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Lexical Ambiguity and Semantic Processing in Urdu Pun Words: An Explanation by Semantic Network Theory

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ABSTRACT
The study examines semantic processing and cognitive mechanism behind the comprehension of homographic puns in Urdu. Ten sentences of naturally occurring puns are analyzed using the psycholinguistic lens of Semantic Network Theory, with the aim to investigate how a single orthographic and phonological form can activate multiple semantic nodes having competing interpretations. Findings highlight that lexical ambiguity of pun words initiate parallel activation of divergent conceptual domains and multiple semantic nodes. Three kinds of structural ambiguities were observed – homophones/homonyms, proper name/common (abstract) name and derivational/category ambiguity. These insights contribute to psycholinguistics by emphasizing how ambiguity is negotiated within multilingual context.

Keywords: activation, ambiguity, cognitive, conceptual, nodes, processing, puns

INTRODUCTION
Language is a fundamental cognitive system that externalizes human perceptions, thoughts and experiences; therefore, linguistic processing is inseparable from cognitive processing. This makes the study of language use a crucial site of research as it provides a window to the working of the mind (Khalfan et al., 2020; Khawar et al., 2021). This allowed researchers to explore how cognitive processes are reflected through and shaped by different kinds of linguistic processing (Batool et al., 2024c; Jan et al., 2025; Jan et al., 2022).

The insights from psycholinguistics and cognitive linguistics have also shed light on how language production and comprehension engage complex cognitive mechanisms – conceptualization (Batool et al., 2024b; Batool et al., 2022; Naqvi, 2017), schemas and frames (Batool et al., 2025c), embodiment (Batool & Shehzad, 2018; Batool et al., 2021), executive functions (planning and decision making) (Noor & Batool, 2025b, Batool et al., 2025a; Noreen et al., 2024) – making language a powerful medium to understand cognition. This is particularly significant in multilingual contexts, where speakers navigate through multiple linguistic systems and negotiate with their associative cognitive demands (Noor & Batool, 2025a). Exploring cognitive processing in such linguistic contexts becomes crucial in understanding the extent to which construction of meanings in our minds are variable and/or universal (Batool et al., 2025b; Batool et al., 2024a).

Within this broader framework of linguistic and cognitive processing, semantic

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processing holds a central place, as it involves assessing, activating and integrating meaning during comprehension. In situations where words carry multiple meanings, in case of pun words, cognitive system negotiates between/among possible competing interpretations – contexts, schemas and inferential strategies facilitate those interpretations. Puns are a form of wordplay used to evoke multiple meanings. Research across humanities and social sciences researched puns extensively and revealed insights into humour, comedy and the application of puns in fields like business, entertainment and healthcare (Sa'adah et al., 2024; Rashid, 2017; Khir, 2012). Studies also explored the brain's processing of puns and their variation across time and culture (Bekinschtein et al., 2011; Bell et al., 2011; Culler, 1988; Lagerwerf, 2002; Monnot, 1982). Studying literary puns is therefore important, because besides cognitive processing, it also provides a better understanding of the cultural or historical context of literature. This context is essential for accurate interpretation and translation (Delabastita, 1997).

Puns are intentionally crafted or identified artifacts (Attardo, 2010) that require conscious deployment of lexical ambiguity and introduce ambiguity by simultaneously activating distinct concepts or lexemes in the mind. The inherent complexity of wordplay, encompassing numerous types and subtypes, contributes to the lack of a single universal definition for puns (Attardo, 1994; Brown, 1956; Giorgadze, 2014). Researchers have categorized puns into varied categories (Brown, 1956; Giorgadze, 2014), but the two major types of puns are homographic and homophonic puns (Macceca et.el., 2007). Homographic puns exploit identical spellings with divergent meanings, while homophonic puns rely on identical pronunciations despite differing spellings (Partington, 2009).

Significance of study

This study holds significance for advancing our understanding of multiple meaning processing during lexical ambiguity resolution in sentences. The comprehension of puns is likely influenced by various additional factors, particularly cultural knowledge, given their inherent dependence on context and substantial variation across languages and cultures. Understanding how cognitive systems process meanings in non-English Linguistic context and getting psycholinguistic evidence for languages like Urdu is crucial. In the context of Pakistan, this work provides a framework for understanding how speakers of Urdu negotiate semantic ambiguity, and establishes Urdu not just as a medium of cultural expression, but a crucial site for advancing scholarly debates in the fields of cognitive and psycholinguistics.

Research Objectives

To explore the possible nodes and links activated by pun words.
To analyze the activation of multiple semantic meanings triggered by pun words

Research Questions

What kind of semantic nodes are activated simultaneously by each Urdu pun word in the mental lexicon of its speakers?
How do these activations negotiate with the cognitive mechanism of spreading activation with in the semantic network?

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LITERATURE REVIEW

Puns are considered complex rhetorical devices (McQuarrie & Mick, 1996; van Mulken et el., 2005). They require significant cognitive effort due to manipulating sentence structure and wordplay for double meanings (Bates, 1999). To better understand this complexity, Giora (1999) proposes moving beyond the 'literal' vs. 'figurative' dichotomy of meaning. Instead, meaning salience depends on conventionality. This view emphasizes societal norms and linguistic expectations for meaning making. Building on this, van Mulken et al. (2005) note that salience can arise from multiple sources, including a word's popularity, prototypicality, frequency, familiarity or preceding context. However, salience remains subjective and varies across individuals. Therefore, investigating contextual factors is essential to grasp the processing and understanding of puns.

While psycholinguistic research specifically focused on puns has been limited, new studies in psycholinguistics and neurolinguistics are increasingly examining the mental processing of linguistic ambiguity. Central to this inquiry are models of language production, which describe speaking as involving distinct conceptual, lexical and morpho-phonological processes (Rose et al., 2015). Bryden (1982) suggests that past contradictory findings in language processing may stem from interactions between lateralized cognitive functions, such as component activation and pattern recognition. This perspective directly relates to understanding the mechanisms of word representation and processing in the mind. Understanding word structure and meaning is fundamental to explaining ambiguity resolution in language. Research indicates that these processes likely occur in separate but linked mental systems (Balota et al., 2006; Collins & Loftus, 1975; Hutchison, 2003; McClelland & Rumelhart, 1985, all as cited in Traxler, 2011) a framework essential for investigating ambiguous stimuli like puns.

Semantic network theory is a cognitive framework that explains how knowledge is accessed, organized and stored in human mind (Quillian, 1962, 1967). This theory, developed through early computer simulations of memory retrieval, proposes that concepts are represented as interconnected nodes within a semantic network. During a memory search, activation spreads in parallel from starting nodes, tagging related concepts along their defining properties and relationships. The search continues until activation from different starting points intersects at a common node and establish a potential path. This path is then evaluated based on syntactic and contextual constraints. If rejected, new searches are initiated under governing decision rules (Collins & Quillan, 1970; Collins & Loftus, 1975).

Building on Quillian's (1966) hierarchical network model, semantic memory is structured as a mental lexicon distinct from conceptual meaning. Within this framework, node similarity increases with shared links, while semantic relatedness generally decreases with network distance despite that closely positioned nodes may still exhibit low relatedness. This modular architecture was extended by Collins and Loftus (1975), who observed that priming effects could target either the lexical network, semantic network or both systems. This kind of dynamic activation underlies language comprehension, lexical access, semantic priming effects observed in psycholinguistic experiments (Meyer & Schvaneveldt, 1971; Posner & Snyder, 1975).

Semantic network theory has been influential in psycholinguistics since it demonstrates that language processing is not linear – it is distributed across interrelated structures of meaning. Therefore, this framework is foundational not only in analysing how linguistic input, involving figurative, ambiguous and abstract language, interacts with cognitive mechanisms, but also in investigating how mental lexicon is structured and how semantic

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knowledge is activated in real-time language processing.

METHODOLOGY

The study investigated the lexical and semantic processing of pun words within the framework of psycholinguistics. The research was conducted in two distinct phases. In phase 1, 12 participants were recruited and were asked to elicit 10 sentences including pun words. The pun-based sentences with English translation are listed in Table 1. These pun words were then analyzed to identify distinct semantic activations triggered by each pun word, to see how distinct meanings become accessible in specific contexts. In the second phase, fifteen additional participants were engaged in semantic processing task of same pun words, to explore the nature of their lexical access and semantic processing in real time and during contextualized language use.

Table 1: Pun sentences in Urdu (with English Translation)

Sr. No.	Pun-based Sentences in Urdu	English Translation
1.	مرغی ***کھانے*** کے لیے تیار ہے	Chicken is ready **to eat** (its food)/**to be eaten** (by humans)
2.	وہ ***مری*** جا رہی ہے	She's going to **Murree**/**die**
3.	مرے ***سر*** کو چوٹ لگی ہے	My **sir/head** has got hurt
4.	اس ***کان*** سے کیا نکلا	What came out of that **ear /mine**
5.	چھت پر ***بیل*** ہے	There is a **bull/vine** on the roof
6.	مجھے ***سونا*** چاہیے	I need **gold**/I should **sleep**
7.	***ضمیر*** مر چکا ہے	**Zameer (person)** has died/**Conscience** is dead
8.	***مالٹا*** کہاں پر ہے	Where is **orange/Malta (country**)
9.	میں تو ***شرافت*** سے بات کر رہا تھا	I was talking to **Shirafat (person)/** with **courtesy**
10.	یہ ***گھڑی*** قیمتی ہے	This **watch/moment** is precious

Theoretical Framework

The study is situated in the theoretical framework of Semantic Network Theory – a foundational model in psycholinguistics – which theorizes that concepts are stored as nodes in the memory and the relationship between these nodes are represented as links (Collins & Quillan, 1970; Collins & Loftus, 1975). Therefore, the meaning of a word emerges from the pattern of nodes and links activated in the semantic network. Spreading activation is a central mechanism to the model and provides robust explanation for the processing of puns, that rely on semantic ambiguity, where single phonological form triggers multiple competing nodes in mental lexicon of the listener. The activation of multiple pathways in the semantic network or the triggering of two unrelated semantic fields usually generates either a sense of humour or challenge to interpret right meaning.

ANALYSIS

Using the framework, the lexical ambiguity of pun words in ten selected sentences was analysed through their semantic networks. After identifying the nature of multiple meanings and semantic nodes activated by each pun word, the accounts of spreading activation were examined to see the activations of humor, comprehension and ambiguity resolution. The analysis revealed that across 10 Urdu sentences, a single orthographic/phonological form activated two distinct semantic nodes within the lexical network and spread activation in divergent conceptual fields. Three different kinds of structural ambiguities were brought to light – homophones/homonyms, proper

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name/common (abstract) name and derivational/category ambiguity. The detailed analysis is done accordingly.

Homophones/Homonyms

Place vs State

وہ ***مری*** جا رہی ہے

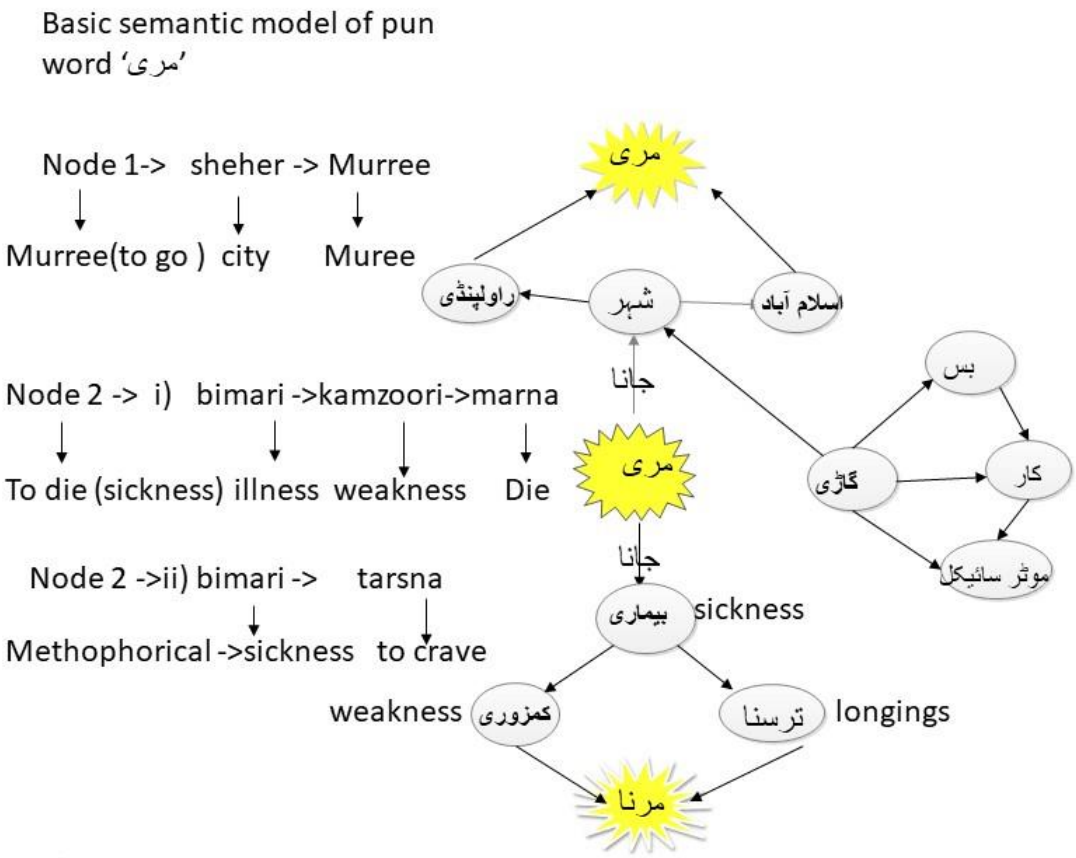
Wo ***muree*** ja rahi hye.

She's going to ***Murree***/***die***

In this sentence, the pun word 'Muree' activates two distinct semantic nodes associated with two concepts: 1) the 'sheher' (city) node containing the concept of 'Muree' (the hill station), and 2) the 'bimari' (sickness) node containing both the semantic concept 'kamzoori' (weakness) and the metaphorical concept 'tarsna' (craving/obsession). It should be noted that metaphorical meanings like 'tarsna' are excluded from this study's focus. Figure 1 illustrates the semantic network of these nodes, depicting potential activation paths following exposure to 'Muree'.

The analysis of 15 participants revealed varied activation patterns: three participants exhibited dual activation (both the 'city' node and metaphorical 'craving' node); one participant showed activation solely of the 'craving' node (bringing total activation of this node to four participants); two participants activated only the 'illness' node ('kamzoori'/weakness); and the remaining nine participants activated the 'city' node, associating it with diverse semantic concepts.

Figure 1: Semantic network of ‘murree’



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Place vs Plant

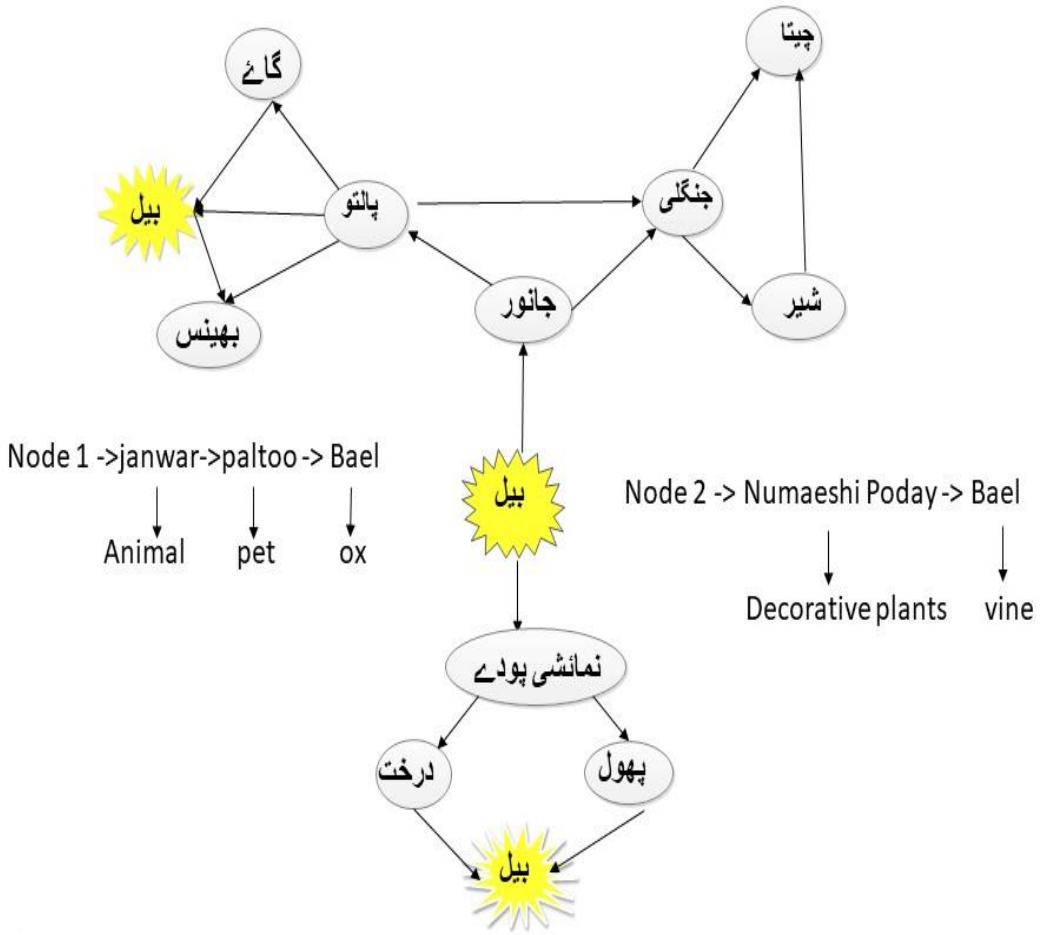
چھت پر ***بیل*** ہے

Chaath par ***bail*** hye.

There is a ***bull/vine*** on the roof

In this sentence, the pun word 'bail' activates two distinct semantic meanings: 'ox' and 'vine'. Applying semantic network theory, this involves potential activation of two conceptual nodes: 1) a 'jaanwar' (animal) node containing 'bail' (ox) within the 'paltoo' (pets) category, and 2) a 'numaishi poday' (decorative plants) node containing 'bail' (vine). Figure 2 illustrates the semantic network for 'bail' below, depicting potential spreading activation pathways for associated concepts. Analysis of responses from 15 participants revealed the following patterns: four participants exhibited dual activation (both the 'ox' and 'vine' nodes) with various associated semantic concepts; while the remaining eleven participants activated only the 'ox' node, associating it with different semantic concepts.

Figure 2: Semantic network of ‘bail’



Place vs Fruit

مالٹا کہاں پر ہے -

Malta kahan par hye

Where is ***Malta (orange)/Malta (country***)

In this sentence, the pun word 'malta' activates two distinct meanings: a fruit (citrus) and a country (nation-state). According to semantic network theory, exposure to this pun may

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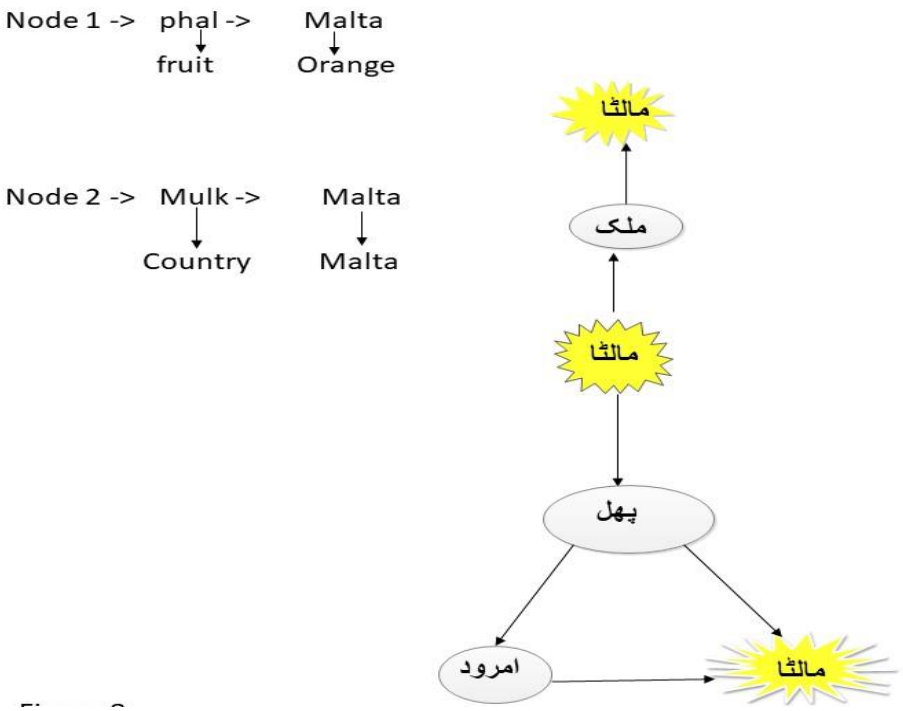
trigger two conceptual nodes: 1) a 'fruit' node containing 'malta' (the citrus fruit), and 2) a 'country' node containing 'Malta' (the sovereign state). Figure 3 depicts the semantic network for 'malta' below, illustrating potential spreading activation pathways for associated concepts. Analysis of responses from 15 participants revealed that 14 activated only the 'fruit' node with various related semantic concepts, while one participant exhibited dual activation of both the 'fruit' and 'country' nodes.

Figure 3: Semantic network of ‘malta’



PROPER NOUN vs Abstract Nouns
Person vs Abstract state
- ***ضمیر*** مر چکا ہے
Zameer mar chuka hye
Zameer (person) has died/***Conscience*** is dead
In this sentence, the pun word 'zameer' activates two distinct semantic meanings: conscience ' and 'a person' (typically as a proper name). According to semantic network theory, this involves potential activation of two conceptual nodes: 1) a 'khud shanasi' (self-awareness) node linked to 'zameer' (self-criticism), and 2) an 'insan' (human being) node. Figure 4 illustrates the semantic network for 'zameer' below, depicting potential spreading activation pathways for associated concepts.
Analysis of responses from 15 participants revealed the following patterns: four participants exhibited dual activation (both the 'inner self' and 'human being/name' nodes); two participants activated only the 'human being' node; while the remaining nine participants activated only the 'inner self' node, associating it with various related semantic concepts.

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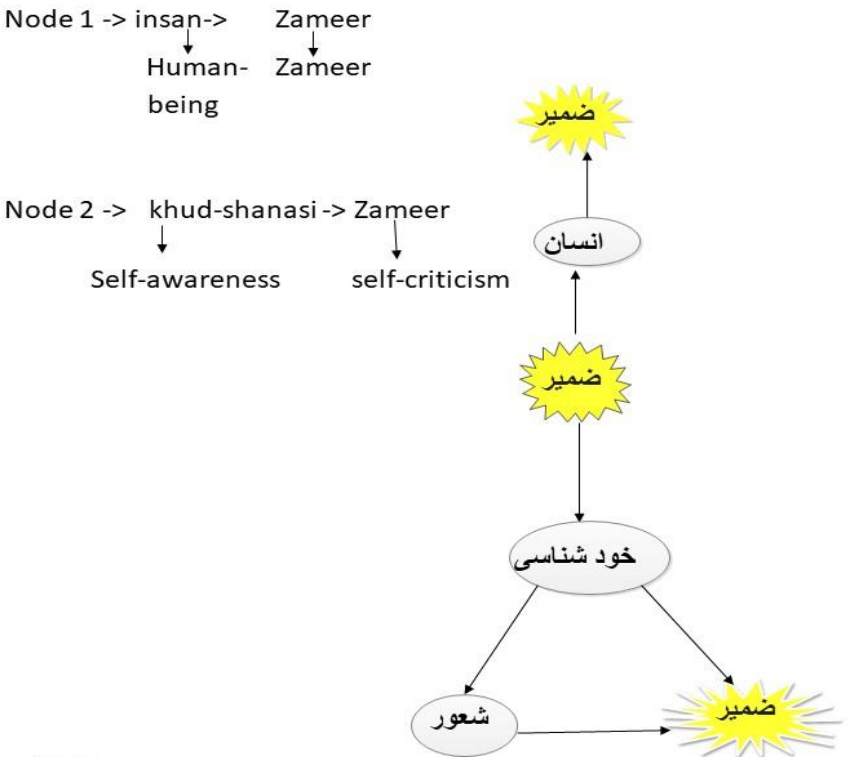
Figure 4: Semantic network of ‘zameer’



Person vs Manner

میں تو ***شرافت*** سے بات کر رہا تھا۔

Mein tu ***shirafat*** sy baat kar raha tha.

I was talking to ***Shirafat (person)/*** with ***courtesy (manner)***

In this sentence, the pun word 'shirafat' activates two distinct meanings: a proper name (person) and an abstract value (courtesy). According to semantic network theory, this involves potential co-activation of two conceptual nodes: 1) an 'insan' (human being) node containing 'naam' (name) as its conceptual category with 'Shirafat' as a token instance, and 2) an 'aqdaar' (values) node containing 'shirafat' (courtesy) as a core concept. Figure 5 depicts the corresponding semantic network below, illustrating spreading activation pathways for associated concepts.

Analysis of 15 participants revealed three exhibited dual activation (both name/human and courtesy/value nodes), two activated only the name/human node while the majority (ten participants) activated only the courtesy/value node with diverse semantic associations.

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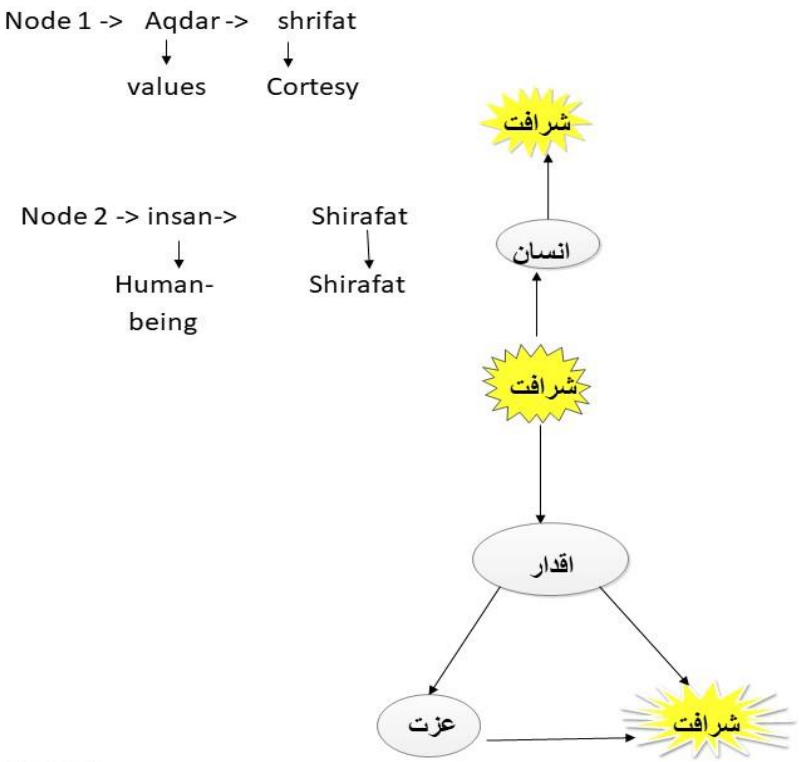
Figure 5: Semantic network of ‘shirafat’



Derivation/Category
Animal vs Food
.مرغی ***کھانے*** کے لیے تیار ہے
Murghi ***khany*** keliye tiyar hye (Roman Urdu)
Chicken is ready ***to eat*** (its food)/***to be eaten*** (by humans)
In this sentence,the pun 'khany' activates two concepts ('eating'/'food'). Semantic network theory explains this as concurrent activation of two conceptual nodes ('hiwan'/'salan') with their specific attributes.
None of the 15 additional participants discussed the simultaneous activation of these two semantic concepts. For all except one participant, only the 'salan' (food) node was activated, though it was associated with various related semantic concepts. The single exception activated a node representing a hen (as a living organism) consuming food (seeds). Figure 6 shows this activation pattern.

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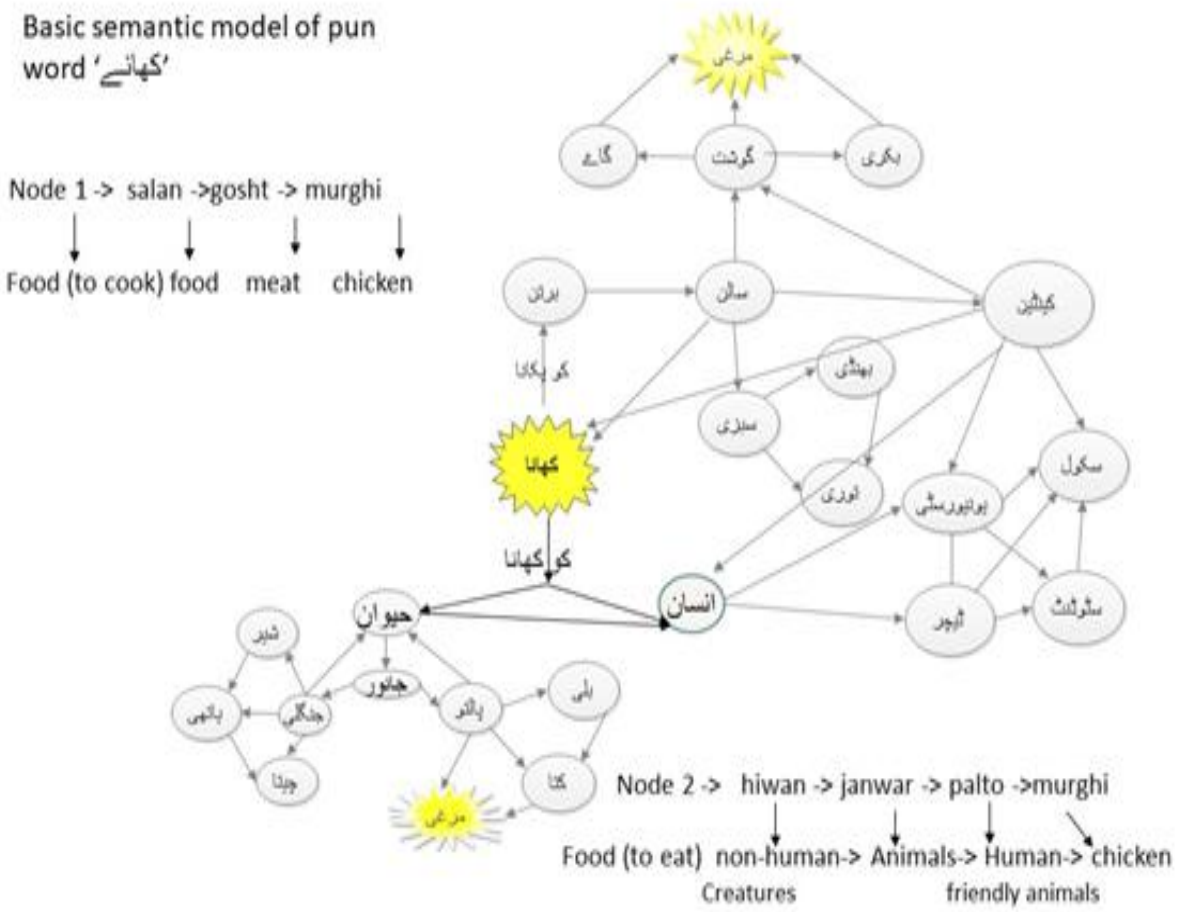
Figure 6: Semantic network of ‘murghi’



Person vs Body Organ

مرے **سر** کو چوٹ لگی ہے

Mery ***sar*** ko chout lagi hye

My **Sir/head** has got hurt

In this sentence, the pun word 'sar' activates two distinct meanings: 'human head' and 'sir/teacher'. Applying semantic network theory, this corresponds to the activation of two conceptual nodes: 1) the 'jandar' (living being) node, containing the concept 'sar' (head), and 2) the 'idara' (organization) node, containing the concept 'sar' (sir/teacher) within the broader 'paisha' (profession) category. Figure 7 depicts the semantic network for 'sar' below, illustrating potential spreading activation pathways for associated concepts.

Analysis of responses from 15 participants revealed the following activation patterns: two participants exhibited dual activation (both the 'head' and 'teacher' nodes); eleven participants activated only the 'head' node, associating it with various related semantic concepts; and the remaining two participants activated only the 'teacher' node, associating it with different semantic concepts.

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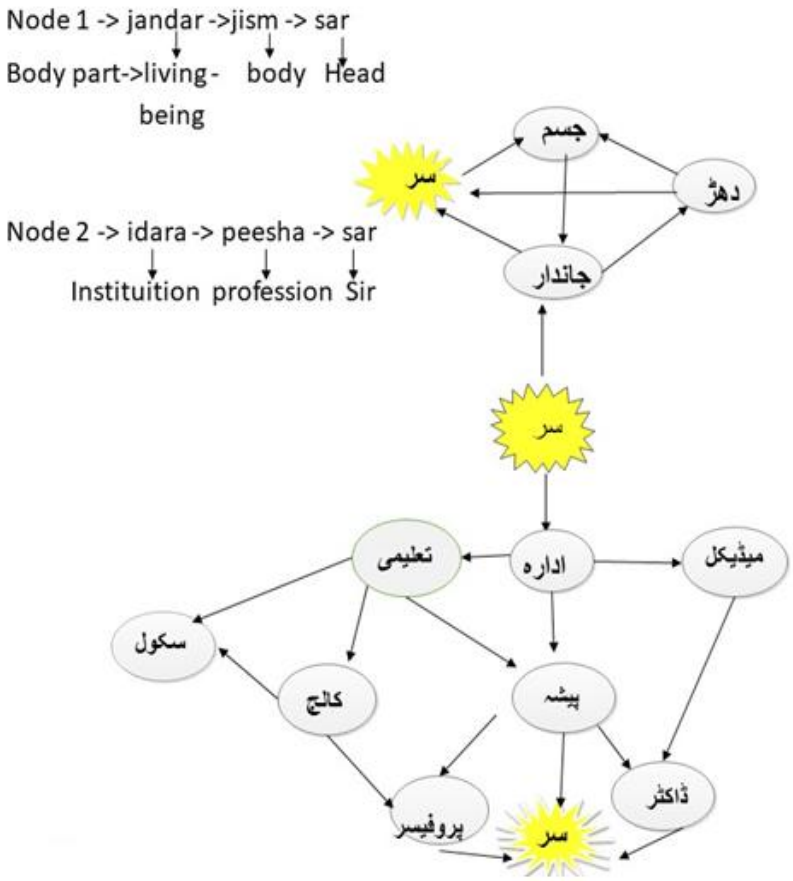
Figure 7: Semantic network of ‘sir’



Place vs Body Organ

اس ***کان*** سے کیا نکلا

Uss ***kan*** sy kia nikla

What came out of that ***ear /mine***

In this sentence, the pun word 'kaan' activates two distinct semantic meanings: 'human ear' and 'mine' (excavation site). According to semantic network theory, this involves potential activation of two conceptual nodes: 1) a 'human body' node containing 'kaan' (ear) as a body part, and 2) an 'industrial site' node containing 'kaan' (mine). Figure 8 illustrates the semantic network for 'kaan' below, depicting potential spreading activation pathways for associated concepts.

Analysis of responses from 15 participants revealed the following patterns: two participants exhibited dual activation of both nodes; nine participants activated only the 'ear' node with various related semantic concepts; and the remaining four participants activated only the 'mine' node with different associated semantic concepts.

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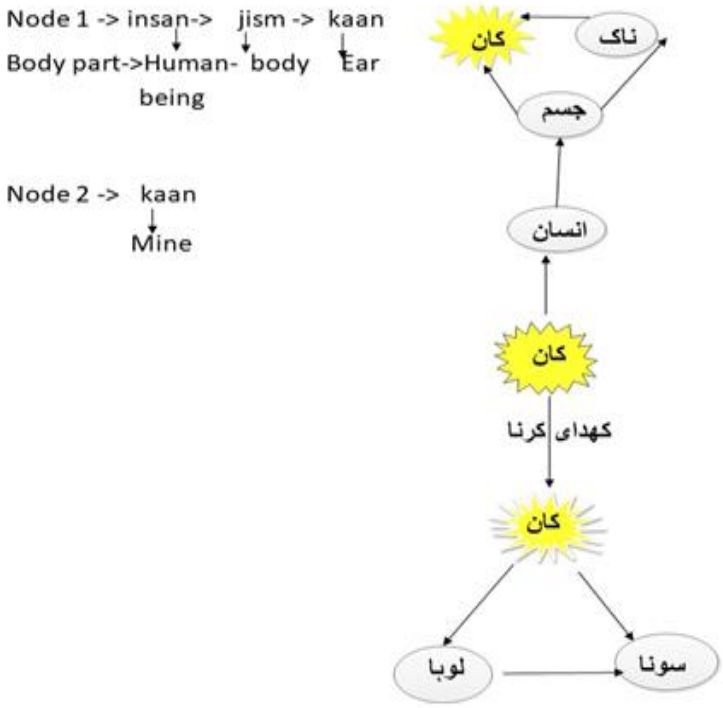
Figure 8: Semantic network of ‘kan’



Object vs State

مجھے سونا چاہیے

Mujhy ***sona*** Chahihye

I need ***gold***/I should ***sleep***

In sentence six, the pun word 'sona' activates two distinct semantic meanings: 'sleep' and 'gold'. According to semantic network theory, this involves potential activation of two conceptual nodes: 1) a 'human activity' node containing 'sona' (sleeping) as a state of rest, and 2) a 'precious metals' node containing 'sona' (gold) within the broader 'money' category. Figure 9 illustrates the semantic network for 'sona' below, depicting potential spreading activation pathways for associated concepts.

Analysis of responses from 15 participants revealed the following patterns: five participants exhibited dual activation (both the 'sleep' and 'gold' nodes); while the remaining ten participants activated only the 'sleep' node, associating it with various related semantic concepts.

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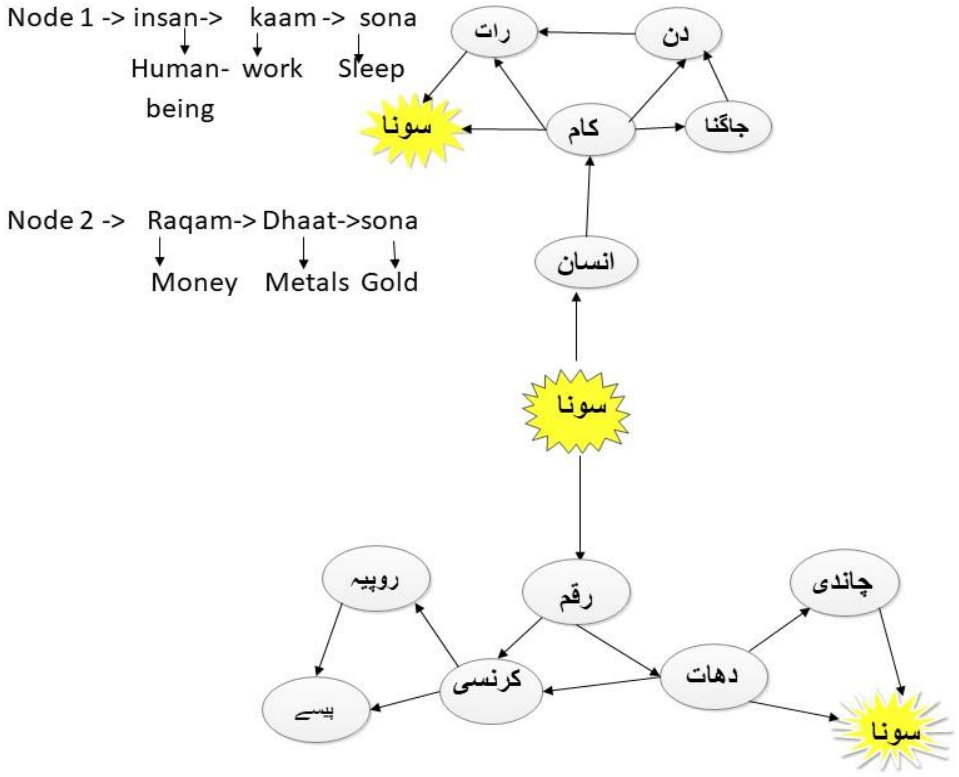
Figure 9: Semantic network of ‘sona’



Object vs Time

یہ ***گھڑی*** قیمتی ہے

Ye ***ghari*** qeemti hye.

This ***watch/moment*** is precious

In this sentence, the pun word 'ghari' activates two distinct temporal concepts: a timekeeping device (watch) and a unit of time (moment). Applying semantic network theory, this involves potential co-activation of two conceptual nodes: 1) a 'waqt' (time measurement) node containing 'ghari' (moment) as a temporal unit, and 2) an 'aala' (device) node containing 'ghari' (watch) as a physical instrument. Figure 10 depicts the semantic network below, illustrating spreading activation pathways for associated concepts.

Analysis of 15 participants revealed five exhibited dual activation (both moment and watch nodes), one activated only the moment node while the remaining nine activated only the watch node with diverse semantic associations.

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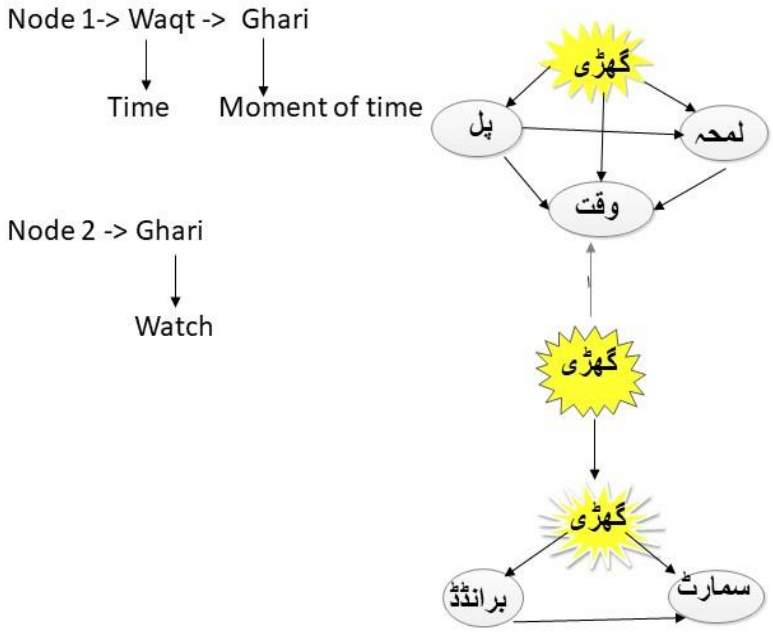
Figure 10: Semantic network of ‘ghari’



DISCUSSION

The analysis of participant responses reveals consistent patterns in the processing of homographic puns in Urdu when encountered in sentence contexts by individuals unaware of the intended ambiguity. A dominant finding across all sentences was the overwhelming tendency for participants to activate only one of the two possible meanings associated with the pun word. This primary meaning was almost invariably the one most strongly cued by the immediate sentence context. For instance, in Sentence 1 ('khany'), virtually all participants activated the 'food' ('salan') concept, aligning with the frame ‘Chicken is ready for’, while the 'eating' action was rarely accessed. This powerful contextual priming effect demonstrates that sentence structure guides initial semantic access, directing activation toward the most contextually relevant conceptual node and often suppressing the competing node entirely within the semantic network

This activation pattern exhibited significant asymmetry between the two meanings. The alternative meaning, while lexically valid, was activated far less frequently and rarely co-activated with the primary meaning. Instances of true dual activation, where participants reported accessing both concepts simultaneously (e.g., 'Muree' as both city and sickness, 'sar' as both head and teacher, 'sona' as both sleep and gold), were observed in only a minority of participants for each sentence, ranging from one to five individuals out of fifteen. This low incidence highlights the strong competition inherent in lexical access for ambiguous words; the semantic network model suggests that activation of the contextually primed node often inhibits the spread of activation to the competing node, preventing conscious awareness of the ambiguity for most listeners under normal comprehension conditions.

Several factors appeared to influence the likelihood of dual activation or the selection of the less dominant meaning. Meanings that were more balanced in terms of plausibility or frequency within the given context, such as 'bail' (ox/vine) or 'sona' (sleep/gold), showed

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slightly higher rates of dual activation. Conversely, meanings with a stark imbalance, like 'malta' (fruit vs. country) or 'khany' (food vs. eating), saw minimal dual activation. Concrete meanings (e.g., 'sar' as head, 'kan' as ear, 'ghari' as watch) generally held an activation advantage over more abstract meanings (e.g., 'zameer' as inner self, 'sharafat' as courtesy) or metaphorical interpretations excluded from this study. Furthermore, meanings representing proper nouns ('Zameer' as a person, 'Shirafat' as a name, 'Malta' as a country) were consistently activated less frequently than their common noun counterparts ('inner self', 'courtesy', 'fruit'), suggesting common noun interpretations possess greater default salience in ambiguous sentence contexts.

The findings provide support for the semantic network theory framework applied here. The distinct patterns of semantic associations reported by participants where concepts activated were typically closely related within a single conceptual node (e.g., associating 'sar' with other body parts or with school-related concepts, but rarely mixing these domains). It validates the model's representation of knowledge in discrete, though potentially interconnected, nodes (e.g., 'human body', 'profession/organization'). The observed spreading activation within a primed node (like the participant linking 'murghi' to 'seeds' via the living organism node in Sentence 1) and the competition between nodes align well with the theory's core principles. The variation across participants in which node was activated (e.g., for 'muree': city, sickness, or craving) also underscores the role of individual differences in lexical knowledge and processing, likely influenced by personal experience or subtle contextual interpretations.

The stark contrast between the processing patterns observed in these 15 unaware participants per sentence and the earlier group of 10 participants who were aware of the puns' dual meanings is highly significant. While the first group successfully accessed both meanings, the second group overwhelmingly accessed only one. This highlights that conscious awareness of the potential for wordplay fundamentally alters the cognitive processing of ambiguous words. Natural comprehension, as demonstrated here, heavily favors a single, contextually driven interpretation, with the alternative meaning remaining largely dormant. Appreciating the pun requires an additional cognitive step of deliberate awareness or a specific intention to seek ambiguity, which triggers the necessary co-activation or rapid switching between the competing semantic nodes within the network.

Collectively, these patterns illustrate the inherent asymmetry in lexical access for homographic puns during natural language comprehension in Urdu. Context exerts a powerful priming effect, strongly favouring one interpretation and often inhibiting the alternative. While both meanings reside within the semantic network, their simultaneous activation is the exception rather than the rule for unaware listeners. The cognitive effort or specific awareness required to trigger and sustain the co-activation necessary for pun appreciation is evident. Future research could explore this further, perhaps comparing processing times, examining the role of prosody in disambiguation, using more neutral sentence frames or quantitatively analysing factors like word frequency, concreteness and semantic distance between meanings predict activation dominance and the potential for dual access within the semantic network.

CONCLUSION

This study highlights the interdependence between linguistic processing and cognitive mechanisms, during the processing and interpretation of Urdu pun words, within the domain of psycholinguistics and semantic ambiguity. During natural sentence comprehension, Urdu homographic puns activate a single, contextually dominant

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meaning and strongly inhibit the alternative interpretations. This involves coordination of multiple cognitive processes including lexical access, semantic activation, and contextual integration. Moreover, conscious awareness of potential ambiguity fundamentally alters processing and enabling the co-activation necessary for pun appreciation. Factors like meaning concreteness and noun type (common vs. proper) further influenced activation patterns. The findings confirm semantic network principles of competitive node activation and highlight the cognitive effort required to access ambiguity deliberately.

The study contributes to cognitive linguistics and psycholinguistics by situating Urdu within broader theoretical debates, demonstrating that language specific structures, cultural schemas, and word play strategies influence how human mind resolves ambiguity and constructs meanings. Future research may extend the investigation to contextual modulators and neural correlates of this processing conflict. Moreover, comparing processing of pun words in Urdu with other south Asian languages and examining how multilingual speakers of Urdu and English resolve semantic ambiguities differently would offer insights into cross-linguistic transfer and cognitive flexibility.

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