro Dergach and Larysa Shevchenko, the media arena is overflowing with content related to intellectual, culinary, medical, travel, etc. shows, while talent shows are losing their functional relevance. Their practical and intuitive

qualities appeal to the dynamics of knowledge, talents, and abilities in a particular sphere of social life, which is realised in game-like, visually appealing, or commentary-worthy forms appropriate for the show's genre. This kind of research question is not addressed in contemporary linguistics, particularly when considering media genre theory and practice (Shevchenko & Dergach 2023: 35).

Today there are many variations of cooking shows in the world, ranging from the simplest, where the chef explains how and from what ingredients to cook dinner, and ending with competitions of non-professional cooks, where it is not so important the result and the recipe of cooking, but how the participants will get out of awkward situations, which the host has prepared for them. According to Lori F. Brost, there are three main types of culinary shows: Domestic Cooks; Professional Chefs; and Travelers (Brost 2000: 8).

British scientist Nicky Strange analysed television cooking shows in the UK and identified 4 categories:

1. **Cookery-Educative** – clearly, following the recipe, they demonstrate how to prepare food;
2. **Personality** – revolves around a famous chef;
3. **Tourism-Educative** – includes elements about travel and the country of origin of the dish, usually in the very place where the dish was invented and first prepared. Travel themes are an important part of the plot of this format;
4. **Raw-Educative** – demonstrates the full cooking process (describes the entire cooking path from processing raw ingredients to the finished dish) (Strange 1998: 301).

However, a more precise classification was identified by Cheri Ketchum, Communications Professor from the University of California. Her research is mainly based on an analysis of cooking programs on the Food Networks television channel. In her analysis, culinary programs are divided into 4 categories:

1. **Traditional domestic instructional cooking** – the chefs emphasised that they cook for family, for close friends, and not for clients, e.g., Martha Stewart's from Martha's Kitchen (Dean, 2002a, 2002b), Rachel Ray's 30 Minute Meals (Food

Network, 2002c), Emeril Lagasse's *Essence of Emeril* (K. Katz, 2002a), Sara Moulton's *Sara's Secrets* (Downward, 2002). Although this genre can seem quite monotonous and boring, these shows were anything but boring. The way the video is shot also gives the impression that the chefs are always moving. Specifically, close-ups of cutting, cooking, mixing, and other food processing scenes were captured on camera. In order to give the impression of constant activity, the camera was also frequently in motion. This gave viewers the impression that the show would be engaging and keep them glued to the screen the entire time (Ketchum 2005: 224).

2. **Personality-driven domestic cooking shows** – the main driving force is the personality of the presenter. Local cuisine of the country of origin of the program predominates, e.g., *Emeril Live* (K. Katz, 2002, 2002), *Molto Mario* (Batali, 2002), *Hot off the Grill with Bobby Flay* (Food Network, 2002), and *Wolfgang Puck* (Weller, Grossman, Lange, 2002). Since the hosts/chefs of this type of show are mostly men, the food is also different from one where the host/chef is a woman. Ketchum states that male chefs prepare special food for the masses, but this does not include everyday food, since traditionally women are in charge of preparing everyday meals, while men are allowed to cook only on special occasions (Ketchum 2005: 226).
3. **Food travel programs** – the moderator or moderators travel to different countries in search of unusual food or try to cook local cuisine himself, e.g., *FoodNation with Bobby Flay* (Food Network, 2002), *Gordon Elliot's Follow That Food* (Millbrook Media, 2002). This category includes shows that display food from distant countries, whose hosts, according to Ketchum, are actually the best salesman since they “sell” the visited country or restaurant to the viewers along with the food (Ketchum 2005: 227). Travel culinary shows are moving forward. It is no longer enough to create a funny atmosphere in the studio, the chefs have to go out. By visiting different parts of the world, they get to know different cultures through food. In this way, viewers can get useful information on where to eat when they come to a certain foreign country. This phenomenon

gives viewers the impression that the whole world is at their fingertips. Now they can really taste what their culinary idols talk about and what they themselves admire. The connection with the audience is very important.

4. **The avant-garde** – a new genre created by the channel. In this category, the author included discussions and other formats in which there are no clear boundaries between education, information and entertainment, e.g., Iron Chef (2002), Alton Brown's (2002) Good Eats, Jamie Oliver's Oliver's Twist (Fresh One Productions, 2002), and Anthony Bourdain's A Cook's Tour (Tenaglia, 2002, 2002). These shows were full of sexual connotations thus connecting with viewers with an adventurous spirit. But what sets this show apart from travel cooking shows is its way of interacting with the audience. Namely, as Ketchum claims, Bourdain didn't shy away from cursing in his show, he addressed his audience in an honest, uncensored way. He also addressed directly to the audience and flirted with the camera to establish an intimate relationship with the viewers. In order to appear as real as possible, Bourdain smoked, drank and was often censored for swearing on the show. In addition, the recording method contributed to bringing this show closer to the audience. The camera movements were sometimes shaky as if the camera was shaking. In this way, the audience felt as if they were really in every corner of the world that was shown, just like Anthony Bourdain. Ketchum believes that Jamie Oliver is also a presenter who brought a certain amount of sexuality to cooking. With his show "Oliver's Twist", the Food Network wanted to reach a younger audience. Oliver wanted to impress the audience with his hyperactive cooking, jumping around the kitchen and exaggerated enthusiasm for food. The cameras were placed in different angles. That is why viewers felt as if they were in Oliver's kitchen, which made them even more connected to him and the kitchen (Ketchum 2005: 229).

## Conclusions to Chapter 1

Summarising all the above, it should be noted that sensory perception serves as the foundation for the food product's experience, influencing its appeal, cognitive connotations, associated meanings, triggered actions, and potential emotional responses. We explored the concept of sensory modalities, the ways we perceive the world through our senses. We began by acknowledging the traditional five-sense model, where *sight* allows us to perceive colour, size, shape, and other visual aspects of food, influencing our initial impressions, *touch* is crucial for understanding food texture in the mouth, including smoothness, crispness, and creaminess, *taste* encompasses the basic flavours (sweet, sour, salty, bitter, umami) and the overall richness or intensity of those flavours, *smell* plays a significant role in flavour perception, with some odours being difficult to describe in words due to their subjective nature, and finally hearing enables us to perceive acoustic nuances of the cooking process and the process of food consuming.

But then delved into the limitations of the traditional five senses model. The concept of “ineffability” refers to the difficulty of putting certain sensations into words. For example, the specific texture of a perfectly cooked piece of fish might be challenging to describe precisely.

Researchers have proposed alternative frameworks for classifying senses, considering factors like the underlying neurophysiology, the type of energy involved, or the interaction between senses. The hierarchy of senses, with sight often ranked as dominant, has also been explored. However, other studies challenge the notion of five distinct senses altogether. The existence of pain perception as separate from touch, and the strong interplay between senses like taste and smell, complicate a clear-cut categorisation. The way food sounds (crunchy, sizzling) can influence our taste perception, and vice versa. This “multisensory” quality of food experience makes categorising sensory vocabulary even more complicated.

In this work, we also explore the genre of cooking shows, that has become increasingly popular in recent years.

Cooking shows have a long history, dating back to the early days of television. There are many different variations of cooking shows, from instructional programs to competitions between amateur chefs.

Scholars have proposed various classifications for these shows. Some possible categories include:

- Instructional shows focus on teaching viewers how to cook specific dishes.
- Personality-driven shows centre around the charismatic host and their cooking style.
- Food travel shows combine travel and cuisine, showcasing the foods of different cultures.
- Avant-garde shows explore food in creative and unconventional ways.

The popularity of cooking shows reflects our growing interest in food and its cultural significance. These shows entertain us, educate us, and allow us to learn about different cultures through the prism of food.

## 2. SENSORY MODALITIES in CULINARY EXPERIENCES

### 2.1. Visual Modality

Visual perception is fundamental to human experience, enabling us to navigate hazards, recognise food, and communicate socially. Yet, its importance is frequently overlooked, particularly in terms of our ability to articulate and interpret visual stimuli. We aim to elucidate the often-underestimated significance of the visual modality in human experience. By delving into the ways we perceive, understand, and express visual information, we uncover the profound impact of sight on our daily experiences and interactions.

While the culinary world is often celebrated for its flavours and aromas, we aim to shine a spotlight on the visual language employed in these gastronomic spectacles. From the vibrant hues of fresh ingredients to the intricate plating techniques, we uncover how visual cues play a pivotal role in evoking sensory experiences and engaging viewers. Through an analysis of the popular documentary cooking series “SALT FAT ACID HEAT” and “Hell’s Kitchen”, we dissect the lexicon of visual modality utilised by chefs and hosts to convey taste, texture, and culinary prowess. Moreover, we examine how the visual presentation of dishes influences audience perception and culinary trends. By immersing ourselves in the visual feast of culinary shows, we gain a deeper appreciation for the nuanced interplay between sight and taste, and the artistry of culinary storytelling.

Samin Nosrat, a chef and food writer, explores four fundamental principles of amazing cooking through global trips, sharing recipes and practical advice along the way. The show “SALT FAT ACID HEAT” isn't just about the building blocks of flavour, it's about the full sensory experience of food. Each episode delves into how these elements stimulate our senses in unique ways.

In the first episode, Samin explores the world of fat and its various roles in cooking. From adding richness and mouthfeel to carrying flavour molecules, fat plays a crucial part in creating delicious dishes. Glistening olive oil, golden brown focaccia with air pockets revealed when broken. *“How light, how beautiful. Crunchy on the bottom and soft inside”* (SALT FAT ACID HEAT, Ep. 1), vibrant green artichokes

nestled against creamy white pecorino “*The artichokes are beautiful... all of the fresh pecorino. How nice*” (SALT FAT ACID HEAT, Ep. 1), perfectly formed red currants glistening with raindrops – the show uses close-up shots to highlight the visual appeal of food.

The second episode dives into the importance of salt in enhancing “*the natural flavor of ingredients*” (SALT FAT ACID HEAT, Ep. 2). We learn how to properly season food with salt to unlock its full potential, for example, “*We use stronger salts for strong-flavored ingredients like meat. But for food with a milder flavor, like vegetables, I would use a mild salt.*” “*When you perfectly season something it zings in your mouth*” (SALT FAT ACID HEAT, Ep. 2).

The next episode examines the role of acidity in bringing balance and brightness to food. It revealed how different sources of acid, like citrus fruits and vinegar, can elevate a dish. “*When used as a cooking medium, acidic ingredients mellow, becoming subtle but essential flavors in a dish, while acting as a counterpoint to salty, fatty, sweet and starchy foods*” (SALT FAT ACID HEAT, Ep. 3).

The last episode explores the transformative power of heat in cooking. From unlocking new flavors through browning to tenderising meats, heat is a powerful tool for creating exciting dishes. We see the visual transformation of ingredients as they cook. Raw tuna turns into seared tuna, glistening with a beautiful sear, “*The browning is just so perfect and so even on the whole thing*” (SALT FAT ACID HEAT, Ep. 4). Cheese melts, vegetables caramelize – these visual cues become associated with the development of flavour.

Another genre of cooking shows that was explored is one of the Avant-garde cooking shows – Hell’s Kitchen. Hell's Kitchen is a long-running reality TV show that features aspiring chefs competing for a job as head chef at a prestigious restaurant. The show is known for its high-pressure environment and the fiery personality of host Gordon Ramsay.

Two teams of chefs compete throughout the season. Chefs participate in various culinary challenges to test their skills and teamwork. Teams prepare and serve a multi-course meal to real customers in the restaurant. Based on performance, one or more

chefs are eliminated from the competition in each episode. The show is known for its intensity and the pressure that Ramsay puts on the chefs. He's known for his use of strong language and for critiquing dishes in a very critical way, *“Hey by the way in England we have a saying “when it's brown is cooked when it's black it's [ \_\_ ] disgusting” and you bring me that”* (Hell's Kitchen, S. 15, Ep. 1). *“It's cold and raw I I'm done I'm [ \_\_ ] done I am done! Get out get out I told you I would put up another service* (Hell's Kitchen, S. 15, Ep. 3). *“I'm pissed! You guys have proven that you're terrible* (Hell's Kitchen, S. 15, Ep. 5). Our main focus will be Hell's Kitchen Season 15 with Gordon Ramsay that was premiered in January 2016.

Having analysed 337 units of sensory modalities vocabulary taken from the previously mentioned episodes of the show “SALT FAT ACID HEAT” (see Appendix 1) and “Hell's Kitchen” (see Appendix 2) we discovered that visual modality makes up the second biggest cluster of sensory modalities vocabulary in the “Hell's Kitchen” and the third in the show “SALT FAT ACID HEAT” (see Appendices 3, 4). Moreover, it can be divided into 3 main groups which are classified by, appearance, cooking process and presentation.

Considering appearance, we defined the following groups of words which belong to visual modality vocabulary:

- Colour: words describing colour can be very specific (golden brown, ruby red) or more general (light, dark, vibrant, sparkling).

*“It's almost transparent”* (about dough) (SALT FAT ACID HEAT, Ep. 1).

*“...just the center of the yolk is shiny”* (SALT FAT ACID HEAT, Ep. 2).

*“When looking for a steak at a grocery store, look for the speckled marbling”* (SALT FAT ACID HEAT, Ep. 4).

*“I'm going to take a risk and go for the black rice, even though I know it's a long cooking time, pairs really well with salmon I feel like I can make it work”* (Hell's Kitchen, S. 15, Ep. 6).

- Shape: vocabulary can describe the overall shape (round, rectangular, square) or specific details (feathery asparagus tips, spiral pasta).

*“So, it was all about perfectly cutting everything into little squares”* (SALT FAT ACID HEAT, Ep. 1).

*“Salt crystals will quickly form as pretty squares”* (SALT FAT ACID HEAT, Ep. 2).

When evaluating the *“pierogi with a pleat”* of one of the participants Gordon Ramsay describes it as *“beautifully pleated”* (Hell’s Kitchen, S. 15, Ep. 1).

- Size: words like large, small, bite-sized, too big, a little spoonful, etc are used to measure the object.

*“I might add a little spoonful of the bean juice”* (SALT FAT ACID HEAT, Ep. 4).

- Texture: visual terms can describe how food appears textural (smooth, glistening, flaky, airy).

*[Samin] How do you know you've worked it long enough?*

*[Diego] When there are no bumps. It's completely smooth* (SALT FAT ACID HEAT, Ep. 1).

*“Danny presenting a crab cake topped with poached eggs get a little bit overcooked, so you want that poached egg really nice and runny”* (Hell’s Kitchen, S. 15, Ep. 10).

- Arrangement: this describes how food is positioned on a plate (plated, swirled, dolloped).

*“A dollop of sour cream will lend silky richness to a baked potato”.*

*“Wow!*

*Wow, wow, wow, wow, wow, wow.*

*It's like a ballet”* (SALT FAT ACID HEAT, Ep. 1).

When we analysed visual modality vocabulary used to describe the cooking process, we found out that the following two categories can be defined:

- Transformation: words that describe the visual change food undergoes while cooking (caramelised, seared, roasted, charred).

*“So I think I'm gonna make a big salad with roasted vegetables and beans”* (SALT FAT ACID HEAT, Ep. 4).

*“Make sure the bottom of that pan isn't scorched”* (Hell's Kitchen, S. 15, Ep. 11).

*“So all we're doing is glazing them they're they're all right now they're going to be mushy”* (Hell's Kitchen, S. 15, Ep. 11).

- Doneness: visual cues can indicate doneness (raw, golden-brown crust, the outside will shrivel or break or tear).

*“The skin of the chicken will rip; the outside will get burnt and overly dry before the inside can even cook.”*

*“...raw tuna and seared.”*

*“Heat takes food from raw to cooked. .... Pale to golden brown”.*

*“When they're creamy all the way through, that's how you know they're done. Oh, beautiful”* (SALT FAT ACID HEAT, Ep. 4).

*“Come here! You taste that. It's bland. The rice is still undercooked. Disgusting”* (Hell's Kitchen, S. 15, Ep. 1).

When the chicken is described as *“pink”* it usually implies that the meat is raw (Hell's Kitchen, S. 15, Ep. 7).

Presentation is also an important part of culinary discourse. It can be referred to as a part of “appearance”, but it is necessary to mention that presentation is not only about the final result but rather about the process. Although Samin Nosrat didn't pay much attention to it because she was mainly focused on flavours and taste combination, we defined the following groups of visual modality vocabulary used to describe the presentation of the dish:

- Plating: this describes how food is arranged on a plate (simple, elegant, rustic).  
*“A few drops of toasted sesame oil can transform a plain bowl of rice”* (SALT FAT ACID HEAT, Ep. 1).

Gordon Ramsay, in his turn, expects the participants *“in 45 minutes to create a stunning dish”* (Hell's Kitchen, S. 15, Ep. 1).

*“The presentation is dreadful, it's tasty but it looks terrible. Um, two out of five”* (Hell's Kitchen, S. 15, Ep. 1).

- Garnishes: words can describe the visual elements added to a dish (sprinkled herbs, drizzled sauce, edible flowers).

*“We take the oil...and spread it out”.*

*“Staying in that Middle Eastern region, we can crumble a little creamy feta cheese on top”* (SALT FAT ACID HEAT, Ep. 4).

*“There's a reason why I don't put fresh crisp salad on a hot pizza. Honestly, it looks terrible, the Dough's uneven”* (Hell's Kitchen, S. 15, Ep. 1).

Visual information plays a significant role in shaping our culinary experiences. Among visual modality vocabulary we can define the words with positive, neutral and negative connotations which influence our food perception.

Positive connotations evoke pleasant feelings or ideas. For example, when the word *“beautiful”* is applied to food, it suggests a presentation that's not just appetising but aesthetically pleasing. *“Brightness”* is often associated with freshness and life. Brightly coloured vegetables and fruits tend to signal their peak ripeness when their flavour and nutrients are at their best.

Negative connotations evoke unpleasant feelings or ideas. Although the adjective *“pale”* is often considered to be neutral, in the glutton discourse it frequently has a negative connotation, e.g., *“pale pink chicken”* which is potentially undercooked.

Neutral connotations don't have strong emotional associations. For example, the word *“dense”* describes the compactness of food. Depending on the context, it can be positive (a really dense and meaty sauce) or negative (a dense dry piece of bread).

*Ripe* and *spoiled* are two contrasting terms used to describe the visual appearance of food in relation to its freshness. They can influence our perception in different ways.

Visual cues of ripeness include vibrant colours (red for tomatoes, yellow for bananas), smooth and unblemished surfaces, and signs of growth or fullness (plump grapes). Ripe food is visually associated with freshness, quality, and optimal flavour. The colours signal the presence of beneficial nutrients like carotenoids and anthocyanins.

Spoiled food is, on the other side, characterised by discolouration (browning on bananas, mold spots on bread), loss of vibrancy (dull or faded colours), leakage of

fluids, and wrinkling or shrivelling of skin. Spoiled food is visually unappealing and signals potential spoilage or the presence of harmful microorganisms. Our brains are wired to avoid spoiled food to prevent illness.

Our visual system is attuned to recognise these visual cues because of their evolutionary significance. Choosing ripe food maximises nutrient intake and avoids potential toxins associated with spoilage.

Sight interacts with other senses like smell and touch to create a complete picture of freshness. The musty odour of spoiled fruit or the slimy texture of rotten vegetables further confirms spoilage beyond just visual cues.

Visual cues like ripeness and spoilage play a significant role in our food choices. They influence our perception of freshness, safety, and ultimately, our enjoyment of the food.

## **2.2. Gustatory Modality**

While the visual presentation of food can certainly tempt us, it's the taste that truly satisfies us. Our sense of taste, also called gustatory perception, is a fascinating and vital part of being human. It plays a crucial role in our relationship with food, influencing everything from safety to pure enjoyment.

Taste receptors on the tongue identify bitter flavours, which can be a warning sign of potentially harmful or poisonous substances. This aversion to bitter tastes helps us avoid ingesting toxins.

But taste is about more than just keeping us safe. It can also subtly guide us towards healthy choices. Sweetness often indicates the presence of energy-rich sugars, while a salty taste might signal essential minerals our bodies need. Over time, these taste preferences can nudge us towards a more balanced diet.

Taste buds are equipped to detect five basic taste qualities: sweet, salty, sour, bitter, and umami (savoury). The interaction of these receptors allows for the identification of a vast array of flavour profiles in food. It should be mentioned that gustatory modality makes up the largest group of sensory vocabulary units (about 40%) in the culinary discourse (see Appendices 3, 4).

The documentary culinary show “SALT FAT ACID HEAT” takes viewers on a journey to explore the fundamental elements that make food taste incredible. Narrator Samin Nosrat focuses on four key ingredients: salt, fat, acid, and heat.

Salt is a flavour enhancer, and the documentary uses words to convey the different levels of intensity it brings to food. From the “*very salty*” *seaweed salt* to the “*mild*” *artisanal varieties*, viewers get a clear picture of how salt impacts taste. “*When you perfectly season something it zings in your mouth*” (SALT FAT ACID HEAT, Ep. 2).

Although fat, as another key player, contributes mainly to the texture of the dish and we will discuss it within the field of tactile modalities, its flavour profile is also explored, with terms like “*buttery*”, “*rich*”, and “*meaty*” highlighting its contribution to deliciousness. Fat creates a luxurious mouthfeel: “*Fatty and acidic. You know, this is, like, true decadence*” (SALT FAT ACID HEAT, Ep. 4).

Acidity adds *a zing to food*, and the series uses words like “*tart*”, “*tangy*”, and “*pucker*” to describe this taste sensation. It’s interesting to note that acid is often used as a *counterpoint*, “*taming*” other flavours and creating a “*perfectly balanced*” profile. “*The buttermilk provides both fat and acid that really tenderizes the meat*” (SALT FAT ACID HEAT, Ep. 4).

Heat is a transformative element in cooking. The show uses terms like “*browning*”, “*caramelization*”, and “*crispy*” to describe the physical changes heat creates in food, which was explored within the visual modality vocabulary cluster. But heat also brings out complex flavours, with words like “*deep in flavor*”, “*savory*”, and “*rich*” used to describe this effect. Moreover, heat unlocks new taste sensations “*High heat reorganizes aromatic compounds in our food and produces deep, savory flavors that don’t exist in the pale versions*” (SALT FAT ACID HEAT, Ep. 4).

The joy of food comes alive through close-up shots of people tasting dishes. Facial expressions and descriptive language convey the complex interplay of sweet, salty, sour, bitter, and umami on the tongue. When Samin tastes the perfectly seasoned focaccia, she exclaims, “*Wow! Delicious.*” Describing perfectly cooked miso, the narrator says, “*Oh my gosh, so full in my mouth!*” (SALT FAT ACID HEAT, Ep. 2).

Taking into consideration an SNQHU model that was first introduced by Carl Pfaffmann in 1941 (Pfaffmann 1941: 249) and later developed by James Fulton (Fulton 2020: 7) we found the following examples of gustatory modality vocabulary, that can complement the **theory of 5 basic taste qualities**:

- Sweetness: sweet, honeyed, sugary, candied, malty, crazy marshmallowness, etc.

*“You need to put all of these different tropical fruits that are full of beautiful acidity to balance that crazy marshmallowness”* (SALT FAT ACID HEAT, Ep. 3).

- Saltiness: briny (like seawater), salty, inedibly salty, etc.

*“Let's start with the brine typical of the salty flavor that goes into the focaccia's holes”* (SALT FAT ACID HEAT, Ep. 1).

- Bitterness: bitter, earthy, astringent (drying, puckering), chocolaty, a nice bitterness

*“There's a little bit of bitter, but a nice bitterness”* (SALT FAT ACID HEAT, Ep. 1).

- Sourness: tart, tangy, acidic, citrusy, sharp, etc.

*“high acidic juice”*

*“It's like, hint of tanginess, and it's so moist”* (SALT FAT ACID HEAT, Ep. 3).

- Umami: savoury, brothy, meaty, cheesy, nutty, starchy, etc.

*“...which is a really dense and meaty sauce”* (SALT FAT ACID HEAT, Ep. 1).

*“..even though it looks like a hearty dish it's not really heavy”* (Hell's Kitchen, S. 15, Ep. 5).

Apart from 5 basic taste qualities, we can also define **the nuances of flavour**:

- Richness: Creamy, buttery, decadent, luxurious, velvety, piquant

*“You know, this is, like, salty, fatty, acidic. That's, like, true decadence. Oh, my God. Amazing”* (SALT FAT ACID HEAT, Ep. 4).

- Intensity: Zesty, bold, mild, mellow, subtle. Words like *“inedibly salty”* *“very salty,”* *“mild,”* and *“least salty”* describe the strength of the salty taste. Similar to salt, terms like *“tart,”* *“tangy,”* and *“pucker”* describe the strength of the

sour or acidic taste. Acid can add a refreshing “*brightness*” to a dish, alongside its sour or tart taste.

*“When used as a cooking medium, acidic ingredients mellow, becoming subtle but essential flavors in a dish”* (SALT FAT ACID HEAT, Ep. 3).

*“I think of tasting vibrant Mexican dishes like delicious enchiladas chalupas and tacos,”* although “*vibrant*” is often used to describe the appearance of an object, in this case, it’s used for the taste (Hell’s Kitchen, S. 15, Ep. 5).

- Complexity: perfectly balanced, harmonious, layered, surprising, intriguing, a delicious combo. Words like “*deep,*” “*savory,*” and “*complex*” describe the way heat can bring out other flavours in food.

*“The soy has a good umami and complexity of flavor”* (SALT FAT ACID HEAT, Ep. 2).

- Associative taste is how your brain connects different flavours and sensations together. These connections can be based on your past experiences or even what you expect a food to taste like based on its smell or appearance:

Salt isn't just salty! “*Minerally*” describes a taste that reminds you of rocks or minerals “*It tastes very minerally, Like I can taste rocks almost*” (SALT FAT ACID HEAT, Ep. 1).

Gordon Ramsay described wax bean puree as “*greasy*” and “*bland,*” (Hell’s Kitchen, S. 15, Ep. 1) comparing it with the taste and texture of grease.

Samin compares the taste of iodized salt with the taste of the metal. “*In general, I discourage folks from buying iodized salt because it makes your food taste metallic*” (SALT FAT ACID HEAT, Ep. 1).

When the cook was “*trying to peel the cheese off the bottom of the pot*” Samin was really impressed by the swirling cheese in the sour liquid. “*Wow, wow, wow, wow, wow, wow. It's like a ballet*” (SALT FAT ACID HEAT, Ep. 1).

There were also other examples of associative tastes,

e.g., “*It reminds me of smoked salmon. It's very... delicate.*”

*“This one has a more fishy, deep taste, closer to bacon or something...”*

*“It tastes like sauerkraut”* (SALT FAT ACID HEAT, Ep. 3).

*“Tasty. Yeah, very salty. It smells like an ocean”* (SALT FAT ACID HEAT, Ep. 1).

Furthermore, by describing the soy sauce with the *“hand-made quality”* the consumer might expect a more complex and nuanced taste compared to a mass-produced variety.

- Overall Pleasantness: words like *“delicious,” “flavorful,” “good,”* and *“tasty”* describe how much we enjoy the overall taste of a dish. These words can be used for any kind of food, regardless of the specific taste profile or texture.

Connotations are the emotional associations that a word carries beyond its literal meaning. Words used to describe taste can have positive, negative, or neutral connotations. These associations can be based on:

Cultural experiences: Certain flavours or textures might be linked to positive memories or traditions, making the descriptive words carry a positive connotation, e.g., *“tangy”* and *“zesty”* food reminded Samin Nosrat her childhood in Iran, where her mother always used *“the flavors of lime, pomegranate, and yoghurt”* to complement the dish (SALT FAT ACID HEAT, Ep. 3).

Physiological responses: Some basic tastes, like *“sweetness”*, are generally considered pleasant, while *“bitterness”* might be seen as negative due to its association with potential toxins in nature. Thus, describing the taste of dark chocolate Samin Nosrat had to clarify that bitterness is not always unpleasant, *“There's a little bit of bitter, but a nice bitterness”* (SALT FAT ACID HEAT, Ep. 1).

The way a flavour interacts with other senses, like smell and texture, can influence its overall perception. For example, the word *“crispy”* might have a positive connotation because the sound and texture create an enjoyable experience. When we consider the phrase *“just got shrimp juice in my mouth”* we can assume that it implies not only the particular taste of shrimp but also a specific smell that is not always perceived as positive (Hell’s Kitchen, S. 15, Ep. 1).

### 2.3. Olfactory Modality

Taste interacts with other senses, particularly smell, to influence appetite. The olfactory system can trigger cravings based on enticing aromas, while the taste of food itself can signal satiety or a lack of necessary nutrients.

There are odours everywhere: at our favourite park, the freshly cut grass, our partner's perfume, the bakery we walk past on our way to work every morning or even the smell of the milk we forgot in the refrigerator. Nevertheless, scent was historically regarded by Western nations as an inferior sense that gradually vanished as vision took its position as our primary sense during development. Olfaction was frequently unfavourably linked to sexuality and dirtiness, making it unworthy of a civilised, enlightened man. It was seen as a remnant of our “animal” past (Muchembled 2017: 126). An odourless society became the ideal to strive for with the rise of hygienics in the early 20th century.

12% of sensory modalities vocabulary in the show “SALT FAT ACID HEAT” and 18% in the “Hell’s Kitchen” describe an olfactory component (see Appendices 3, 4).

The shows emphasise the enticing aromas that waft from cooking food. Freshly chopped herbs like oregano and thyme “*Or any other aromatic herb you add. That's beautiful. That's beautiful*”, sizzling garlic, and fragrant spices like seven-spice powder “*It's wonderful*” all play a role in building anticipation for the taste (SALT FAT ACID HEAT, Ep. 1).

Certain smells can evoke powerful memories. The episode on acid explores how the aroma of sour oranges “*They are floral like oranges but tart like lemons*” can transport you back to childhood, especially for Samin Nosrat it was very nostalgic because she is from Iran and they “*add yoghurt to all of the dishes*”. “*This smell of the crispy rise, this like popping, pop pop pop crispy rise, is to me like my childhood, because we have this crispy rise in Iran too*” (SALT FAT ACID HEAT, Ep. 3).

Our sense of smell is a powerful part of the flavour experience. Having analysed olfactory modalities vocabulary in the documentary-cooking show “SALT FAT ACID HEAT” we suggest the following classification for the smell-related vocabulary:

- Basic Smells: Sweet, salty, sour, bitter, savoury, aromatic  
*“That goes for sage, too... Or any other aromatic herb you add”* (SALT FAT ACID HEAT, Ep. 1).  
*“What I have for you is a pan-seared halibut with the sweet Curry [Music] Broth, you know it's sweet and spicy but aromatic. Ashley, that's a five for five”* (Hell’s Kitchen, S. 15, Ep. 6).
- Food-Specific Smells: Buttery, meaty, smoky, floral, fruity, herbal, saffrony  
*“To me, I smell like caramel and maple. It just smells so rich,”* – referring to soy sauce (SALT FAT ACID HEAT, Ep. 2).  
*“The smoky flavor makes it so yummy”* (SALT FAT ACID HEAT, Ep. 2).
- Intensity: Fragrant, strong, faint  
*“The saffron is so fragrant”* (SALT FAT ACID HEAT, Ep. 4).
- Pleasantness: Pleasant, unpleasant  
*“It’s a very pleasant smell... they are floral like oranges but tart like lemons,”*  
 – about sour oranges (SALT FAT ACID HEAT, Ep. 2).

The smell of food can make it taste more delicious *“...lemon zest, and you get this beautiful citrusy aroma...”*. With some smells, we can have different associations based on our experience *“It smells like an ocean”*. Sometimes we may encounter very unusual comparisons like *“Red cow Parmesan”* with a *“cow smell”*, which was surprisingly used for a description of a pleasant cheesy smell.

Exploring how different scents and aromas can affect our taste perception, it is important to mention that the olfactory experiences can be positive, neutral, or even negative.

### **Positive Connotation**

- Appetising smells make food seem more desirable and delicious. Examples from the show include *“buttery,” “sweet,” “fruity,” “fragrant,” “floral,”* and *“savory”*.
- Pleasant aromas are generally enjoyable smells that can be independent of food. An example might be the *“beautiful sage”* from Samin’s garden.

### **Neutral Connotation**

- Food-specific smells can be characterised as the inherent smells of different foods, without implying whether they are pleasant or unpleasant. Examples include “*meaty,*” “*smoky,*” “*herbal,*” and “*citrusy.*”
- Intensity describes the strength of a smell, such as “*strong,*” “*faint,*” or “*subtle.*”

### **Negative Connotation**

Unpleasant aromas are smells that are generally considered undesirable. The show specifically mentions that iodized salt can make food taste “*metallic*”, implying an unpleasant smell. For example, “*durian fruit smells like hot garbage*” (Hell’s Kitchen, S. 15, Ep. 12).

But we have to remember that our sense of smell is subjective. What one person finds pleasant, another might find unpleasant. Sometimes our linguistic means to describe the smell can differ, as with the example of “*cow smell*”.

### **2.4. Tactile Modality**

The sense of touch is intricately involved in food perception, offering diverse sensations. Individuals perceive the weight and size of food in their mouths, feel its texture while chewing, sense its temperature, and may encounter sensations like tickling or heat. These tactile experiences are transmitted to the brain via the trigeminal nerves, which traverse the jaw, tongue, teeth, and oral cavity. Together, these varied touch sensations play a crucial role in shaping how food is perceived.

The way food feels in your hands and mouth is a crucial part of the experience. We see chefs feeling the dough for doneness “*Lidia feels the dough. See how soft it is? Beautiful*” and hear descriptions of crispy exteriors and creamy centres “*It's crispy on the bottom and soft inside. And soft inside,*” (SALT FAT ACID HEAT, Ep. 2) and witness the satisfaction of breaking bread “*So you can crumble a little creamy feta cheese on top*” (SALT FAT ACID HEAT, Ep. 4). When commenting on one of the participants’ dish, Gordon Ramsay criticises the texture of the dough, “*There's a reason why I don't put fresh crisp salad on a hot pizza. Honestly, it looks terrible, the Dough's uneven*” (Hell’s Kitchen, S. 15, Ep. 1).

High heat can create a “*crispy*” texture on food, like the crust on bread or roasted vegetables. Fat was described as a key factor in creating a range of textures. Words like “*flaky*,” “*crispy*,” and “*tender*” paint a picture of how fat contributes to the mouthfeel of food.

Mouthfeel encompasses the tactile sensations experienced in the mouth while consuming foods and beverages, playing a vital role in the overall acceptability of many edible products. These sensations, collectively known as “chem-esthetic” sensations, include perceptions of heat, burning, cooling, tingling, and numbing. They arise from chemical interactions with receptors associated with nerve fibres responsible for conveying pain and mechanotransduction signals (Simons et. al., 2019: 281).

In the oral cavity, each of these chem-esthetic sensations is transduced through the activation of various molecular channels and receptors expressed on trigeminal nerve fibres that innervate the mouth and tongue. Among these molecular components are transient receptor potential channels, proton-sensitive ion channels, potassium channels, and others (Simons et. al., 2019: 282).

Having analysed the lexical units that belong to the sensory vocabulary cluster from the documentary-culinary show “Fat, salt, acid, heat” and the avant-garde TV show “Hell’s Kitchen”, we found out that they make up 24% and 18% respectively, and there are three main categories:

**Texture** encompasses words that describe the physical structure and feel of food in the mouth and on the hands e.g., *soft* (yields easily to pressure in your mouth or hands), *tender* (easy to bite or chew), *crispy* (has a brittle and crunchy texture that makes a snapping sound when bitten), *flaky* (comes apart in thin layers), *creamy* (smooth, rich, and thick), *smooth* (has a uniform and even surface with no bumps), *bumpy* (has small, irregular raised areas), *chewy* (requires sustained effort to chew), *dense* (heavy and compact), *pliable* (bends easily without breaking), *light* (not heavy or dense), *airy* (has pockets of air that make it feel light and fluffy), *silky* (very smooth and soft, like silk fabric), *slippery* (has a surface that is difficult to grip), *firm* (solid and not easily compressed), *crumbly* (breaks easily into small pieces), *mushy* (very soft and lacking in structure).

*“You didn't cook the squid enough it's still raw it's very chewy”* (Hell's Kitchen, S. 15, Ep. 7).

*“There a way to rehydrate seaweed anybody knows how to rehydrate seaweed so it's pliable”* (Hell's Kitchen, S. 15, Ep. 9).

**Temperature** includes words that describe the thermal properties of food, e.g., *hot* (very warm to the touch), *warm* (slightly warm to the touch), *cool* (slightly below room temperature), *room temperature* (neither hot nor cold), *cold* (low temperature).

*“It's a warm lobster salad with corn and couscous”* (Hell's Kitchen, S. 15, Ep. 8).

**Moisture** describes the wetness or dryness of food, e.g., *moist* (slightly wet), *juicy* (full of liquid), *wet* (covered or soaked in liquid), *dry* (not wet or moist), and *soggy* (very wet and limp).

*“...shrimp tempura with leak puree”* (Hell's Kitchen, S. 15, Ep. 7).

Before moving to another category of tactile modalities, it is necessary to define such a phenomenon as onomasiology. The term "onomasiological structure" was introduced into scientific circulation by the Czech linguist M. Dokulil in 1962, who considered it as a combination of two components – onomasiological feature (motivator, creative basis) and onomasiological basis (word-forming formant) (Dokulil 1962: 54).

Thus, the onomasiological approach is a theoretical framework that highlights the cognitive-semantic aspect of language and underscores the importance of real-world concepts in the naming process (Fernández-Domínguez 2019: 1).

We defined that according to the onomasiological approach 2 categories of words among the explored tactile modality vocabulary from the documentary-cooking show “SALT FAT ACID HEAT” can be found:

Derives from **an object** which is associated with a certain quality:

*Mushy* (from “mush”) – this describes a lack of structure and firmness. Mushy food offers minimal resistance when bitten, easily disintegrating in the mouth. *“This is still so soft and tender, but it has a little bit of resistance. It's not just mushy”* (SALT FAT ACID HEAT, Ep. 4).

*Creamy* (from “cream”) – this term suggests a smooth and luxurious texture. Creamy foods often have a high moisture content and a coating effect on the mouthfeel. “*When they're creamy all the way through, that's how you know they're done*” (SALT FAT ACID HEAT, Ep. 4).

*Juicy* (from “juice”) – this describes something that has a lot of liquid inside it, like a juicy orange or a juicy steak and that has a lot of flavours and is enjoyable to eat. “*Gentle heat uses time and liquid to transform dry, tough ingredients into tender, juicy ones*” (SALT FAT ACID HEAT, Ep. 4).

*Silky* (from “silk”) – this describes something that feels smooth and luxurious, like silk fabric. “*A dollop of sour cream will lend silky richness to a baked potato*” (SALT FAT ACID HEAT, Ep. 1).

*Flaky* (from “flake”) – it is something that easily separates into thin pieces, like a flaky croissant or flaky pastry dough.

*Marshmallowness* (from “marshmallow”) – this describes very soft and fluffy texture of something.

Derives from **an action** which is associated with a certain quality:

*Slippery* (from “to slip”) – means that the food has a surface that feels smooth and wet, making it difficult to grip or hold onto. “*It's so slippery*” (about fish).

*Super chewy* (from “to chew”) – this describes a food that requires a significant chewing effort. It suggests a high degree of elasticity, meaning the food springs back after being bitten.

*Crumbly* (from “to crumble”) – describes something that is easily broken into small pieces, e.g., cookies, cheese or cornbread.

*Crunchy* (from “to crunch”) – describes food that is firm and makes a satisfying noise when you bite into it. It often crumbles or breaks apart easily. “*Crunchy on the bottom and soft inside.*”

*Melt-in-your-mouth* – a phrase used to describe food that is exceptionally tender, smooth, or creamy, dissolving or breaking down effortlessly when eaten. This sensory experience is typically associated with an immediate and enjoyable sensation of the food dissolving or disintegrating in the mouth, requiring little to no chewing.

It is important to mention that Samin Nosrat often compared the texture with some object the feeling of which is known to everyone.

The phrase “*falling off the bone*” (used to describe meat) emphasises the ease of separating the meat from the bone. It suggests very little connective tissue resistance, resulting in meat that practically melts in your mouth. In this case, the positive connotation is implied.

“*It feels like the inside of my cheek*” has a negative connotation when used to describe meat. Generally, cooked meat should have a satisfying bite or chewiness. This comparison suggests it doesn't meet that expectation. The inside of the cheek is a familiar but not particularly appetising texture for meat. This comparison emphasises the undesirability of the mushiness.

The phrase “*a lump on your mouth*” describes an uneven or bumpy food texture. It's not necessarily pleasant when used for some foods, especially those expected to be smooth.

As usual, we have to take into account that a big part of sensory modalities are subjective. We mostly consider “*crunchiness*” as a positive characteristic, but not in the following case: “*With her almond and brown butter sauce beats a touch crunching that's the only defect on that dish that's a solid four. Good job! Really good!*” Gordon Ramsay criticises the tough crunchiness of the dish (Hell's Kitchen, S. 15, Ep. 6).

## **2.5. Auditory Modality**

The auditory aspect of culinary experiences encompasses a rich array of sensations that significantly contribute to the overall dining experience. From the sizzle of food cooking on a hot grill to the satisfying crunch of a crispy crust, sounds play a crucial role in shaping our perceptions of food. Chefs meticulously orchestrate auditory cues in their culinary creations, understanding that the sounds accompanying food preparation and consumption can evoke emotions, enhance anticipation, and even influence taste perception.

The sizzle of a steak hitting the pan “*And when you hear the sizzle, you can add it all,*” (SALT FAT ACID HEAT, Ep. 1) the rhythmic chopping of vegetables, the

satisfying crackle of roasting Brussels sprouts “*That's how you get that crisp bottom edge... that's when you get steamed brussels sprouts*” (SALT FAT ACID HEAT, Ep. 4) – these sounds become associated with the cooking process and build anticipation for the final dish.

The auditory modalities, that have been analysed, make up the smallest group of sensory modalities (see Appendices 3, 4) and can be divided into two categories:

- **Associated with food preparation**, e.g., *sizzling* (describes the sound of hot oil or fat hitting a pan), *crackling* (describes a sharper sound than sizzling, often associated with crisping skin or burning), *spattering* (describes the sound of small drops of liquid hitting a hot surface), *bubbling* (describes the sound of liquid boiling or simmering), *popping* (describes a short, sharp sound, like the sound of oil splattering or kernels of corn popping), *jiggle* (movement felt or heard to indicate doneness).
- **Associated with food consumption**, e.g., *crunching* (biting into something hard or crisp).

Although auditory modalities do not make up the largest part of sensory modalities in culinary discourse, they play a significant role in our culinary experiences.

## 2.6. Multimodality and multisensory

Multimodality and multisensory describe how we experience the world through a combination of our senses (Alvarado et. al., 2024: 1). Multimodality and multisensory experiences in the culinary world have become significant areas of interest in both gastronomic and scientific communities. These concepts explore how multiple senses contribute to the perception and enjoyment of food, extending beyond taste and smell to include sight, sound, and touch.

Multimodality refers to using multiple channels or methods to communicate or represent information. For example: A recipe might include written instructions (visual), pictures of the steps (visual), and a video demonstration (visual and auditory).

Multisensory focuses on how our different senses work together to create a unified perception of the world around us. For instance: The smell of freshly baked cookies (olfactory), the warmth from the oven (tactile), and the sight of chocolate chips (visual) all contribute to the overall experience of enjoying warm cookies.

Talking about one of her friends Samin Nosrat mentioned that thirty years ago she got a big bottle of olive oil for her wedding, and she is still using it, “*She hasn't learned yet, that it's turned rancid*” (SALT FAT ACID HEAT, Ep. 1). The word “*rancid*” cannot be assigned to one modality, as it describes both an unpleasant taste and smell, and is usually associated with fats that have spoiled.

In the 4<sup>th</sup> Episode of the show “SALT FAT ACID HEAT” we encounter the following phrase:

“*Are you listening for the jiggle?*

*You can feel it*” (SALT FAT ACID HEAT, Ep. 4).

In cooking, we use a combination of senses to determine if something is ready. *Jiggle* primarily refers to the auditory modality, but in this case Samin Nosrat emphasises that it also has a reference to a tactile sensation (touch) that can be used alongside other senses like sight or smell.

The word “*crunchy*” is a great example of a word that bridges two or even three senses. Crunchy describes something that makes a crackling or crushing sound when you touch or bite into it, that is why there is an undeniable connection with a tactile modality. For example, you might describe a potato chip or a fresh apple as crunchy because you feel that satisfying resistance when you eat them.

Auditory modality is also often associated with the word “*crunchy*”. The sound of something crunching is what we associate with the sensation of touching it. So, hearing the crackling sound of a chip bag being opened or someone biting into an apple can make you imagine the crunchy texture, even if you're not touching it yourself.

Sometimes, we can visually anticipate crunchiness. For example, the wrinkled surface of a potato chip or the way a fresh apple gleams might give you a clue that it will be crunchy. There is also a powerful connection with gustatory modality because crunchiness plays an important role in taste perception.

When we consider the word “*fishy*” we may assume that it can encompass not only the characteristic of the taste but also smell. Furthermore, when something is described as “*fishy*” it could be meant that this object is slippery, cold, wet and unpleasant to touch.

The exploration of multimodal and multisensory vocabulary in culinary discourse underscores the complex interplay of our senses in the perception and enjoyment of food. Terms such as “*rancid*,” “*crunchy*,” and “*fishy*” illustrate how sensory descriptors can span multiple modalities, thereby enriching our understanding and communication of culinary experiences. This nuanced approach highlights the significance of considering all sensory inputs in gastronomic practice and research, ultimately aiming to enhance the overall culinary experience. Such an integrated sensory perspective is essential for advancing both the scientific study and the practical application of culinary arts.

“*You want everything to feel vibrant*” (SALT FAT ACID HEAT, Ep. 1). The word “*vibrant*” can be multisensory in culinary experiences because it can evoke a strong and positive response across multiple senses. Vibrant often suggests bright, intense colours. Vibrant can also be used to describe lively, complex flavours.

“*When I need inspiration, I take a trip down to the local market there's nothing more inspiring than fresh ingredients*” (Hell’s Kitchen, S. 15, Ep. 6). The word “*fresh*” can be multisensorial in culinary experiences because it can trigger associations with multiple senses that contribute to the overall impression of freshness. Freshness is associated with vibrant, unblemished colours in food. Fresh food is often linked to pleasant, clean aromas. Freshly baked bread or cut herbs would be good examples. And “*fresh*” itself primarily relates to taste. Fresh food generally has a clean, bright flavour that isn't dull or muted.

Among the multisensorial vocabulary units we encounter the following combinations:

Visual + Tactile, e.g., *flabby, smooth, runny, etc.*

Visual + Gustatory, e.g., *great, evenly cooked, raw, vibrant, etc.*

Visual + Olfactory, e.g., *burnt, etc.*

Gustatory + Tactile, e.g., *al dente, chewy, buttery, oily, etc.*

Gustatory + Olfactory, e.g., *fishy, fruity, spicy, smoky, exotic, sweet, etc.*

Auditory + Tactile, e.g., *crispy, jiggle, etc.*

Visual + Gustatory + Olfactory, e.g., *fresh, beautiful, etc.* (see Appendices 5, 6).

Furthermore, we observed that Samin Nosrat, the host of “SALT, FAT, ACID, HEAT”, emphasizes the beauty and delight of food through her visual descriptions. Nosrat uses words that highlight the vibrant colours, unblemished textures, and signs of ripeness associated with fresh ingredients. This creates a positive association between the food's visual appeal and its quality and taste. She employs words that convey appreciation for the food's appearance. Terms like “*glistening,*” “*beautiful,*” and “*It's like a ballet*” evoke a sense of enjoyment and admiration. Nosrat's descriptions often connect visual details to other senses. Talking about “bright, citrusy flavors” alongside the “vibrant yellow” of lemon creates a richer mental picture of the food. That is why, positive connotation prevails in this documentary-travel show (see Appendix 7).

Gordon Ramsay, on the other hand, uses a more direct approach in “Hell's Kitchen”. His focus is on evaluating the food presented by the contestants. Ramsay might use words that highlight visual flaws, like “*unevenly cooked*” or “*looks like a mess.*” This helps pinpoint areas where the contestant can improve the dish's presentation. His descriptions often address aspects related to cooking methods. Words like “*overcooked*” or “*undercooked*” indicate where a technical error might have occurred. Ramsay uses clear and concise language to convey his assessment. This may come across as strong or critical, but it's meant to be direct feedback for the contestants. Thus, in “Hell's Kitchen” a lot of sensory modalities vocabulary with neutral and negative connotations can be encountered, nevertheless, the positive connotation prevails (see Appendix 8).

The contrasting styles of Nosrat and Ramsay reflect the different goals of their shows. SALT, FAT, ACID, HEAT is a culinary travelogue, showcasing the beauty and diversity of food cultures. Hell's Kitchen is a competition program, where Ramsay provides critical feedback to help contestants improve their culinary skills.

## Conclusion to Chapter 2

Based on the research that was conducted through the lens of the popular documentary cooking series “SALT FAT ACID HEAT” and the reality show “Hell’s Kitchen,” we have examined how visual, gustatory, olfactory, tactile and auditory cues profoundly influence the perception of food.

Visual cues such as *colour, shape, size, texture, and arrangement* help articulate the appeal and quality of food. Descriptive vocabulary related to the *cooking process*, such as caramelized, seared, or golden brown, highlights the transformative power of heat and other elements. *Presentation*, involving plating and garnishes, underscores the importance of aesthetic appeal in culinary arts.

The impact of visual information on our culinary experiences cannot be overstated. Positive visual cues often evoke pleasant feelings and enhance the perception of freshness and quality, while negative cues can indicate spoilage or poor preparation. This sensory interplay between sight and other senses like smell and touch creates a holistic perception of food that influences our enjoyment and satisfaction.

Gustatory perception, through the detection of *sweet, salty, sour, bitter, and umami* flavours, not only ensures our safety by warning us of potential toxins but also guides us toward nutritious choices, enriching our dietary habits. Through Samin Nosrat’s exploration of salt, fat, acid, and heat, we see how each element uniquely contributes to the flavour profiles of food. Moreover, Gordon Ramsay’s commentary on the participants’ dishes includes a wide range of sensory modalities vocabulary to convey all of the shades of taste.

Smells can evoke memories and emotions. Different cultures may have unique associations with certain smells. We categorized olfactory vocabulary into *basic smells* (sweet, salty, sour, bitter, savoury, aromatic), *food-specific smells* (buttery, meaty, smoky, floral, fruity, herbal, saffrony), *based on intensity* (fragrant, strong, faint) and *pleasantness* (pleasant, unpleasant).

The mouthfeel of food is a critical component of its overall sensory profile. This includes the crunchiness of fresh vegetables, the creaminess of a dessert, or the chewiness of meat. The chapter also explored onomasiological approaches to

understanding tactile vocabulary. For instance, terms like “mushy,” “creamy,” “juicy,” and “silky” *derive from objects* associated with certain qualities, while words like “slippery,” “crumbly,” and “crunchy” *derive from actions* linked to specific tactile experiences.

The sound of food can also enhance the eating experience. The sizzle of a hot dish, the crunch of biting into a crisp apple, or the pop of a champagne cork can add to the enjoyment.

Finally, the culinary shows “SALT FAT ACID HEAT” and “Hell’s Kitchen” provide numerous examples of multimodal and multisensory vocabulary. Terms like “crunchy” bridge auditory, tactile, and gustatory modalities, illustrating how the sound of crunchiness can evoke tactile and taste sensations. Similarly, “fishy” encompasses taste, smell, and tactile qualities, demonstrating the interconnected nature of sensory experiences. Multimodal and multisensory vocabulary enhances our ability to communicate culinary experiences. Words like “vibrant” and “fresh” evoke strong, positive responses across multiple senses. “Vibrant” can suggest bright colours and lively flavours, while “fresh” triggers associations with clean aromas, bright flavours, and visually appealing food.

## CONCLUSIONS

In this study, we explored the complex connection between sensory perception, language, and the representation of food in popular cooking shows. We investigated how the traditional five-sense model, while valuable, is insufficient to capture the complexities of human experience. In the first chapter, we defined the characteristics and typology of cooking shows as a genre and analysed the approaches of well-known linguists such as Winter B., Viberg Å., Van Putten S., Sorabji, R. and others who explored sensory linguistics and how it is used in the context of glutton discourse. Here we also focused on one of the biggest problems of sensory linguistics – that is an inability to express some peculiar sensations with words. In this case, the concept of “ineffability” was proposed. The concept of “ineffability” highlights the limitations of language in fully expressing certain sensory nuances. Furthermore, we examined the concept of multisensory integration, where senses like taste and smell merge to create a unified perception of food.

In the second chapter, we conducted the analysis of two different genres of cooking shows – the documentary-travel cooking show “SALT FAT ACID HEAT” and the avant-garde reality competition cooking show “Hell's Kitchen” – that revealed the strategic use of multimodal and multisensory language.

Firstly, we identified the specific vocabulary and techniques used to describe visual elements, taste sensations, aromas, textures, and sounds in culinary shows based on the list of sensory vocabulary units taken from the shows. To create a richer experience for viewers, both Samin Nosrat and Gordon Ramsay skilfully use the sensory modalities vocabulary targeting sight, smell, taste, touch, and even sound.

Secondly, we proposed the classifications of the vocabulary units to each of the five main sensory modalities in culinary experiences and explored the implications of different connotations of sensory modalities vocabulary and how they influence our food perception.

Finally, we focused on multisensory as one of the main problems for categorising the senses. Having analysed the aspects of multimodality and multisensory, we can state that the language used by Samin Nosrat and Gordon Ramsay constructs a vivid

multisensory experience for viewers, even though they cannot directly interact with the food that is displayed in the shows.

To summarize, it is important to mention that by exploring the intricate language used in culinary shows we uncover the mechanisms by which these programs bridge the gap between the screen and the viewer's imagination. Through detailed analysis, the research delves into how culinary shows use descriptive vocabulary, sensory cues, and vivid imagery to foster a sense of participation and immersion. By examining the linguistic techniques that convey the textures, aromas, and flavours of food, this study reveals how these shows not only educate but also engage viewers, making them feel as though they are actively involved in the act of cooking and enjoying food. This sense of involvement is crucial in transforming passive viewership into an interactive and sensory-rich experience, ultimately enhancing the viewer's appreciation and enjoyment of culinary arts.

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## APPENDICES

### Appendix 1. Sensory Modalities Vocabulary – Show “SALT FAT ACID HEAT”

No	Vocabulary unit	Number of repetitions	Sensory modality	Connotation (positive/negative/neutral)
1.	good	19	visual, gustatory, olfactory	positive
2.	fruity	4	gustatory, olfactory	positive
3.	spicy	10	gustatory, olfactory	positive
4.	bitter	5	gustatory, olfactory	negative
5.	rich taste	1	gustatory	positive
6.	the sweetest	4	gustatory	positive
7.	lovable	3	visual	positive
8.	buttery	6	tactile	positive
9.	acidity	4	gustatory	neutral
10.	salty	14	gustatory	neutral
11.	soft	14	tactile	positive
12.	no bumps	1	tactile	positive
13.	(completely) smooth	2	tactile, visual	positive
14.	aromatic	2	olfactory	positive
15.	beautiful	21	visual	positive
16.	a rich fruity flavor	1	gustatory	positive
17.	tender crumb	1	tactile, auditory	positive
18.	crisp crust	2	tactile, auditory	positive
19.	rich	8	gustatory, olfactory	positive
20.	taste like salt	1	gustatory	neutral
21.	crunchy	3	tactile, auditory	positive

22.	creamy	8	gustatory, tactile	positive
23.	marvellous	1	visual	positive
24.	coarse salt	1	tactile	neutral
25.	sweet	16	gustatory	positive
26.	rancid	1	gustatory, olfactory	negative
27.	delicious	18	gustatory	positive
28.	fatty	20	gustatory, tactile	here: positive
29.	lean	1	gustatory	here: negative
30.	tastes porkier	1	gustatory	positive
31.	shiny	3	visual	positive
32.	noble fat	1	gustatory, tactile	positive
33.	super salty	1	gustatory	here: positive
34.	super chewy	1	gustatory, tactile	negative
35.	very flavorful	19	gustatory	positive
36.	a very soft texture	3	tactile	positive
37.	ground up	1	tactile, visual	neutral
38.	flavored	25	gustatory	positive
39.	a plain bowl of rice	1	gustatory	neutral
40.	smoked (fish)	1	gustatory, olfactory	positive
41.	richness	4	gustatory	positive
42.	cow smell	1	olfactory	here: positive
43.	solid	5	tactile	negative
44.	It's like a ballet	1	visual	positive
45.	air pockets inside	1	visual	neutral
46.	low	3	visual	negative

47.	fresh	10	visual, gustatory, olfactory	positive
48.	crunching	11	tactile, auditory	positive
49.	pure flavor	2	gustatory	positive
50.	a nice bitterness	3	gustatory	positive
51.	umami	9	gustatory	positive
52.	flaky	2	visual, tactile	positive
53.	crisp	8	gustatory, tactile	positive
54.	tender	17	gustatory, tactile	positive
55.	light	5	visual	positive
56.	delightful	4	visual	positive
57.	surprising	3	visual, gustatory, olfactory	positive
58.	crispy	12	gustatory, tactile	positive
59.	sizzle	1	auditory	neutral
60.	hard	4	tactile	negative
61.	chewiness	1	gustatory, tactile	negative
62.	al dente	1	tactile, gustatory	positive
63.	silky	4	tactile, gustatory	positive
64.	dense		gustatory, tactile	here: positive
65.	meaty	4	gustatory	positive
66.	pliable	1	tactile	positive
67.	almost transparent	1	visual	positive
68.	wet	6	tactile	neutral
69.	small crystals	2	visual	neutral
70.	big crystals	2	visual	neutral
71.	saltiness	7	gustatory	positive

72.	intense	8	gustatory, olfactory	positive
73.	gradual	2	gustatory	positive
74.	delicate	5	gustatory, olfactory	positive
75.	strong-flavored	9	gustatory	positive
76.	mild	5	gustatory, olfactory	positive
77.	a very distinct color and flavor	1	visual	positive
78.	It tastes very minerally	1	gustatory	negative
79.	I can taste rocks almost	1	gustatory	negative
80.	tasty	5	gustatory	positive
81.	It smells like an ocean	1	olfactory	positive
82.	pretty squares	1	visual	positive
83.	depth of flavor	4	gustatory	positive
84.	clean	6	visual	positive
85.	it zings in your mouth	1	gustatory	positive
86.	fat	8	gustatory, tactile	here: positive
87.	so full in my mouth	1	gustatory	positive
88.	popping sounds	2	auditory	positive
89.	I smell like caramel and maple	1	olfactory	positive
90.	pop pop pop	1	auditory	positive
91.	complexity of flavor	1	gustatory	positive
92.	hand-made	1	gustatory	positive

	quality			
93.	sour	10	gustatory	
94.	savoriness	8	gustatory	positive
95.	taste satisfying	1	gustatory	positive
96.	slippery	1	tactile	negative
97.	dried (fish)	1	tactile	positive
98.	fishy	4	gustatory, olfactory	here: positive
99.	deep taste	6	gustatory	positive
100.	It tastes like sauerkraut	1	gustatory	neutral
101.	sweetness	13	gustatory	positive
102.	inedibly salty	1	gustatory	negative
103.	smoky/smokey	1	olfactory	here: positive
104.	yummy	10	gustatory	positive
105.	bubbling	2	auditory	neutral
106.	falling off the bone	1	gustatory	positive
107.	tart	13	gustatory	positive
108.	sourness	12	gustatory	neutral
109.	a very pleasant smell	2	olfactory	positive
110.	floral	3	olfactory	positive
111.	mellow	1	tactile	positive

112.	subtle	4	gustatory	positive
113.	starchy	2	gustatory	negative
114.	savory	18	gustatory	positive
115.	overcooked tough steak	1	gustatory, tactile	negative
116.	perfectly balanced	2	gustatory	positive
117.	brightness	5	visual	positive
118.	tang	3	gustatory	positive
119.	starchy richness	9	gustatory	positive
120.	well-roasted and seasoned	1	gustatory	positive
121.	smell really strong	4	olfactory	here: positive
122.	plain flavors	2	gustatory	neutral
123.	pillowy tortillas	1	tactile	positive
124.	steady flavor	2	gustatory	positive
125.	yellowish thing	1	visual	positive
126.	extremely white	1	visual	positive
127.	clear honey	1	visual	positive
128.	distinct floral taste	1	gustatory	positive
129.	tartness	4	gustatory	positive

130.	a bit of juice	1	tactile	positive
131.	too thick	1	tactile, visual	negative
132.	too thin	1	tactile	negative
133.	bright red color	1	visual	positive
134.	smokiness	3	gustatory, olfactory	neutral
135.	super fluffy	1	tactile	positive
136.	super crispy	1	tactile, auditory	positive
137.	beautiful acidity	4	gustatory	positive
138.	crazy marshmallowness	1	tactile	positive
139.	sweetened cream	1	gustatory	positive
140.	exotic	2	gustatory, olfactory	positive
141.	flabby	1	visual, tactile	positive
142.	firm	2	tactile	negative
143.	pale	1	visual	negative
144.	golden brown	1	visual	positive
145.	splatter	1	auditory	neutral
146.	crackle	4	auditory	positive
147.	great	3	visual, gustatory	positive

148.	giant	1	visual	neutral
149.	so quiet and calm	1	auditory	positive
150.	a little cooler	1	tactile	neutral
151.	hot	18	tactile	neutral
152.	browning	3	visual	positive
153.	medium rare	2	visual	positive
154.	evenly cooked	2	visual, gustatory	positive
155.	it has a little bit of resistance	1	tactile	neutral
156.	mushy	1	tactile	negative
157.	feel like the inside of my cheek	1	tactile	negative
158.	speckled marbling	1	visual	positive
159.	a lump on your mouth	1	tactile	negative
160.	moist	2	tactile	neutral
161.	with the perfect crust	3	tactile, auditory	positive
162.	beautifully browned	1	visual	positive
163.	overly dry	1	tactile	negative
164.	burnt	2	visual, olfactory	negative
165.	raw	5	visual, gustatory	negative

166.	browning totally unevenly	1	visual	negative
167.	gorgeous	7	visual, gustatory	positive
168.	buttermilk	2	gustatory, tactile	positive
169.	feel vibrant	1	visual, tactile	positive
170.	turn yellow	1	visual	neutral
171.	get brown	4	visual	neutral
172.	freshness	7	gustatory, olfactory, visual	positive
173.	juicy	11	visual, tactile	positive
174.	evenly moist and cooked	1	visual, tactile	positive
175.	the outside will shrivel or break or tear	1	visual	negative
176.	gentle	7	gustatory	positive
177.	complex in flavor	5	gustatory	positive
178.	like butter	2	gustatory, tactile	positive
179.	crumble	6	tactile, auditory	positive
180.	taste metallic	1	gustatory	negative
181.	exquisite pyramid shape	1	visual	positive
182.	soggy	1	gustatory, tactile	negative

183.	jiggle	1	tactile, auditory	neutral
184.	saffrony	2	olfactory	positive
185.	fragrant	5	olfactory	positive
186	properly dressed	3	gustatory	positive
187	the perfume from the oil	1	olfactory	positive

#### Appendix 2. Sensory Modalities Vocabulary – Show “Hell’s Kitchen”

№	Vocabulary unit	Number of repetitions	Sensory modality	Connotation (positive/negative/neutral)
1	tasty	21	gustatory	positive
2	ruby red	2	visual	neutral
3	floral	6	olfactory	positive
4	golden-brown	17	visual	positive
5	caramelized	20	visual, gustatory	positive
6	flaky	5	visual, tactile	positive
7	zesty	6	gustatory	positive
8	fragrant	6	olfactory	positive
9	ripe	8	visual, gustatory, olfactory	positive
10	colossal	2	visual	positive

11	bite-sized	3	visual	neutral
12	well-plated	2	visual	positive
13	citrusy	8	gustatory, olfactory	positive
14	rustic	2	visual	negative
15	generous portion	1	visual	positive
16	tiny portion	2	visual	negative
17	spiralized	2	visual	neutral
18	elegant	9	visual	positive
19	rosemary-infused	3	olfactory	positive
20	intoxicating	1	gustatory, olfactory	negative
21	marbled	3	visual	positive
22	chopping (of vegetables)	1	auditory	neutral
23	grassy	1	olfactory	neutral
24	delicate	7	gustatory	positive
25	cinnamon-scented	6	olfactory	positive
26	smoky	5	olfactory	neutral
27	savory	16	gustatory	positive
28	refreshingly cool	3	tactile	positive
29	glistening	2	visual	positive

30	crispy skin on roasted chicken	1	gustatory, tactile	positive
31	moist	2	tactile	negative
32	sour	11	gustatory	neutral
33	snow-white	1	visual	positive
34	umami	5	gustatory	positive
35	freshness	7	visual, gustatory, olfactory	positive
36	velvety	2	tactile	positive
37	watery	2	tactile	neutral
38	greasy	1	gustatory, tactile	negative
39	rich	5	gustatory	positive
40	pipng hot	1	tactile	neutral
41	nuanced	2	gustatory, olfactory	positive
42	sizzling	3	auditory	neutral
43	crackling	5	auditory	neutral
44	juicy	16	gustatory, tactile	positive
45	balanced	8	gustatory	positive
46	decadent	2	gustatory	positive
47	bitter	5	gustatory, olfactory	negative

48	pungent	1	gustatory, olfactory	negative
49	overcooked	6	gustatory, tactile	negative
50	dry	7	tactile	negative
51	burnt	9	gustatory, olfactory	negative
52	salty	10	gustatory	neutral
53	melt-in-your-mouth	3	gustatory	positive
54	like a burst of sunshine	1	visual	positive
55	bubbling	2	auditory	neutral
56	smooth	4	visual, tactile	positive
57	unappetizing	2	gustatory	negative
58	earthy	3	gustatory	negative
59	chewy	2	gustatory, tactile	negative
60	tender	15	tactile	positive
61	crispy	13	tactile, auditory	positive
62	nutty	8	gustatory	neutral
63	emerald green	2	visual	neutral
64	herbaceous	6	olfactory	positive
65	sweet	25	gustatory, olfactory	positive
66	spicy	19	gustatory, olfactory	positive

67	whisking	2	auditory	neutral
68	messy	2	visual	negative
69	mellow	1	tactile	positive
70	fishy	2	gustatory, olfactory	negative
71	foul	6	gustatory, olfactory	negative
72	deep amber	1	visual	neutral
73	heaping	1	visual	negative
74	tangy	3	gustatory	positive
75	peppery	5	gustatory, olfactory	neutral
76	sour	5	gustatory	neutral
77	harmonious	2	gustatory, olfactory	positive
78	sweet and smoky	1	gustatory, olfactory	positive
79	soggy	3	gustatory, tactile	negative
80	mouthwatering	1	gustatory	positive
81	sparkling	4	visual	positive
82	swirled	2	visual	neutral
83	caramelised	4	gustatory, visual	positive
84	charred	1	gustatory, visual	negative
85	raw	17	visual, gustatory	negative

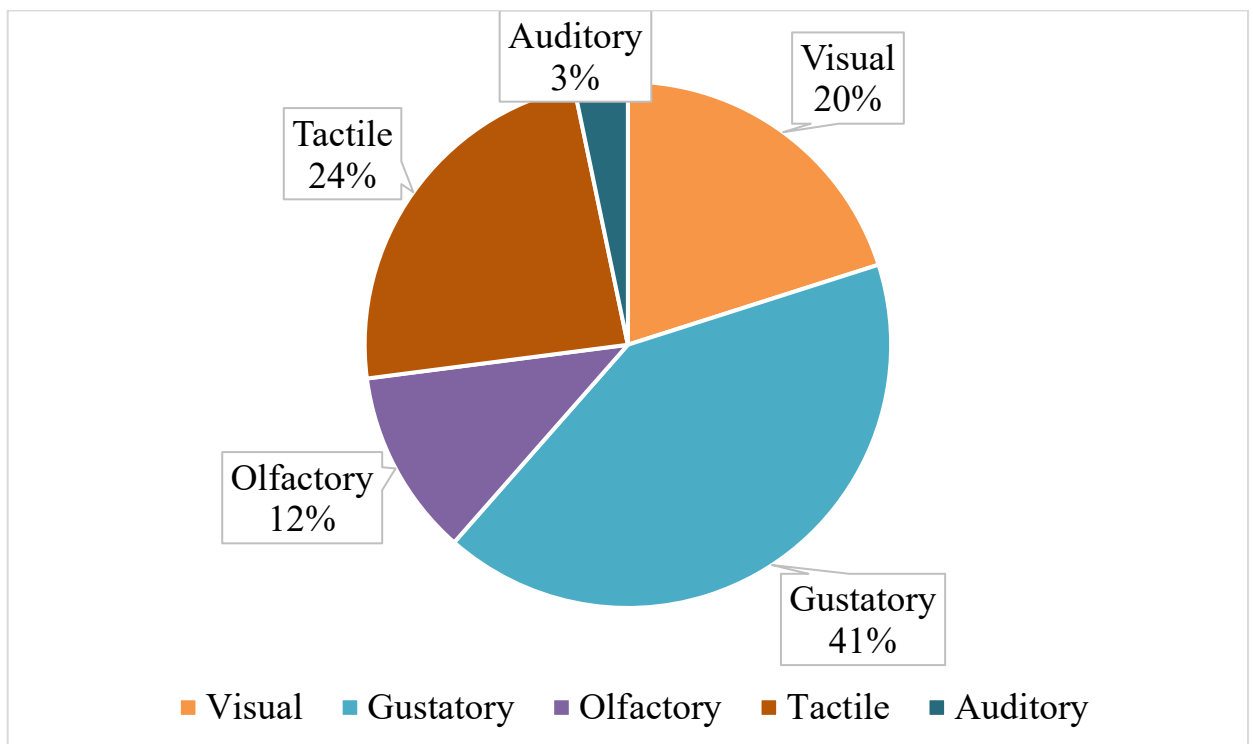
86	plain	5	gustatory	neutral
87	bright	2	gustatory, visual	positive
88	fresh	11	gustatory, visual, olfactory	positive
89	oily	1	gustatory, tactile	neutral
90	buttery	3	gustatory, tactile	positive
91	fatty	3	gustatory, tactile	neutral
92	pucker	1	gustatory, tactile	negative
93	astringent	1	gustatory	here: negative
94	chocolaty	2	gustatory, olfactory	positive
95	sharp	6	gustatory	here: positive
96	complex	3	gustatory	positive
97	robust	4	gustatory	positive
98	rosemary-scented	1	olfactory	positive
99	aromatic	4	olfactory	positive
100	delectable	1	gustatory	positive
101	herbal	2	olfactory	positive
102	soft	4	tactile	positive
103	crunchy	4	tactile, auditory	positive
104	tasteless	2	gustatory	negative

105	piquant	2	gustatory	positive
106	red-wine marinated	3	gustatory	neutral
107	beautiful	10	visual, gustatory, olfactory	positive
108	boom	2	auditory	neutral
109	shrimp juice	1	gustatory, tactile	here: negative
110	truffle mashed potatoes	1	tactile, gustatory	neutral
111	stunning	1	visual	positive
112	dreadful	2	gustatory, olfactory	negative
113	it's cooked beautifully	3	gustatory	positive
114	bland	5	gustatory	negative
115	terrible	5	gustatory, olfactory	negative
116	fresh crisp salad	1	tactile, auditory	positive
117	hot	21	tactile	neutral
118	looks like a mess	1	visual	negative
119	the cool touch of a knife	1	tactile	neutral
120	feeling the heat from the oven	1	tactile	neutral
121	beautifully pleated	2	visual	positive
122	fungus growing out of everything	1	olfactory	negative

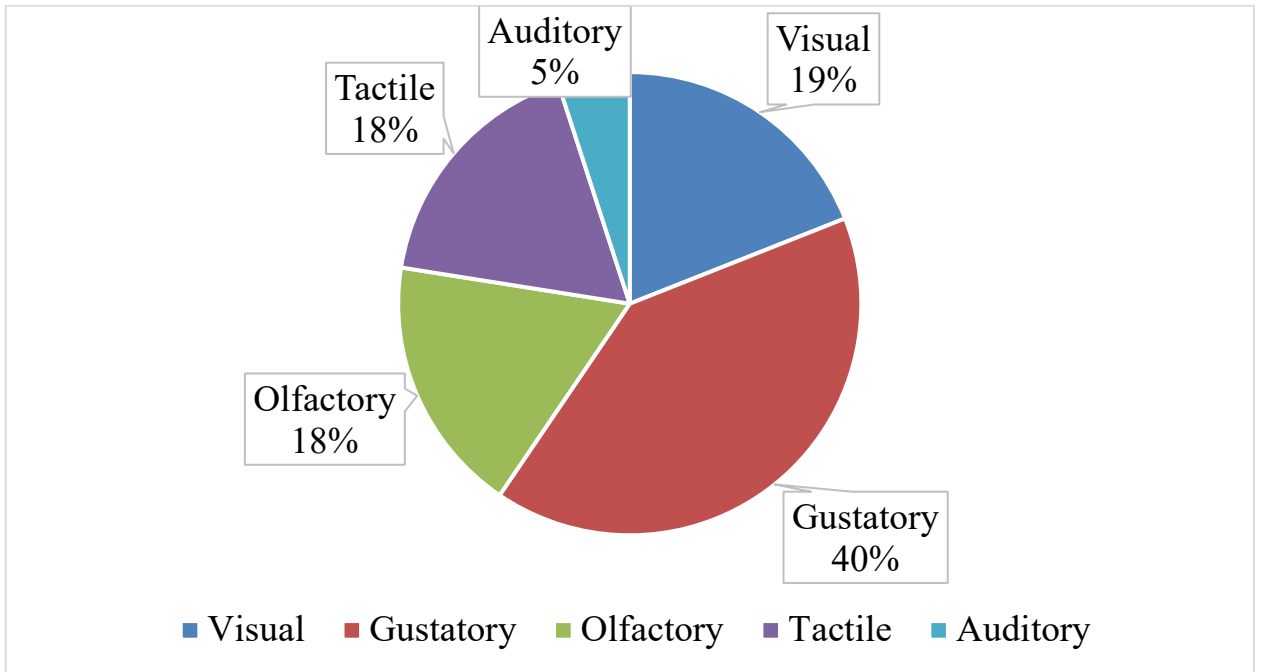
123	shucking (corn)	1	auditory	neutral
124	chopping	4	auditory	neutral
125	high-pitched	1	auditory	neutral
126	greasy	3	gustatory, texture	negative
127	mushy	4	texture	negative
128	bitter	9	gustatory, olfactory	negative
129	bittery aftertaste	1	gustatory	negative
130	vibrant	3	visual, gustatory	positive
131	rough	5	texture	negative
132	disgusting	12	gustatory, olfactory	negative
133	undercooked	8	gustatory, tactile	negative
134	touch crunching	1	tactile, auditory	negative
135	gritty	1	tactile	negative
136	dainty	1	gustatory, olfactory	positive
137	hearty	2	gustatory	here: positive
138	pink (chicken)	3	visual	negative
139	lukewarm	1	tactile	neutral
140	nice flavor	4	gustatory	positive
141	crust	3	auditory	positive

142	pliable	1	tactile	positive
143	runny (about eggs)	1	visual, tactile	positive
144	warm	12	tactile	neutral
145	glazing	3	visual	neutral
146	durian fruit smells like hot garbage	1	olfactory	negative
147	creamy	6	texture	positive
148	appetizing	4	gustatory	positive
149	perfectly seasoned	1	gustatory	positive
150	satiating	2	gustatory	positive

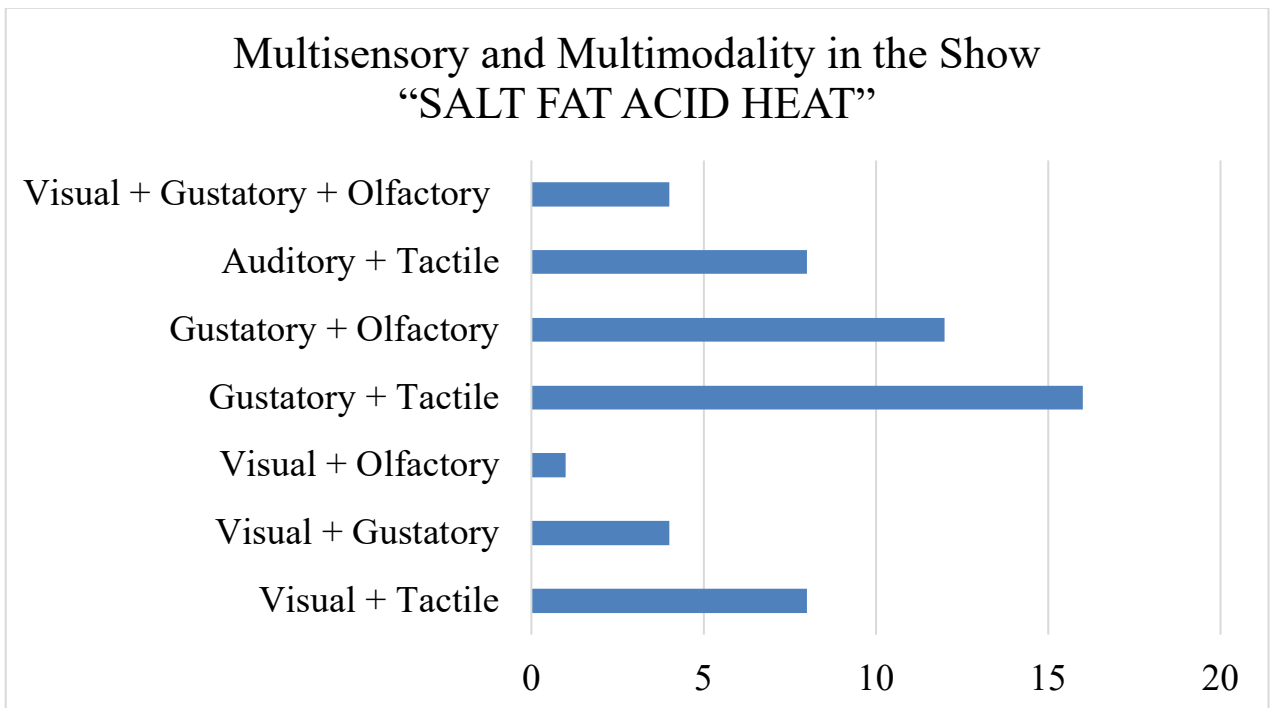
Appendix 3. Sensory Modalities in the Show “SALT FAT ACID HEAT”



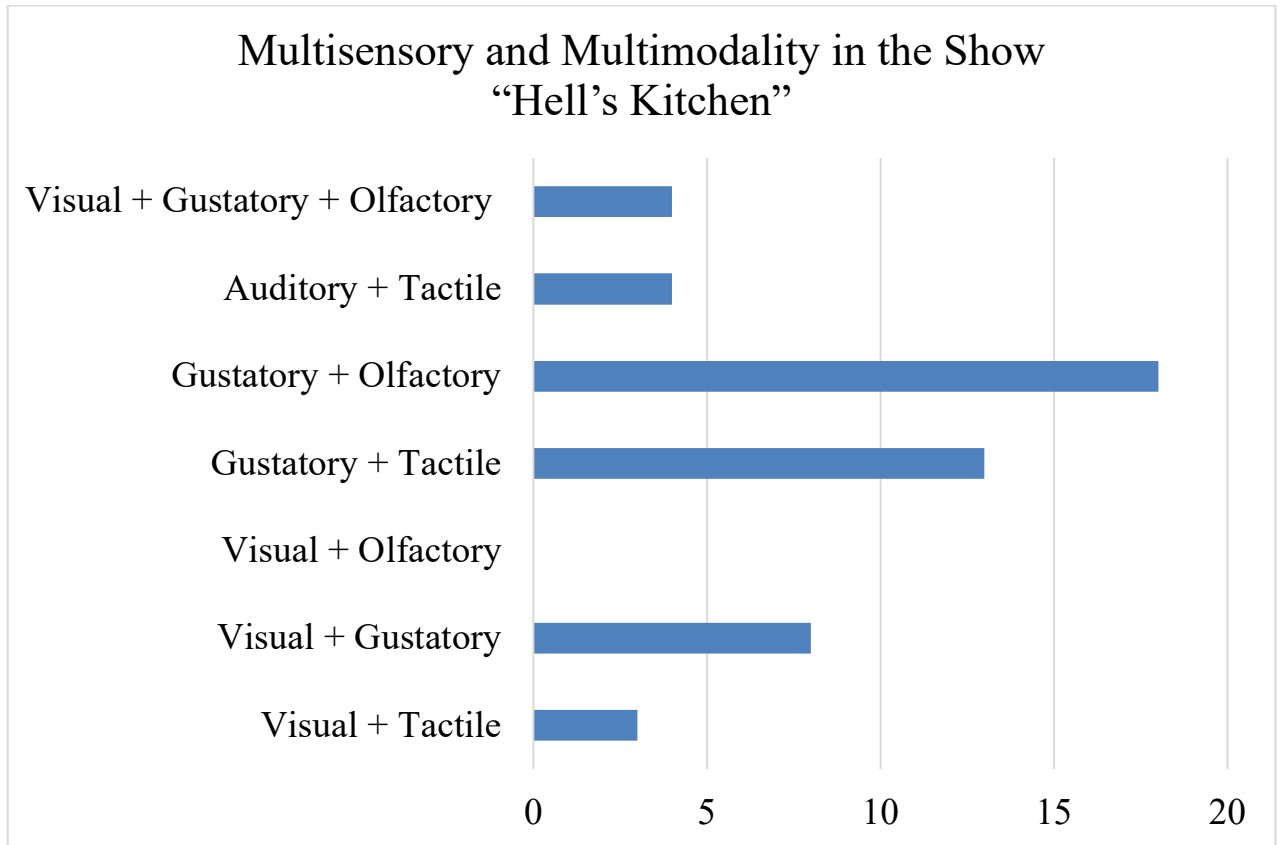
#### Appendix 4. Sensory Modalities in the Show “Hell’s Kitchen”



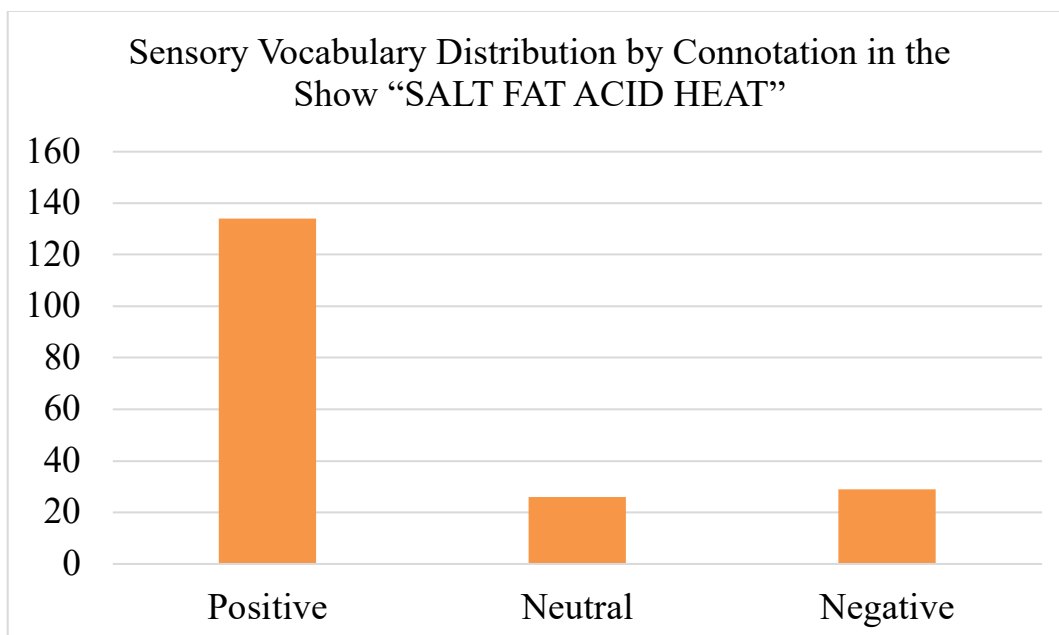
#### Appendix 5. Multisensory and Multimodality



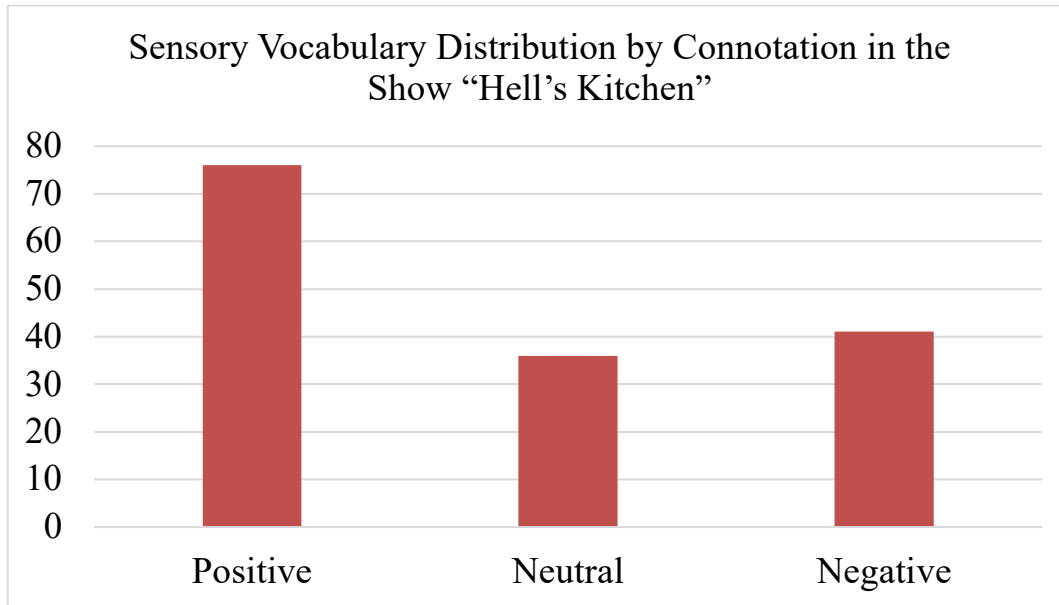
## Appendix 6. Multisensory and Multimodality



## Appendix 7. Sensory Vocabulary Distribution by Connotation



## Appendix 8. Sensory Vocabulary Distribution by Connotation



## SUMMARY

Кваліфікаційна робота бакалавра присвячена аналізу використання сенсорних модальностей у кулінарних шоу. Кулінарні шоу стали одним із головних елементів кулінарного дискурсу, зачаровуючи аудиторію зображенням провідних технік приготування, різноманітних традиційних кухонь і, звісно, кінцевого продукту – самої їжі. Однак здатність цих шоу залучати глядачів виходить за рамки простого зображення процесу приготування та презентації страв. Кулінарні шоу використовують багату мовну палітру для створення мультисенсорного досвіду, навіть якщо глядачі не можуть безпосередньо взаємодіяти з їжею.

Дослідження здійснено крізь призму аналізу дискурсу, мультимодальності та сенсорної лінгвістики. У цій роботі аналізується використання сенсорної мови в кулінарних шоу. Розглядаючи специфічну лексику і прийоми, що використовуються для опису візуальних елементів, смакових відчуттів, ароматів, текстур і навіть звуків, це дослідження має на меті зрозуміти, як ці програми конструюють мультисенсорний досвід для глядачів. Результати цієї дипломної роботи сприятимуть нашому розумінню того, як мова формує сприйняття в контексті медіа про їжу, з потенційними наслідками для різних галузей, таких як сенсорна наука, комунікаційні студії та маркетинг.

Варто зазначити, що у різні часи такі видатні вчені, як Б. Вінтер (2018, 2019), А. Д. Белова (2023), Д. Ліннот (2009, 2010, 2014, 2016), Л. Коннел (2009, 2010, 2014, 2016), А. Маджид (2014, 2016), С. Левінсон (2014), А. Віберг (1983), І. Кройманс (2016), К. Е. Шредер (2001), Ф. Стрік Ліверс (2015, 2016) та інші присвячували свої наукові роботи сенсорній лінгвістиці. Крім того, такі вчені, як М. Лоурес (2011), Л. Коннел (2018), Л. Дж. Спід (2017), К. Спенс (2001, 2015), М. Е. Ніколлс (2001), Дж. Драйвер (2001), М. Дінгеманс (2012) і Д. Ліннот (2009, 2013) вивчали питання сенсорних модальностей та перцептивної модальності.

Основною метою роботи було визначення особливостей жанру кулінарних шоу та дослідження того, як сенсорна лінгвістика використовується у контексті

гастрономічного дискурсу. Крім того, була приділена особлива увага мультисенсорності як одній із головних проблем класифікації відчуттів.

У першій частині ми аналізуємо різні підходи науковців до класифікації сенсорної лексики. Традиційно людське сенсорне сприйняття описується через п'ять органів чуття: зір, слух, дотик, нюх та смак, як це запропонував Арістотель. Однак ця модель неодноразово піддавалась сумніву науковцями. Наприклад Вінтер вказує на її невідповідність нейрофізіології та психології сприйняття. Він припускає існування багатьох підкатегорій та складну взаємодію між різними видами відчуттів, що ускладнює їх класифікацію. Мультисенсорність додає додатковий виклик до розуміння та класифікації відчуттів.

Ієрархія відчуттів Віберга включає три основні компоненти: активність, досвід і копулятивність. Він дослідив п'ятнадцять сценаріїв сприйняття у п'ятдесяти мовах і сформулював універсальну ієрархію сенсорних модальностей: зір > слух > дотик > смак, нюх. Інші дослідження підтвердили домінування зору серед відчуттів у різних культурах.

Наступним пунктом було дослідження кулінарного дискурсу та класифікацій телевізійних кулінарних шоу. Дослідники, такі як Г. Курнгутт, Л.І. Шевченко, Д.В. Дергач, М.Г. Онораті, П. Джардулло та Л.Ф. Брост, аналізували особливості цього жанру, етапи його розвитку та чинники, що сприяли збереженню його популярності. Сучасні кулінарні шоу поєднують демонстрацію процесу приготування їжі, кулінарні змагання та історії, пов'язані з їжею. Вивчення різних типів дискурсів, зокрема гастрономічного дискурсу, займає важливе місце у лінгвістиці, адже мова постійно змінюється, що відображається у лексичних та семантичних змінах.

Гастрономічний дискурс, або кулінарний дискурс, характеризує приготування їжі як мистецтво, що потребує спеціальних знань і навичок. Деякі науковці використовують терміни “глутонний дискурс” або “ресторанний дискурс” для позначення цього явища. Ольга Залужна та Аліна Роллер зазначають, що кулінарний дискурс може взаємодіяти з іншими типами дискурсів, утворюючи складну сутність, яка становить виклик для дослідження.

Жанр кулінарних шоу зародився на американському радіо в 1920-х роках і перейшов на телебачення в 1940-х. Він еволюціонував від інформативних програм, де висвітлювались різноманітні рецепти, до розважальних шоу. Сьогодні існує багато варіацій кулінарних шоу: від простих рецептів до змагань непрофесійних кухарів. Лорі Ф. Брост виділяє три основні типи кулінарних шоу: про домашніх кухарів, професійних шефів та мандрівників. Нікі Стрендж додала до цього чотири категорії кулінарних шоу у Великобританії: повчальні, особистісні (фокус на особистості ведучого), туристично-інформативні та суто інформативні.

Черрі Кетчум розробила детальнішу класифікацію, розділивши кулінарні програми на традиційні домашні інструктажі, шоу, орієнтовані на особистість ведучого, кулінарні тревел шоу та авангардні шоу, що поєднують повчальний, інформативний та розважальний елементи.

У другому розділі ми детальніше розглядаємо п'ять головних сенсорних модальностей, класифікуємо їх та аналізуємо особливості їх вживання у двох різних жанрах кулінарних шоу: документальне тревел шоу “SALT FAT ACID HEAT” та авангардне реаліті шоу “Hell’s Kitchen”.

Візуальне сприйняття є ключовим для перцепції того, що нас оточує. Аналіз 337 лексичних одиниць з шоу “SALT FAT ACID HEAT” та “Hell’s Kitchen” показав, що візуальна (зорова) модальність займає друге місце за частотою використання в “Hell’s Kitchen” та третє в “SALT FAT ACID HEAT”. Лексика візуальної модальності поділяється на три основні групи: зовнішній вигляд, процес приготування та подача.

Наші смакові рецептори відіграють важливу роль у взаємодії з їжею. Розрізняють п'ять основних смаків: солодкий, солоний, кислий, гіркий і умамі. Гіркий смак допомагає уникати токсинів, тоді як солодкий і солоний вказують на корисні поживні речовини.

Аналіз виявив, що серед сенсорних модальностей кулінарного дискурсу смакова модальність займає найбільшу частку – близько 40%. Вживані слова для

опису смаків включають солодкість (honeyed, sugary), солоність (salty, briney), гіркоту (bitter, chocolaty), кислість (sour, citrusy) та умами (meaty, cheesy).

Дослідження також виявило, що слова зі смаковими конотаціями можуть бути позитивними, негативними або нейтральними. Наприклад, “солодкий” зазвичай має позитивну конотацію, тоді як “гіркий” може бути як негативним, так і позитивним, залежно від контексту.

Смак тісно взаємодіє з іншими відчуттями, особливо з нюхом, впливаючи на апетит. У шоу “SALT FAT ACID HEAT” 12% словника сенсорних модальностей описують нюхову компоненту, а у “Hell’s Kitchen” – 18%. Аналізуючи нюхову було запропоновано таку класифікацію: основні запахи (sweet, salty, sour, bitter, umami), специфічні запахи їжі (oily, meety, smoky, floral, fruity, herbal, saffrony), інтенсивність (strong, weak) та приємність (pleasant, unpleasant).

Тактильні відчуття є важливою складовою досвіду споживання їжі. Аналіз сенсорної лексики із шоу “SALT FAT ACID HEAT” та “Hell’s Kitchen” показав, що 24% та 18% відповідно складають тактильні модальності, розділені на три категорії: текстура, температура, вологість.

Аудіальні модальності складають найменшу групу сенсорних модальностей і поділяються на дві категорії: звуки під час приготування їжі та звуки під час споживання їжі.

Мультимодальність і мультисенсорність описують, як ми сприймаємо світ через поєднання наших відчуттів. Дослідження мультимодальної та мультисенсорної лексики в кулінарному дискурсі підкреслює складну взаємодію наших відчуттів у сприйнятті і насолоді їжею. Такі терміни, як “rancid”, “crunchy” та “fishy”, ілюструють, як сенсорні дескриптори можуть охоплювати кілька модальностей.

Практична цінність роботи полягає в тому, що вона буде корисною для лінгвістів, викладачів, студентів, а також для всіх, хто прагне зрозуміти сутність такого лінгвістичного явища, як сенсорна лінгвістика, зокрема сенсорні модальності у кулінарних шоу. Матеріали дослідження можуть бути використані

у процесі подальших досліджень сенсорних модальностей та впливу сенсорної лексики у кулінарних шоу на цільову аудиторію. Висновки цієї роботи сприятимуть нашому розумінню того, як мова формує сприйняття у контексті харчових медіа, з потенційними наслідками для різних галузей, таких як сенсорна наука, комунікаційні дослідження та маркетинг.

Робота містить вступ, два розділи з висновками, загальні висновки, список джерел, додатки та анотацію.