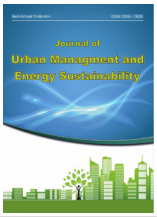
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Identifying and Explaining the Components of Vista Quality in Residential Complexes: A Case Study of the Kowsar Neighborhood (Kuy-e Kowsar), Arak

Omid Fathi[1], Susan Habib[1]*, Saeed Mirriahi[2], Amirhossein Garakani[3]

1 Department of Architecture, Taf.C., Islamic Azad University, Tafresh, Iran*

2 Department of Architecture, Shahid Beheshti University, Tehran, Iran

3 Department of Architecture, CT.C., Islamic Azad University, Tehran, Iran

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ABSTRACT

Vista, the perceived quality of a resident's visual connection with the outdoor environment through a window or balcony constitutes a meaningful yet underexplored dimension of residential experience. While prior research has addressed isolated components such as view content, visual access, clarity, window characteristics, natural elements, and perceived values, a coherent multidimensional framework integrating these components within a residential-complex context, particularly in Iran, remains underdeveloped. This qualitative study aims to identify and conceptually organize the components of vista quality in residential complexes, using Kuy-e Kowsar complex in Arak as the empirical setting. Data were collected through semi-structured interviews with 13 purposively selected experts in architecture, urban planning, and landscape architecture. Thematic analysis was conducted through iterative reading of transcripts, extraction of meaning units, generation and consolidation of initial codes, and progressive theme formation. Analysis yielded 62 consolidated codes, 14 sub-themes, and 3 main themes: (1) physical and perceptual components shaping vista quality, (2) human experience and perceived values associated with vista, and (3) contextual factors affecting perceived vista value. The interpretive synthesis suggests that vista quality emerges from the relational interplay among what is seen, how it is seen, the observer's characteristics, and the observational context. The proposed framework is exploratory rather than causal or empirically tested, and its primary contribution lies in organizing previously scattered components into a context-sensitive structure applicable to residential complexes. Validation through residents' lived experience and preferences is identified as a direction for future research.

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*Corresponding Author:
Email: *Susan.habib@iau.ac.ir*
Phone: 00988636238502
ORCID: https://orcid.org/0000-0002-0918-6978

INTRODUCTION

Housing is not merely a shelter meeting physical needs; it is an environment in which a substantial part of daily activity, environmental perception, and the experience of dwelling take shape. Assessing the quality of the residential environment therefore extends beyond floor area and construction quality to the qualities of the relationship between the dwelling and its surroundings. Among these, the visual connection of the resident with the outdoor environment the view experienced from inside the unit through a window or balcony is an important yet under-theorized dimension of the residential experience (Ulrich, 1984; Kaplan, 2001). To avoid conceptual conflation, this study distinguishes between landscape, view, and vista. Landscape refers to the totality of the external environment and outlook at a broad spatial scale; view denotes what is visible from a given position; and vista, as used here, denotes the directed, framed visual relationship between the resident and the outside, mediated by the window or balcony. Vista quality is thus not reduced to the presence of a beautiful scene within the field of view but concerns the quality of the visual relationship between observer and outdoor environment a quality that can be shaped by view content, visual access, clarity, the physical characteristics of the window and its surroundings, natural elements, and a range of perceived values (Ko et al., 2022a; Abd-Alhamid et al., 2023). Recent empirical research has extended this topic from several angles. Matusiak and Klöckner (2016) showed that the evaluation of a window view is associated with factors such as viewing distance, the number of view layers, and the quality and composition of elements, while Lin et al. (2022) demonstrated that the presence of natural elements, the number of view layers, and distant elements can relate to view preference. Masoudinejad and Hartig (2020) found that the amount of visible sky and greenery relates to perceived restorativeness, and more recent work has connected view features not only to visual structure and content but also to user satisfaction and the quality of environmental experience (Ko et al., 2023; Samaan et al., 2024). The literature thus indicates that view quality is a multidimensional phenomenon that cannot be reduced to a single index such as view extent or scenic beauty (Inglis et al., 2022). This issue becomes more salient in residential complexes, where the position of the unit relative to other blocks and open spaces, height and level differences, building orientation, distances, and visual privacy simultaneously shape the view. Moreover, vista quality cannot be considered fully independent of the characteristics of place and observer: the quality of a view may relate to climate, the natural and physical features of the environment, and the cultural and individual background of the observer (Rapoport, 2005; Norberg-Schulz, 1980). A framework for studying vista quality in the residential environment must therefore attend simultaneously to the features of the view itself and to the context in which the view is experienced and evaluated. Despite the expansion of international research on window-view quality, an important problem remains: how can the diverse set of physical, content-related, perceptual, and contextual features be organized within a coherent framework for understanding vista quality in residential complexes? Existing studies have each addressed part of this problem—through measuring view content, geometric characteristics, element quality, visual access, or perceptual outcomes—but a unified conceptual structure is still needed for the residential-complex context, especially where physical structure, topography, visual privacy, natural and urban content, and perceptual experience are simultaneously at play. In the Iranian context, although studies on residential satisfaction and environmental quality exist (Taher Tolou Del et al., 2017; Hosseinabadi, 2023; Akbarian Rounizi, 2018; Zangeneh et al., 2019; Zohreh & Rezaei, 2020), and although the perception of urban visual corridors has been examined (Zabetian Targhi & Razi, 2022), most have addressed the overall quality of the residential

environment rather than treating the view from within the dwelling as an independent, multidimensional phenomenon. Given the exploratory nature of this problem, the present study as a first step draws on the perspective of experts in architecture, urban planning, and landscape architecture rather than measuring residents' lived experience, in order to identify and organize the components of vista quality and to provide a conceptual basis for a subsequent, resident-focused stage. Accordingly, the objective of the study is to explain the components of vista quality in residential complexes through thematic analysis of expert perspectives and to organize them within a conceptual framework; the research question is: which components constitute vista quality in residential complexes, and how can they be organized into a coherent, context-sensitive structure? The Kuy-e Kowsar complex in Arak is selected as the empirical setting so that these components can be identified in relation to the real physical and contextual characteristics of a residential complex. The significance of this focus is heightened in the residential complex, which has become a dominant housing type in rapidly urbanizing Iranian cities such as Arak. In such developments, dwellings are stacked and clustered, outdoor space is shared and bounded, and the view available to any given unit is largely fixed at the design stage by the position, height, and orientation of blocks. Unlike a detached dwelling, whose occupants can often modify their relationship to the outside, a resident of a complex inherits a vista determined by decisions made before occupancy. Understanding and, ultimately, deliberately designing vista quality therefore has direct consequences for the everyday visual experience of large numbers of residents, and for the equitable distribution of a scarce environmental resource among them. This practical stake motivates the present attempt to move from a scattered list of view attributes toward an organized, design-relevant framework.

MATERIALS AND METHODS

Landscape, view, vista, and visual quality

Defining the research object requires distinguishing the concepts of landscape, view, vista, and visual quality, which, despite their close relationship, differ in scope and level of analysis. In some architectural and urban-design usages, "vista" refers to a directed, framed view possessing an axis or visual focus; in Gordon Cullen's townscape approach, vista is associated with the sequential organization of urban space (Cullen, 1961). The object of the present study is therefore not the overall quality of the landscape, the quality of the complex's green space, or the general quality of open space, but the quality of the visual relationship between the dwelling and the outside examined, in the contemporary window-view literature, through the content of the view, the degree of visual access, and the clarity of observation (Ko et al., 2022a). This concern has long roots in design theory for example in the attention to windows and outlook in pattern-based design (Alexander et al., 1977) and in evidence on the physiological and psychological effects of windows, daylight, and view at home (Veitch & Galasiu, 2012). It is also increasingly supported by computational tools for early-design view-satisfaction evaluation (Kim et al., 2022), by automated green-window-view indices (Bolte et al., 2024), and by studies of the landscape quality of residential communities (Qiao et al., 2023).

Vista as the connection between inside and outside

In residential architecture, the window and balcony are not merely functional elements of the building envelope; they are mediators between the private domain of dwelling and the external environment. Through these elements the resident maintains a visual relationship with the outside. In this framework, vista quality is not an independent property of an external scene but emerges from the interaction among several categories of factor: the characteristics of the external environment, the observer's position, the physical organization of the building, and the mode of

perception and evaluation. The framework of Ko et al. (2022a) formulates window-view quality in three main components view content, view access, and view clarity which, together with the physical–spatial structure of the view and the individual and cultural conditions of the observer, address five questions: what is seen; how much of it is visible; with what clarity; within what physical and spatial structure; and under what individual, cultural, and environmental conditions it is evaluated (Ko et al., 2022b). Vista is thus a relational phenomenon: its quality is located neither solely in the external environment nor solely in the observer's mind, but in the relation among environment, architectural mediator, and the experience of observation.

Sensitizing theories of perception and experience of vista

Classic theories are used here as sensitizing frameworks rather than as models that pre-determine the outcome of the thematic analysis. The study does not test these theories against the data; rather, each directs attention to a family of components that might otherwise be overlooked, and each is later seen to illuminate particular sub-themes of the framework. Prospect–refuge theory explains preferred environmental experience through two complementary needs the possibility of observing and being aware of the environment (prospect), and a sense of protection or refuge (Appleton, 1975). For the present study it sharpens attention to the relationship among openness, obstruction, enclosure, and visual privacy in the residential unit: a view offering extensive prospect may simultaneously erode refuge, so that a desirable vista is often one that balances the two. Phenomenology of place emphasizes the relationship among the human being, the physical environment, and the meaningful qualities of place, treating place as more than a set of physical elements (Norberg-Schulz, 1980; Relph, 1976; Tuan, 1977); Pallasmaa (2012), criticizing the reduction of architectural experience to the purely visual, stresses the embodied, multisensory nature of spatial experience. This lens motivates attention to the identity, belonging, and multisensory sub-themes, and to the possibility that natural elements, urban signs, and landmark features carry meaning and identity value beyond their visual appearance. Townscape theory examines environmental quality in relation to the sequential experience of space, the change of view, and the visual organization of the environment (Cullen, 1961); it cautions that view quality cannot be attributed to isolated elements in the field of view but depends on the arrangement of elements and the relationship between foreground and background. However, Cullen's serial-vision concept is not identical to the operational "view from a window or balcony" used here, so townscape theory informs, rather than defines, the study's notion of vista. The theory of imageability emphasizes the legibility of the environment and the formation of a mental image of urban structure through landmarks, paths, edges, nodes, and districts (Lynch, 1960), suggesting that part of a view's value lies in the recognizability and meaningfulness of what is seen. Finally, attention-restoration theory underscores the capacity of certain natural environments to reduce cognitive load and support the restoration of attention (Kaplan & Kaplan, 1989; Kaplan, 2001). In this study, nature is treated not as the sole determinant of a desirable vista but as one type of view content that may act alongside distance, composition, and structure.

Review of related empirical studies

Table 1 summarizes ten empirical studies that inform the present research, together with their focus, method, principal components, and relevance. Collectively, these studies show that view quality is a multidimensional construct requiring both objective and subjective assessment methods, and that natural content, view layering, distance, geometry, and the observer's context recur as influential factors. (Tab. 1)

Table 1: Review of related empirical studies on window-view and vista quality.

Study	Focus	Method / sample	Principal components	Key finding
Matusiak & Klöckner (2016)	Window-view evaluation	View assessment & statistical analysis	Distance, view layers, element quality & composition	Distance, number of layers, and element quality/composition relate to view-quality evaluation
Masoudinejad & Hartig (2020)	Sky view & restorativeness	Assessment of window-view images	Sky and greenery	More visible sky and greenery relate to perceived restorativeness
Ko et al. (2022a)	Window-view quality framework	Literature review & integration	Content, access, clarity	View quality formulated in three domains: content, access, clarity
Ko et al. (2022b)	Importance of view quality	Expert synthesis & review	Physical, social & cultural factors	View quality is subjective and context-dependent
Drobne et al. (2022)	Perception of near-façade views	Image & view assessment	Distance, adjacent façade, greenery	Limited view layers and short distance can elicit a negative response
Fikfak et al. (2022)	Greenery & imageability	View analysis & perceptual assessment	View layers, distance, greenery	The mode of presence of natural elements and view structure matter for perceiving nature
Abd-Alhamid et al. (2023)	Review of view-quality methods	Review	Content, window geometry, view size, position, privacy	View quality is multidimensional and needs both objective and subjective methods
Samaan et al. (2024)	Visual features & naturalness	Analysis of real home-view images	Image visual features & naturalness	Certain low-level visual features relate to perceived naturalness and related outcomes
Akbari et al. (2025)	Balcony visual preferences, Tehran	Photography, Delphi & questionnaire	Position, geometry, area, parapet & balcony features	Preferences from inside and outside perspectives were not identical
Taher Tolou Del et al. (2017)	Residential satisfaction (physical & landscape)	Survey of Mehr-housing residents, Tehran	Physical & landscape components	Landscape dimensions figure in evaluating residential-environment quality

Case study: The Kuy-e Kowsar complex, Arak

The Kuy-e Kowsar complex, located on the western edge of Arak against a backdrop of foothills, was selected as the empirical setting of the study. As a contemporary residential complex combining mid- and high-rise blocks with open and green spaces and framed by a distinct natural (mountain) horizon, it offers a setting in which the physical organization of blocks, level differences, orientation, visual privacy, and both natural and urban view content are simultaneously present precisely the conditions under which vista quality becomes a multidimensional phenomenon. The complex is instructive for two reasons. First, its peripheral, foothill location means that many units command a genuine natural horizon the mountains and open land visible in (Fig. 3) while others, oriented inward, depend on the complex's own courtyards and planting for their view content; the same development therefore contains the full range from distant-natural to near-built vistas that the framework must accommodate. Second, its layout of parallel and clustered blocks (Fig. 1b) creates pronounced differences in visual access and privacy between otherwise identical units, making it a clear illustration of view provision as a masterplan-scale variable. (Fig. 1a) present the

location, the masterplan, and a panoramic view of the complex, respectively. (Fig. 1c)

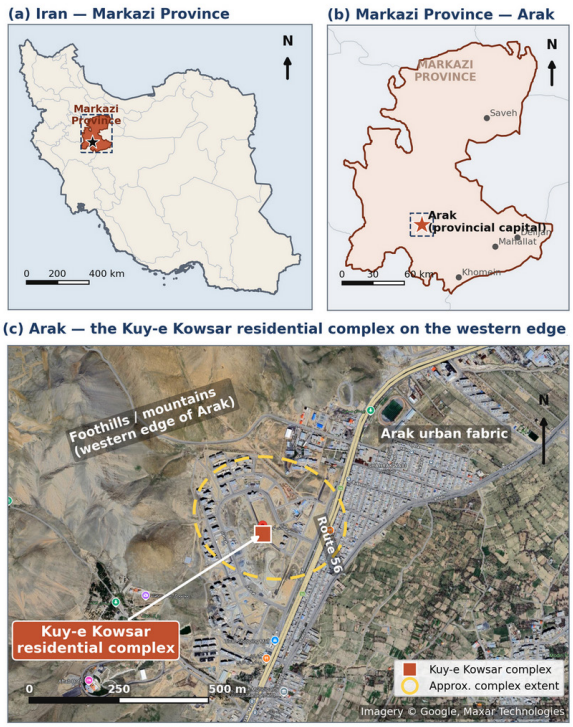


Figure 1: Location of the Kuy-e Kowsar complex, Arak (Iran), Aerial masterplan of the Kuy-e Kowsar residential complex and Panoramic view of the Kuy-e Kowsar complex against the mountain backdrop, illustrating the natural horizon that frames residents' vistas

Participants

Participants were selected purposively on the basis of professional knowledge and experience relevant to the design and evaluation of residential environments. Thirteen experts took part, distributed across architecture, urban planning, and landscape architecture, as shown in (Tab. 2). The composition reflects the multidimensional nature of vista, which spans architectural, urban, and landscape considerations.

Data collection

Data were collected through semi-structured interviews. The interview guide addressed the concept of vista, its constituent components, the physical and perceptual factors shaping it in residential complexes, and the contextual conditions affecting its perceived value. Interviews continued until the analysis reached thematic saturation, at which point additional interviews no longer produced new codes or sub-themes. A semi-structured format was chosen so that the core topics could be covered consistently while leaving room for each expert to introduce considerations specific to their discipline architects tending to elaborate the framing and physical organization of the view, urban planners the arrangement of blocks and the equity of access, and landscape architects the natural content and its restorative and aesthetic value. Interviews were conducted individually, opened with the operational definition of vista to align understanding, and then moved from general reflections on what makes a view valuable to specific probing of the physical, experiential, and contextual factors involved. Prompts such as “what distinguishes a good view from a merely open one?” and “how should a complex be organized so that its views are distributed fairly?” were used to elicit detail without steering participants toward the sensitizing theories. The complex itself, familiar to the participants, served as a shared referent that grounded otherwise abstract discussion in a concrete setting.

Thematic-analysis procedure

Data were analysed using reflexive thematic analysis (Braun & Clarke, 2021; Byrne, 2022), following the eight steps summarized in (Tab. 3) from repeated reading of the transcripts and extraction of meaning units, through the generation and comparison of initial codes and the formation and review of themes, to the final definition and naming of themes.

Table 2: Composition of the expert panel (n = 13).

Field of expertise	Number
Architecture, design, and building-engineering practice	8
Urban planning	3

Landscape architecture	2
Total	13

Table 3: Steps of the thematic-analysis process.

Step	Process
1	Repeated reading of the full interview transcripts for deep familiarity with the data
2	Identifying and extracting meaning units relevant to the research question
3	Generating initial codes from the meaning units
4	Comparing initial codes and identifying similarities, differences, and relationships
5	Merging or splitting related codes to form more coherent meaning sets
6	Examining recurring patterns and forming initial themes
7	Reviewing initial themes against their constituent codes and the original transcripts
8	Refining boundaries, defining and naming themes, and finalizing the theme structure

Trustworthiness and rigour

Several measures were taken to support the trustworthiness of the analysis. Credibility was pursued through purposive selection of experts with demonstrable knowledge of residential design and through the iterative comparison of codes against the original transcripts (steps 4 and 7 in Table 3). Dependability and confirmability were supported by maintaining an audit trail linking each theme to its constituent codes and to illustrative raw data, a sample of which is reported in Table 5, so that the path from data to interpretation can be inspected. Coding continued until thematic saturation, defined as the point at which further interviews yielded no new codes or sub-themes; the stabilization of the 62-code, 14-sub-theme structure across the final interviews was taken as evidence that saturation had been reached. Consistent with a reflexive stance, the sensitizing theories were used to interrogate rather than to confirm the data, and the analyst's interpretive role is acknowledged as part of, not a threat to, the analysis (Braun & Clarke, 2021; Byrne, 2022).

Experts' standing and the limits of interpretation

Because the data derive from experts rather than residents, the findings represent experts' views on vista quality and should not be equated with residents' direct experience or actual satisfaction. Perceived values such as calm, belonging, or satisfaction that experts attribute to vista are treated here as expert propositions to be examined, in a later independent stage, with residents in the real dwelling context. This distinction clarifies the scope of the study's claims: an exploratory stage with experts → extraction of components → organization of a conceptual framework → subsequent use with residents.

FINDINGS AND DISCUSSION

From codes to themes

Analysis of the interviews with the 13 experts produced 62 consolidated initial codes, 14 sub-themes, and 3 main themes. The three main themes form three related but non-causal domains of meaning: first, the features and spatial–perceptual organization associated with the formation of vista; second, the human experience and perceived values that experts attribute to vista; and third, the contextual conditions associated with how vista is preferred and valued. This structure is not interpreted as a sequence of stages or a causal chain but as the organization of themes extracted from the interview data. (Tab. 4) presents the three main themes and their fourteen sub-themes, and (Fig. 2) depicts the resulting framework.

Table 4: Three main themes and fourteen sub-themes of vista quality.

Main theme	Sub-themes
1. Physical and perceptual components shaping vista quality	1. Multidimensional, sensory and perceptual nature of the view; 2. Inside–outside visual connection and view framing; 3. Geometric structure and organization of the view; 4. Physical organization of the complex for view provision; 5. Openness, enclosure, obstruction and visual privacy
2. Human experience and perceived values associated with vista	6. Nature and natural elements as desirable view content; 7. Built intervention and re-created nature in the complex; 8. Visual–aesthetic quality and dynamism of the view; 9. Natural light, climate and environmental comfort; 10. Calm, mental health and satisfaction; 11. Vitality, social interaction and environmental security; 12. Legibility, identity, belonging and memorability
3. Contextual factors affecting the perceived value of vista	13. Individual, cultural and lifestyle differences in view preference; 14. Economic value, visual justice and conditions for realizing a desirable view

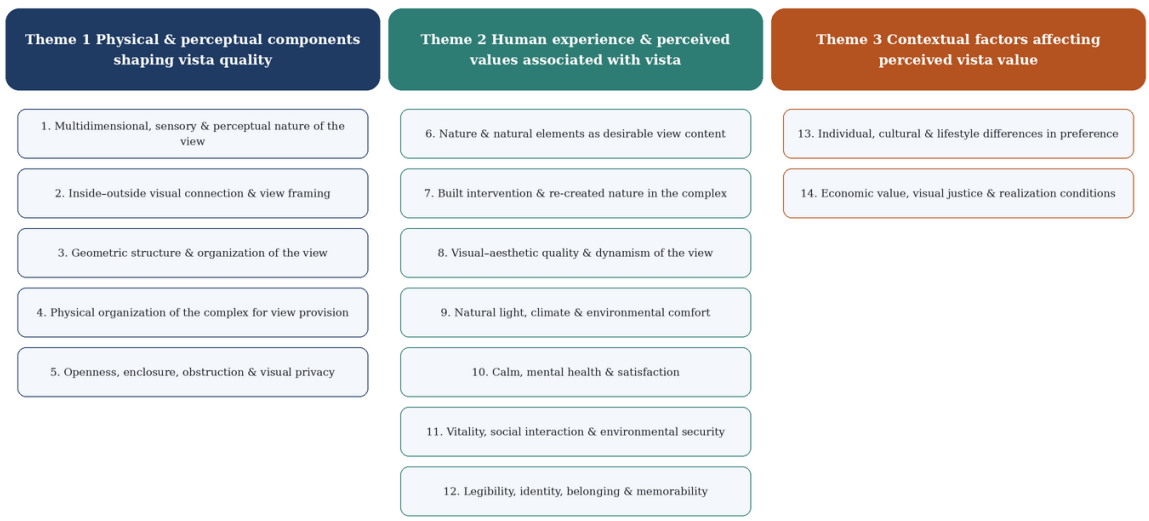


Figure 2: Framework of vista-quality components in residential complexes (three main themes and fourteen sub-themes).

The formation of the structure proceeded from the bottom up. Meaning units extracted from the transcripts were first rendered as a large number of granular codes; through comparison and consolidation merging near-duplicates and splitting codes that conflated distinct ideas these were reduced to 62 consolidated codes. Codes that recurred and cohered around a shared idea were then grouped into 14 sub-themes, which in turn clustered into the three main themes by the level at which they addressed vista: as an organizable object (Theme 1), as a source of experienced value (Theme 2), or as a context-dependent judgement (Theme 3). The relatively large number of codes feeding a moderate number of sub-themes reflects the richness and repetition in the expert accounts, and the stabilization of this structure across the final interviews was the basis for concluding that saturation had been reached.

Trace from raw data to theme

To make the analytic process transparent, Table 5 provides illustrative traces from raw interview data through the initial (consolidated) code and sub-theme to the main theme, demonstrating how expert statements were transformed into the framework's components. Each row shows a

single evidential path; in the full analysis, most sub-themes were supported by several such paths drawn from different interviews, which is what distinguishes a stable sub-theme from an isolated remark. (Tab. 5)

Table 5: Illustrative trace from raw data to code, sub-theme, and main theme.

Main theme	Data / concept in interview	Initial (consolidated) code	Sub-theme
Physical and perceptual components	Window and balcony as the main channel of inside–outside connection	Window and balcony as visual-connection mediator	Inside–outside visual connection and view framing
	Importance of the opening's placement and characteristics for view quality	Importance of the opening and its placement for view quality	Inside–outside visual connection and view framing
	Emphasis on depth and extent of the view	Depth and breadth of view	Geometric structure and organization of the view
	Reference to sound, birds and water alongside the visual scene	Multisensory nature of the landscape experience	Multidimensional, sensory and perceptual nature of the view
Contextual factors	Difference in attitudes of traditional and modern residents toward openness	Cultural difference in preference for openness vs. privacy	Individual, cultural and lifestyle differences in preference

Theme 1- Physical and perceptual components shaping vista quality

The first main theme gathers the physical and perceptual features through which vista is formed, and comprises five sub-themes. Its constituent sub-themes were the most frequently coded across the interviews, indicating that experts locate the starting point of vista quality in the tangible, organizable features of the view before its experiential value is considered. The first sub-theme, the multidimensional, sensory, and perceptual nature of the view, captures the experts' insistence that vista is not a purely optical phenomenon. Several participants noted that the experience of looking out is accompanied by sound (birdsong, water, wind), by the movement of foliage and people, and by changing light and atmosphere; a view is therefore evaluated as a temporally dynamic, multisensory episode rather than a static picture, a position that echoes Pallasmaa's critique of the reduction of architectural experience to vision alone (Pallasmaa, 2012). The second sub-theme, the inside–outside visual connection and the framing of the scene, foregrounds the window and balcony as the architectural mediators that establish and delimit the visual relationship. Experts stressed that the placement, proportion, and detailing of the opening determine what is admitted into the field of view and how it is composed, so that the same external scene can yield very different vistas depending on how it is framed. The third sub-theme, the geometric structure and organization of the view, concerns depth, breadth, the number of visible layers, and the viewing angle. Consistent with the window-view literature, participants associated higher-quality vistas with greater depth and a legible layering of foreground, middle-ground, and background, and with viewing angles that open the scene rather than confining it (Matusiak & Klöckner, 2016; Lin et al., 2022). The fourth sub-theme, the physical organization of the complex for view provision, extends this concern from the single unit to the scale of the complex: the arrangement and spacing of blocks, their orientation, and level differences were seen as decisive in determining which units receive valued views and which are blocked by neighbouring buildings making view provision a design variable of the masterplan it-

self (Ko et al., 2023). The fifth sub-theme, openness, enclosure, obstruction, and visual privacy, gathers the tension that prospect–refuge theory anticipates (Appleton, 1975): experts observed that a highly open view can simultaneously compromise a resident's sense of protection and privacy, so that desirable vistas balance visual access with an appropriate degree of enclosure and control over being seen.

Theme 2 - Human experience and perceived values associated with vista

The second and largest main theme gathers the experiential and value-laden qualities that experts attribute to vista, across seven sub-themes. Where the first theme describes the view as an object that can be organized, this theme describes what a good view is taken to do for the resident and it is here that the experts move from description to attributed value, a move whose interpretive status is discussed below. Nature and natural elements (sub-theme 6) were identified as the paradigm of desirable view content sky, greenery, water, and vegetation consistent with attention-restoration and restorative-environment research (Kaplan & Kaplan, 1989; Kaplan, 2001; Masoudinejad & Hartig, 2020) and with recent work quantifying visible greenery from streets and apartments (Chen et al., 2022; Liu et al., 2023; Xiao et al., 2021; Das et al., 2025). Complementing this, built intervention and the re-creation of nature within the complex (sub-theme 7) recognizes that, where distant natural views are unavailable, deliberately designed courtyards, planting, and water features can supply part of the valued content—turning the complex's own open space into a source of vista. The visual–aesthetic quality and dynamism of the view (sub-theme 8) concerns composition, colour, seasonal change, and movement, which experts associated with sustained rather than momentary visual interest. Natural light, climate, and environmental comfort (sub-theme 9) links vista to the daylighting and micro-climatic performance of the opening, so that a view is valued partly for the light and environmental quality it admits. The remaining sub-themes concern the psychological and social values attributed to vista: calm, mental health, and satisfaction (sub-theme 10), which experts related most strongly to natural and restorative content; vitality, social interaction, and environmental security (sub-theme 11), in which overlooking active, populated outdoor space was linked to liveliness and to a sense of surveillance and safety; and legibility, identity, belonging, and memorability (sub-theme 12), whereby a view containing recognizable landmarks, natural features, or distinctive elements contributes to orientation and to attachment to place (Lynch, 1960; Norberg-Schulz, 1980; Relph, 1976). It should be emphasized that these are values that experts attribute to vista and not measured resident outcomes; their empirical verification is left to a subsequent stage.

Theme 3 - Contextual factors affecting the perceived value of vista

The third main theme gathers the contextual conditions that modulate how vista is preferred and valued, across two sub-themes. Its role in the framework is to prevent the components of the first two themes from being read as universal or fixed: the same physical view, with the same attributed values, may be evaluated differently depending on who is looking and under what conditions. Individual, cultural, and lifestyle differences in view preference (sub-theme 13) captures the experts' observation that residents differ systematically in what they value most vividly in differing attitudes toward openness and privacy among more traditional and more modern households so that a view prized by one resident may be experienced as exposure by another. This accords with cultural readings of the built environment (Rapoport, 2005) and with evidence that view preferences assessed from inside and outside a dwelling need not coincide (Akbari et al., 2025). Economic value, visual justice, and the conditions for realizing a desirable

view (sub-theme 14) links vista to the market—experts noted that access to a good view is capitalized into property value and, in turn, to questions of equity: because view quality is a scarce and unevenly distributed resource within a complex, its allocation raises concerns of visual justice that designers and decision-makers should address rather than leave to chance. Together, the two sub-themes frame vista quality as co-determined by observer and socio-economic context, not as an intrinsic property of the external scene.

The conceptual framework

Taken together, the three themes and their sub-themes support a relational reading of vista quality, summarized in (Fig. 3): quality emerges in the relation among what is seen (view content), how it is seen (access, geometry, clarity, openness and privacy), the observer (individual, cultural and lifestyle characteristics), and the context (the complex's layout, climate, topography, and economic and visual-justice conditions). This relational model is exploratory and organizational rather than causal or tested.

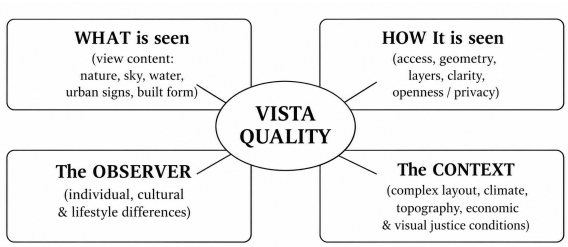


Figure 3: Relational model of vista quality: what is seen, how it is seen, the observer, and the context.

RESULTS AND CONCLUSION

The overall synthesis of the findings indicates that vista quality cannot be reduced to a single attribute such as view extent, the presence of green space, or scenic beauty. Rather, at least at the level of expert views, it is a multidimensional and context-sensitive construct spanning physical–perceptual features, experiential values, and contextual conditions. This result both corroborates and extends the international literature. The three-domain content–access–clarity formulation of Ko et al. (2022a) is reflected in the first main theme, but the present framework broadens it by explicitly incorporating the physical organization of the residential complex, visual privacy, and the multisensory nature of the experience. The salience of natural content echoes Masoudinejad and Hartig (2020) and Fikfak et al. (2022), while the emphasis on individual and cultural difference aligns with Ko et al. (2022b) and with balcony-preference findings that inside- and outside-oriented preferences need not coincide (Akbari et al., 2025). Read against individual studies, the framework both absorbs and re-situates their findings. The distance-, layer-, and composition-based account of view evaluation (Matusiak & Klöckner, 2016) and the quantitative–qualitative content factors of view preference (Lin et al., 2022) map onto the geometric-structure and content sub-themes of Themes 1 and 2; the near-façade findings that short viewing distance and few layers elicit negative responses (Drobne et al., 2022) inform the openness–obstruction sub-theme; and the imageability of greenery (Fikfak et al., 2022) and the restorative role of sky (Masoudinejad & Hartig, 2020) sit within the nature and legibility sub-themes. Geometric view-access modelling (Ko et al., 2023) and early-design satisfaction tools (Kim et al., 2022) correspond to the physical-organization sub-theme, while the multidimensional-review position that view quality needs both objective and subjective assessment (Abd-Alhamid et al., 2023) is precisely what the three-domain structure is designed to hold together. What the present framework adds is the explicit contextual theme individual and cultural difference, economic value, and visual justice that these largely perceptual and geometric studies leave implicit.

Conceptually, the contribution of this study is integrative rather than enumerative. Its value lies not in the separate discovery of components many of which appear individually in prior work but in organizing them into a single, context-sensitive

framework for the residential-complex scale, and in articulating the relation among what is seen, how it is seen, the observer, and the context (Fig. 5). This positions vista as a relational phenomenon located in the interaction among environment, architectural mediator, and observation, consistent with phenomenological accounts of place (Norberg-Schulz, 1980; Pallasmaa, 2012) and townscape reasoning (Cullen, 1961). For the Kuy-e Kowsar setting specifically, the framework foregrounds how the mountain horizon, the arrangement of blocks, and the balance between openness and privacy jointly condition the vistas available to residents. A methodological observation reinforces this reading. The three main themes were not imposed by the sensitizing theories but emerged from the consolidation of 62 codes; the theories prospect–refuge, phenomenology of place, townscape, imageability, and attention restoration functioned as lenses that sharpened attention to particular sub-themes (openness and privacy; identity and belonging; sequential organization; legibility; and natural restorativeness, respectively) without pre-determining the outcome. This reflexive stance (Braun & Clarke, 2021; Byrne, 2022) is what allows the framework to accommodate components, such as the economic value of a view and visual justice, that none of the classic theories anticipates but that experts repeatedly raised. Finally, the framework is offered as analytically transferable rather than statistically generalizable. Although grounded in a single complex, its three domains and the relational model of Figure 5 are formulated at a level of abstraction that should apply to other multi-block residential settings, subject to re-specification of the contextual sub-themes for each climate, culture, and market. The Kuy-e Kowsar case is, in this sense, an instance through which the components were surfaced and organized, not the limit of their relevance. At the results, this study set out to identify and explain the components of vista quality in residential complexes, focusing on the Kuy-e Kowsar complex in Arak, with vista defined operationally as the perceived quality of the resident's visual connection with the outdoor environment through a window or balcony. Semi-structured interviews with 13 experts in architecture, urban planning, and landscape architecture were analysed thematically, yielding 62 consolidated codes, 14 sub-themes, and 3 main themes: physical and perceptual components, human experience and perceived values, and contextual factors. The interpretive synthesis frames vista quality as emerging in the relation among what is seen, how it is seen, the observer, and the context of observation. Several practical implications follow from the framework and are offered here as integrated recommendations. In designing residential complexes, the arrangement of blocks, orientation, and level differences should be treated as instruments of view provision, so that units are afforded meaningful visual access to valued content sky, greenery, water, and the natural horizon while respecting visual privacy; openings should be positioned and proportioned to frame these vistas deliberately rather than incidentally. Where distant natural views are unavailable, the deliberate re-creation of nature within the complex courtyards, planting, and water features can substitute part of the desirable view content. Because preferences vary with culture and lifestyle, and because a good view carries economic value, designers and decision-makers should also attend to visual justice, distributing access to quality vistas equitably across a complex rather than concentrating it in privileged units. Beyond design practice, the framework has implications for policy and evaluation. Because it renders vista quality as a structured set of components rather than a vague aspiration, it can inform the criteria by which residential complexes are reviewed and approved: view provision, the balance of openness and privacy, the availability of natural or re-created natural content, and the equity of visual access could each become explicit, checkable considerations at the masterplan stage. In the Iranian context, where large residential complexes are delivered rapidly and at scale, embed-

ding such criteria early when block arrangement and orientation are still fluid offers more leverage over residents' everyday visual experience than any later, unit-level intervention can achieve.

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