# CROSS-LINGUISTIC INFLUENCE AND CONCEPTUAL TRANSFER IN FICTIVE MOTION: INVESTIGATING THE IMPACT OF EMBODIED INSTRUCTION ON L2 ENGLISH WRITING

**Dilnavoz Sherzod qizi Majidova**

First-year Master's student in Linguistics (English Language) at Fergana State University.

**Dona Satvoldiyevna Usmonova**

PHD

Head of the Department of Practical English Course at Fergana State University.

**Abstract:** This study explores the acquisition of fictive motion metaphors among Uzbek learners of English by addressing the typological conflict between verb-framed and satellite-framed spatial encoding. Experimental results demonstrate that pedagogical interventions based on embodied mental simulation significantly reduce native language interference and enhance the lexical vividness of students' descriptive writing. Ultimately, the research suggests that integrating cognitive-linguistic strategies into the EFL curriculum facilitates more effective conceptual transfer and native-like spatial reasoning

**Keywords:** fictive motion, embodied cognition, conceptual transfer, motion typology, uzbek efl, spatial metaphor.

## Introduction

The human capacity to perceive movement in static configurations—termed Fictive Motion (FM)—is a cornerstone of cognitive linguistics. When a speaker describes a landscape by stating that a "highway runs along the coast" or a "path climbs the ridge," they are not suggesting physical displacement of the object; rather, they are performing a mental simulation of movement through space. While the cognitive basis for such metaphors is universal, the linguistic strategies used to

express them vary significantly across languages, creating a notable barrier for second-language (L2) acquisition.

The primary challenge for Uzbek learners of English lies in a profound typological asymmetry. Following Talmy's (1985, 2000) framework, Uzbek is categorized as a verb-framed language, which typically encodes the path of motion within the verb (e.g., *ko'tarilmoq* / to rise). In contrast, English is a satellite-framed language that prioritizes the "manner" of motion in the verb while delegating the path to a satellite preposition (e.g., *to snake up*). This structural divide often leads to negative conceptual transfer, where L2 learners produce grammatically correct but semantically "static" prose that lacks the lexical vividness characteristic of native English spatial descriptions.

Methodology

Despite the growing body of research on motion typology, the pedagogical application of embodied cognition in the Central Asian EFL context remains largely under-explored. Current instructional methods in Uzbekistan often rely on traditional translation-based approaches, which fail to address the underlying mental simulations required for native-like spatial reasoning. This study seeks to bridge this gap by investigating whether explicit instruction in embodied mental simulation—teaching students to "physically" scan a path before writing—can facilitate the conceptual restructuring necessary for advanced L2 English writing. By examining the impact of this intervention on a cohort of Uzbek university students, this research aims to provide a cognitive-pedagogical model for enhancing metaphorical competence in the language classroom.

This study employed a quasi-experimental mixed-methods research design to investigate the role of embodied instruction in the acquisition of English fictive motion (FM) constructions by Uzbek EFL learners. The study combined qualitative linguistic analysis with quantitative measurements in order to examine how embodied cognitive activities influence learners' spatial conceptualization and descriptive writing skills.

The theoretical foundation of the study is based on Cognitive Linguistics, particularly the theories of fictive motion, image schemas, conceptual transfer, and embodied cognition developed by Leonard Talmy, George Lakoff, and Dan Slobin. The research specifically focuses on the typological contrast between English as a satellite-framed language and Uzbek as a predominantly verb-framed language.

The study aimed to determine whether embodied instructional techniques could reduce negative L1 conceptual transfer and improve learners' ability to produce vivid and dynamic English spatial descriptions through fictive motion constructions.

The research was conducted at a university-level English language program in Uzbekistan. Participants consisted of 40 intermediate-level Uzbek EFL learners aged between 18 and 22. The students were divided into two groups: an experimental group and a control group, with 20 participants in each group. Both groups possessed similar English proficiency levels according to institutional placement criteria.

The experiment lasted for six weeks and included three major stages: pre-test, instructional intervention, and post-test. During the pre-test stage, students were asked to describe static visual scenes such as landscapes, maps, rivers, roads, and mountain paths in written English. These descriptive tasks were designed to identify the participants' initial use of motion expressions, lexical variety, and spatial descriptions.

The control group received traditional vocabulary-based instruction focused on grammar explanation, translation exercises, and memorization of motion verbs. In contrast, the experimental group participated in embodied instructional activities designed to activate mental simulation and spatial visualization processes.

The embodied instructional model consisted of two pedagogical stages. The first stage focused on recognition and visualization. Students analyzed authentic English texts containing fictive motion constructions and identified differences between literal and metaphorical motion expressions. They also completed visual drawing tasks in which they illustrated scenes described by FM sentences. These

activities were intended to strengthen image-schema activation and mental scanning processes.

The second stage focused on production and transformation. Students transformed static spatial descriptions into dynamic embodied descriptions using manner-of-motion verbs and satellite constructions. For example, expressions such as "The road goes through the valley" were transformed into more vivid constructions such as "The road winds through the valley" or "The trail climbs along the mountain ridge."

The post-test repeated the initial descriptive writing task in order to evaluate changes in learners' use of fictive motion expressions, lexical richness, and spatial organization.

Quantitative analysis focused on the frequency of FM constructions, variety of manner-of-motion verbs, and use of satellite-framed structures. Lexical richness was measured through type-token ratio and descriptive diversity. Qualitative analysis examined conceptual patterns, spatial construal strategies, and evidence of reduced L1 transfer in students' writing.

The collected data were statistically analyzed using comparative descriptive analysis and paired sample evaluation techniques in order to determine differences between the control and experimental groups.

Results

The results of the study demonstrated that embodied instruction had a significant positive effect on the acquisition of English fictive motion constructions among Uzbek EFL learners. Comparative analysis of the pre-test and post-test data revealed considerable differences between the experimental and control groups in terms of lexical vividness, spatial description, and the use of satellite-framed motion constructions.

The pre-test findings showed that both groups initially demonstrated limited use of fictive motion expressions in descriptive writing tasks. Most participants

relied on simple and static verbs such as “go,” “be,” “pass,” and “run” when describing landscapes, roads, rivers, and spatial scenes. Many students produced direct conceptual transfers from Uzbek into English, resulting in descriptions that were grammatically acceptable but conceptually static. Typical sentences included expressions such as “The road goes to the village,” “The river is in the forest,” and “The mountain road passes down.” These examples reflected the influence of Uzbek verb-framed conceptualization patterns, in which path information is commonly emphasized while manner information remains less elaborated. In addition, learners rarely employed vivid manner-of-motion verbs or dynamic satellite constructions during the pre-test stage.

The lexical analysis of the pre-test writings indicated relatively low lexical diversity in both groups. Students frequently repeated basic motion verbs and produced descriptions lacking figurative elaboration or dynamic spatial imagery. The frequency of fictive motion constructions was minimal, and learners generally avoided metaphorical descriptions involving mental simulation or imagined movement.

Following the six-week instructional intervention, the post-test results demonstrated substantial improvement in the experimental group compared to the control group. Students who participated in embodied instructional activities produced significantly more vivid and dynamic spatial descriptions. Their writing included a greater variety of manner-of-motion verbs such as “wind,” “snake,” “crawl,” “stretch,” “climb,” and “curve.” The post-test compositions contained expressions such as “The narrow road winds through the mountains,” “The river snakes across the valley,” “The path climbs toward the snowy hills,” and “The railway cuts through the forest.” These constructions reflected enhanced mental simulation processes and improved conceptualization of spatial movement in English.

By contrast, the control group continued to rely mainly on literal and static descriptions. Although some improvement in vocabulary usage was observed after traditional instruction, the level of figurative and embodied language remained comparatively limited. Sentences such as “The road goes through the mountain” and “The river passes the forest” continued to dominate their written descriptions.

The findings also revealed a noticeable increase in lexical richness within the experimental group. Students exposed to embodied instructional techniques demonstrated greater lexical variety and reduced repetition of basic motion verbs. The type-token ratio in the post-test writings increased considerably, indicating improved lexical diversity and more sophisticated descriptive expression. Furthermore, the students displayed stronger figurative competence by producing descriptions that guided the reader’s visual attention more effectively and created a stronger sense of movement within static scenes.

The embodied instructional activities, particularly drawing tasks and mental path simulation exercises, appeared to strengthen learners’ ability to conceptualize landscapes dynamically. Students became more capable of transforming static visual information into vivid linguistic representations. The visual and cognitive engagement encouraged learners to perceive roads, rivers, and pathways as dynamic trajectories rather than static objects.

The results additionally suggested a reduction in negative conceptual transfer from Uzbek into English. Before the intervention, many participants transferred Uzbek verb-framed structures directly into English descriptions. However, after embodied instruction, the experimental group demonstrated greater awareness of English satellite-framed constructions and more frequent use of prepositional path markers such as “through,” “across,” “along,” “into,” and “down.” This shift indicated that learners had begun adapting to English motion-event

conceptualization patterns instead of relying exclusively on Uzbek spatial encoding strategies.

The findings further showed that embodied pedagogy positively influenced learners' spatial reasoning abilities. During the post-test stage, students in the experimental group produced descriptions with clearer trajectory organization, stronger scene continuity, and more coherent spatial sequencing. Many participants reported that visualization and mental scanning activities helped them mentally "see" movement within static scenes. Drawing-based exercises also increased learners' attention to directionality, path structure, and environmental interaction.

Overall, the study demonstrated that embodied instruction significantly improved Uzbek EFL learners' acquisition of English fictive motion constructions. The experimental group showed increased use of fictive motion expressions, greater lexical vividness, enhanced figurative competence, improved spatial reasoning, and reduced negative L1 conceptual transfer. These findings support the assumptions of embodied cognition theory and suggest that cognitive-based instructional approaches can substantially improve descriptive writing and spatial conceptualization in second language learning contexts.

## Conclusion

This study examined the role of embodied instruction in the acquisition of English fictive motion constructions among Uzbek EFL learners. The findings showed that typological differences between Uzbek and English strongly influence learners' spatial descriptions and often lead to static and literal writing patterns caused by L1 conceptual transfer.

The results demonstrated that embodied instructional activities such as visualization, mental scanning, drawing tasks, and sentence transformation significantly improved students' use of fictive motion expressions, lexical richness,

and figurative competence. Learners in the experimental group produced more vivid and dynamic spatial descriptions and showed greater awareness of English satellite-framed constructions.

The study confirms that second language learning involves not only grammatical knowledge but also cognitive and conceptual restructuring. By activating universal image schemas and mental simulation processes, embodied instruction helps learners conceptualize space more effectively in English. Therefore, integrating cognitive-based teaching methods into EFL classrooms may improve descriptive writing and figurative language production among Uzbek learners of English.

Reference

1. Leonard Talmy Toward a Cognitive Semantics. Vol. 1. – Cambridge, MA: MIT Press, 2000.

2. George Lakoff, Mark Johnson Metaphors We Live By. – Chicago: University of Chicago Press, 1980.

3. Dan Slobin The Many Ways to Search for a Frog: Linguistic Typology and the Expression of Motion Events // Relating Events in Narrative. – 2004. – P. 219–257.

4. Raymond Gibbs Embodiment and Cognitive Science. – Cambridge: Cambridge University Press, 2006.

5. Zoltán Kövecses Metaphor: A Practical Introduction. – Oxford: Oxford University Press, 2010.

6. Majidova D.S., Usmonova D.S. Tavsifiy yozuv ko‘nikmalarini o‘rgatishda xayoliy harakat metaforalarining roli // World of Science. – 2025. – Vol. 8. – №12.