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prostorski poudarki landmarks

dobro počutje

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oviranost disability

glokalizacija

glocalization

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Spoznanje o širini področja

Uvodnik: Vita Žlender

To številko zaznamuje sprememba uredniškega vodstva pri reviji *Urbani izziv*. Vlogo glavne urednice s spoštovanjem in občutkom odgovornosti prevzemam od Damjane Gantar, katere uredniško delo je v zadnjih osmih letih revijo oblikovalo v živahno platformo za prostorski diskurz, zato se ji najprej iskreno zahvaljujem za njeno premišljeno in predano usmerjanje.

Ob pripravi te številke sem se zavedela izjemne širine tem, s katerimi se ukvarjamo strokovnjaki na področju prostora. Ne glede na to, ali delujemo na področju arhitekture, krajinske arhitekture, urbanističnega in krajinskega načrtovanja, sociologije, geografije ali okoljskih študij, je področje delovanja široko in medsebojno povezano. Obravnavati prostor danes pomeni poglobiti se v zapleteno presečišče grajene oblike, odprtega prostora, življenjskih izkušenj, spomina, ekologije, sodelovanja in še česa. Pomeni priznati, da se prostorska vprašanja le redko pojavijo sama zase, ampak so večplastna, sistemska in v svojem bistvu človeška.

Izbor prispevkov v tej številki odraža prav to široko območje. Čeprav je vsak članek utemeljen na posebnem primeru ali pristopu, skupaj ponujajo vpogled v raznolikost vprašanj, ki oblikujejo naše področje. Začenjamo s študijo o vlogi arhitekture pri oblikovanju identitete mesta v Almatyju, sledi raziskava o vplivu mestnih znamenitosti na zaznavanje varnosti v Istanbulu. Od tam preidemo k vključujočemu oblikovanju in dostopnosti za pešce, nato pa k razmerju med mestnimi zelenimi površinami in dobrim počutjem v Prištini. Zadnji članek z uporabo netnografije raziskuje nesnovno dediščino zgodovinske medine v Tlemcenu. To vsebinsko bogato zbirko zaokrožuje predstavitev projekta ARCH-E, ki se posveča razvoju evropskih arhitekturnih natečajev.

Ta številka pod novim uredniškim vodstvom ne opredeljuje nove poti, temveč priznava in sprejema pluralnost pogledov, izzivov in disciplin, ki se srečujejo pri raziskovanju in oblikovanju prostora. Potrjuje vrednost tega področja v njegovi celotni kompleksnosti in spodbuja k razmisleku, kako naša raznovrstna prizadevanja prispevajo k bolj premišljenim, odzivnim in trajnostnim prostorskim praksam.

V duhu odprtosti in sodelovanja ste lahko opazili tudi prenovljeno naslovnico revije. Posodobljeno vizualno identiteto je zasnovala oblikovalka Maja Licul, ki je želela vzpostaviti ravnovesje med strokovno vsebino in dostopnostjo. Nova podoba vsebuje drzno tipografijo, sestavljeno iz drobnih pikic, kar je po njenih besedah »igriva vzporednica z urbanizmom, ki poskuša urediti množico elementov v delujočo celoto«. Za vsako številko so izbrane ključne besede oblikovane v kompozicijo, ki je hkrati dinamična in vizualno urejena, vsaka letna zbirka pa je zaznamovana z značilno barvo. Ta premišljena prenova ne pomeni le osveženega videza, temveč tudi ponovno zavezanost k jasnosti, ustvarjalnosti in večplastni kompleksnosti področja, ki ga raziskujemo.

Facing the breadth of the field

Editorial by Vita Žlender

This issue marks a shift in leadership at *Urbani izziv*, and it is with respect and a sense of responsibility that I begin my role as editor-in-chief. Succeeding Damjana Gantar, whose editorial work over the past eight years has shaped the journal into a lively platform for spatial discourse, I would like to begin by expressing my deep appreciation for her thoughtful and dedicated guidance.

In preparing this issue, I have become acutely aware of the remarkable breadth of themes that those engaged in spatial sciences must consider. Whether working in architecture, landscape architecture, urban and landscape planning, sociology, geography, or environmental studies, the scope is wide and interconnected. Addressing space today means confronting a complex intersection of built form, open space, lived experience, memory, ecology, participation, and more. It means acknowledging that spatial issues are rarely singular or isolated – instead, they are layered, systemic, and fundamentally human.

The selection of contributions in this issue reflects this broad terrain. Although each article is grounded in a specific case or approach, together they offer insight into the diversity of issues that shape our field. The journal begins with a study of architecture's role in shaping city identity in Almaty, followed by research on how urban landmarks influence perceptions of safety in Istanbul. From there, it moves to inclusive design and pedestrian accessibility, then to the relationship between urban green spaces and wellbeing in Prishtina. The final article employs netnography to explore the intangible heritage of Tlemcen's historic medina. This rich collection is rounded out by a presentation of the ARCH-E project, which examines the evolving landscape of European architectural design competitions.

Rather than defining a new path, this first issue under new editorial leadership acknowledges and embraces the plurality of perspectives, challenges, and disciplines that converge in the study and shaping of space. It affirms the value of seeing the field in its full complexity, and of continuing to ask how varied efforts contribute to more thoughtful, responsive, and sustainable spatial planning practice.

In keeping with this commitment to openness and engagement, you also noticed a redesigned cover for the journal. The updated visual identity, developed by the designer Maja Licul, seeks to communicate a balanced relationship between expert content and approachability. The new design features bold typography made up of tiny dots; "a playful parallel", as she puts it, "to urban planning itself, which attempts to organize a multitude of elements into a functioning whole". For each issue, selected keywords are arranged into a composition that is both dynamic and visually ordered, and each annual volume is marked by a distinct colour. This thoughtful redesign signals not only a fresh appearance but also a renewed commitment to clarity, creativity, and the layered complexity of the field we explore.

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Arhitektura kot odločilni dejavnik oblikovanja identitete mesta: študija primera kazahstanskega mesta Almaty

V članku so opredeljeni dejavniki, ki odločilno prispevajo k oblikovanju identitete mesta. Predstavljeni so izsledki raziskave, v kateri sta avtorici proučevali načine izražanja identitete na primeru Almatyja, največjega urbanega območja v Kazahstanu. Na podlagi analize javnega mnenja sta določili dejavnike, ki vplivajo na oblikovanje identitete Almatyja. Izsledki njune raziskave so pokazali, da je sodobna arhitektura pomembna za ohranjanje in izražanje identitete mesta in regije, ki posledično privabljata naložbe in turiste. Zaradi globalizacije je danes težje kot kdaj koli prej ugotavljati in ohranjati identiteto mest in regij. Proučevanje vprašanj, povezanih z identiteto, je pomembno, saj se na podlagi izsledkov raziskav lahko oblikujejo strategije za družbenokulturno in gospodarsko preobrazbo mest.

Ključne besede: sodobna arhitektura, identiteta mesta, dejavniki, ki vplivajo na oblikovanje identitete, regionalna arhitektura, Almaty

1 Uvod

Arhitektura je močan dejavnik, na podlagi katerega lahko razumemo identiteto in bistvo mesta. Ima praktično funkcijo, izraža zgodovinske, kulturne in družbene značilnosti kraja ter je pogosto vizualni odsev njegovega razvoja (Sardak idr., 2021). Mest ne določajo samo prebivalci in geografske meje, ampak tudi arhitekturne oblike, ki odražajo kolektivne vrednote, želje in spomin. To je opazno zlasti v mestih, kot je Almaty, kjer se je arhitekturna krajina preoblikovala pod vplivom kulturnih obdobij, kulturno-političnih sprememb in urbanističnih strategij (Nocca, 2017).

V današnjem globaliziranem svetu postaja oblikovanje identitet mest zelo pomembno vprašanje (Bell in De-Shalit, 2011). Identiteta mesta je posebna oblika teritorialne identitete, povezana s prevlado nekaterih dejavnikov, ki pri mestnih prebivalcih ali turistih vzbujajo asociacije na posamezno območje. Med te dejavnike spadajo naravne in krajinske značilnosti (npr. asociacija na Benetke kot mesto kanalov ali na Ulan Bator kot najhladnejše glavno mesto na svetu), arhitektura in kulturni simboli (npr. Eifflov stolp v Parizu, nebotičniki na Manhattnu, bazilika Svete družine v Barceloni itd.) in značilne funkcije (Milan kot modna prestolnica, Cambridge kot univerzitetno mesto).

Vprašanje identitete spremlja prelomne trenutke v zgodovini, zlasti v obdobjih spreminjajočih se družbenih struktur. V takih kompleksnih obdobjih se pri posameznikih in skupnostih pojavi potreba po samoidentifikaciji, ki obsega več oblik identitete (npr. etnično, socialno, poklicno, versko in teritorialno) (Beyers, 2016). Zanimanje za proučevanje teritorialne identitete, ki vključuje tudi identiteto mesta, spodbujajo zgodovinski procesi vključevanja držav v svetovne mreže.

Na začetku devetdesetih let prejšnjega stoletja so se nekdanje sovjetske republike, tudi Kazahstan, po razpadu Sovjetske zveze spoprijele z zahtevnim procesom oblikovanja lastne identitete (Bahga in Raheja, 2018). Njihove identitete, ki so se razlikovale od krovne sovjetske identitete, so začele odražati značilnosti lokalne zgodovine in kulture teh novih neodvisnih držav. Ta proces je vključeval prevrednotenje kulturnih in vrednostnih dominant v družbi, pečat pa je pustil tako v arhitekturi kot mestnem okolju (Sarttarova idr., 2014). Navedena preobrazba ni pomenila popolnega preloma s sovjetsko preteklostjo. Črpala je iz bogatih izkušenj sovjetske arhitekture in v dialogu z drugimi kulturami oblikovala nove prvine regionalne arhitekture (Jahn Kassim idr., 2018). V zadnjih treh desetletjih neodvisnosti je Kazahstan z razvojem novega glavnega mesta Astana in revitalizacijo drugih mestnih območij izoblikoval novo identiteto.

Almaty kot največje kazahstansko mesto vključuje bogato paleto arhitekturnih slogov, ki združuje stavbe iz sovjetskega obdobja, sodobne stolpnice in stavbe, ki odražajo značilnosti tradicionalne lokalne arhitekture. Zaradi te eklektične arhitekturne podobe se razlikuje od drugih srednjeazijskih mest, hkrati pa je omenjena eklektičnost pomemben del njegove identitete. Proučevanje arhitekture Almatyja daje edinstven vpogled v to, kako se njegova zgodovinska preobrazba iz mesta ob svilni poti in sovjetskega središča v bleščečo sodobno metropolo odraža v njegovem prostoru. Današnja mednarodna podoba Kazahstana je razvidna zlasti z dojemanjem arhitekture, ki zajema sintezo umetniških reprezentacij tako lokalne kot svetovne kulture. Prav to ravnovesje med univerzalnimi načeli arhitekture in lokalnimi značilnostmi je postalo temelj sodobne regionalne arhitekture v Kazahstanu. Regionalna arhitektura je širok pojem ter se nanaša na oblikovanje in razvoj materialnega okolja na posameznem območju. Obsega zasnovo in gradnjo stavb in drugih objektov ter mestnih okolij, hkrati pa upošteva lokalne tradicije, kulturo in zgodovinske okoliščine.

Pojem identitete mesta je ključen pri vzpostavljanju edinstvenosti mesta in njegovega položaja v svetu. Je lahko dejavnik povezovanja mestne skupnosti na podlagi skupnih vrednot, običajev in navad. Da bi to povezovanje lahko dosegli, morajo pri reševanju skupnih vprašanj sodelovati najrazličnejši deležniki, od prebivalcev do urbanistov in oblasti (Alzemeneva in Mamaeva, 2021). Ena od izraznih oblik te identitete je arhitektura, ki oblikuje bivalno okolje ljudi in prenaša materialne vidike regionalne kulture na prihodnje generacije. Cilj raziskave, predstavljene v tem članku, je bil proučiti vlogo arhitekture kot odločilnega dejavnika pri oblikovanju identitete Almatyja, pri čemer sta avtorici analizirali vpliv arhitekturnih slogov, urbanističnih odločitev in simbolnih objektov na zaznavanje kraja. Glede na kompleksen odnos med arhitekturo Almatyja in njegovo razvijajočo se mestno identiteto sta izpostavili pomen premišljenega arhitekturnega in urbanističnega načrtovanja za ohranjanje edinstvene podobe mesta ob hkratnem prilagajanju sodobni urbanizaciji. Raziskava je bila razdeljena v več faz. V prvi fazi sta avtorici opredelili pogoje za oblikovanje identitete mesta ob upoštevanju vpliva naravnih, podnebnih, zgodovinskih, antropogenih, funkcionalnih, kulturno-simbolnih in družbenokulturnih dejavnikov. V drugi fazi sta proučevali javno mnenje glede identitete analiziranega mesta, v zadnji, tretji fazi pa sta na primeru Almatyja opredelili vlogo sodobne arhitekture pri oblikovanju identitete mest.

2 Pregled literature

Arhitekturna identiteta Almatyja se je izoblikovala na podlagi edinstvene kombinacije zgodovinskih okoliščin, družbenopolitičnih sprememb in kulturnih izrazov. Glaudinov (2016) v

celovitem pregledu razvoja kazahstanske arhitekture ugotavlja, da oblikovalske spremembe odražajo širše družbenopolitične razmere. Njegovo delo postavlja temelje za razumevanje preobrazbe kazahstanske arhitekture skozi čas, pri čemer se je od tradicionalnih oblik premaknila k sodobnejšim, hkrati pa je obdržala jasno narodno identiteto. Truspekova (2019) je proučevala nekatere arhitekturne značilnosti Almatyja in opredelila, kako stavbe v mestu odražajo njegovo identiteto in se ujemajo z regionalno kulturo. Določila je ključne prvine, ki oblikujejo identiteto Almatyja, zlasti postsovjetske vplive, ki se mešajo z zgodovinskimi kazahstanskimi slogi. Truspekova in Sharipova (2022) sta navedeno nadgradili z analizo arhitekturnih slogov kazahstanskih javnih ustanov, iz katere so razvidni arhitekturni trendi, ki združujejo pretekle sovjetske vplive in sodobne označevalce kazahstanske identitete. Njuna raziskava se je osredotočala na slogovno kontinuiteto in preobrazbo javne arhitekture v Almatyju po letu 1991. Galimzhanova idr. (2020) so proučevali kazahstansko identiteto v arhitekturi mošej, pri čemer so posebno pozornost posvetili uporabi načela idžtihada – islamskega koncepta interpretacije in ustvarjalnosti. Analizirali so, kako verska arhitektura z oblikovalskimi in simbolnimi prvinami interpretira sodobno kazahstansko identiteto, ki temelji na kulturi.

Tatygulov idr. (2009) so podrobno analizirali življenje in delo Toleua Basenova, inovativnega arhitekta, ki je s svojimi deli postavil temelje urbani krajini Almatyja. Njihova raziskava Basenovove zapuščine poudarja pomen arhitektov pri oblikovanju arhitekturne podobe območja in vpliv te zapuščine na ustvarjanje projektov, pri katerih je lokalna tradicija usklajena s sodobnimi arhitekturnimi potrebami. Qapanov in Baimagambetov (1998) sta v delu o urbanističnem načrtovanju in zgodovini arhitekture v Almatyju proučila razvoj načrtovanja in coniranja mesta, pri čemer sta posebno pozornost namenila prilagodljivemu odzivu mesta na spreminjajoče se urbane potrebe. V tej povezavi je vredno omeniti pojem kritičnega regionalizma, ki ga je razvil Frampton (2020) in ga je mogoče uporabiti tudi za Almaty. Frampton zagovarja arhitekturne prakse, ki spoštujejo lokalno kulturo in geografske značilnosti ter se jim prilagajajo, hkrati pa se izogibajo površnemu regionalizmu. Njegovo teoretično stališče se ujema tudi z izsledki analize arhitekture v Almatyju, zlasti v povezavi s sodobnimi poskusi uravnoteženja svetovnih trendov s kazahstanskimi kulturnimi motivi, ki odsevajo edinstveno dvojnost postsovjetske identitete Kazahstana. Primerjalne študije arhitekturnega razvoja mest s sovjetskimi in evropskimi vplivi, kot sta Talin in Helsinki (Berger idr., 2019), kažejo, kako nekdanja sovjetska mesta oblikujejo svojo postsovjetsko identiteto prek arhitekturnih prilagoditev. Te študije pomagajo umestiti Almaty v širši okvir, v katerem poskušajo mesta uravnotežiti dediščino sovjetske dobe z željo po modernizaciji in lokalni identiteti.

V širšem geografskem kontekstu Gehl (2010) poudarja pomen oblikovanja človeku prijaznih mest, v katerih arhitektura spodbuja družbene stike in lokalno identiteto. Njegove zamisli o povezovanju javnih prostorov in arhitekturnih oblik za spodbujanje družabnega življenja se ujemajo s prizadevanji Almatyja za ustvarjanje privlačnih javnih prostorov, ki odražajo lokalno kulturo in so usklajeni s cilji ohranjanja lokalne identitete v urbanističnem oblikovanju. To povezovanje regionalnih in mednarodnih vidikov kaže, da na oblikovanje arhitekturne identitete Almatyja ne vplivajo samo lokalni in zgodovinski dejavniki, ampak tudi svetovni trendi. Mesta si posledično prizadevajo ohraniti edinstveno identiteto pod pritiski globalizacije. Na podlagi tovrstnih teoretičnih izhodišč lahko opredelimo, kako se regionalni temelji arhitekture v Almatyju odražajo v globalizirani urbani krajini.

Tudi Mendikulov (1948) se je v svojem zgodnjem delu o narodni arhitekturi Almatyja ukvarjal s problematiko vključevanja tradicionalnih kazahstanskih prvin v urbanistično oblikovanje. Njegove zamisli so temeljne za razumevanje zgodovinskih prizadevanj za ohranjanje ravnovesja med nacionalno identiteto in sodobnostjo, ki še vedno vplivajo na arhitekturo Almatyja.

Predstavljene raziskave razkrivajo kompleksno součinkovanje zgodovinskih, kulturnih in okoljskih dejavnikov pri oblikovanju arhitekturne identitete Almatyja. Hkrati dajejo podlago za analizo njegove arhitekturne krajine kot odločilnega dejavnika, ki prek grajenega okolja oblikuje identiteto mesta.

3 Gradivo in metode

Za večplastno razumevanje vloge arhitekture pri oblikovanju identitete mesta so bile za celovito analizo arhitekturne identitete Almatyja uporabljene empirična, teoretična in kvalitativna metoda. Za analizo proučevanega mesta v regionalnem kontekstu, pri čemer sta avtorici mesto razčlenili na posamezna območja, ulice in stavbe, je bil uporabljen deduktivni pristop. V skladu s tem so bili prebivalci obravnavani kot subjekti družbenozgodovinskega razvoja, ki vplivajo na regionalno identiteto. Z analizo znanstvenih virov, povezanih z identiteto, arhitekturo in regionalnimi značilnostmi mest, sta avtorici opredelili teoretične okvire in določili dejavnike, ki vplivajo na identiteto mest. Poleg tega sta analizirali projektno dokumentacijo in strategije urbanističnega razvoja Almatyja, na podlagi česar sta lahko arhitekturni razvoj mesta umestili v kontekst in proučili namen arhitekturnega oblikovanja.

Da bi avtorici proučili prostorsko konfiguracijo in strukturne značilnosti Almatyja, sta poleg tega uporabili grafoanalitično metodo, s katero sta kartirali in vizualno analizirali ključne arhitekturne značilnosti, modele rabe zemljišč in urbanistične

načrte, ki ustvarjajo identiteto mesta. Z geografskimi informacijskimi sistemi (GIS) sta ponazorili arhitekturne modele mesta in opredelili naravne, antropogene in kulturno-simbolne prvine, iz katerih je razvidna identiteta Almatyja. V okviru prostorske analize mesta sta izvedli terenske raziskave, v okviru katerih sta se osredotočili na objekte in spomenike, ki izražajo identiteto mesta. Z opazovanjem sta poleg tega dobili neposreden vpogled v povezave med arhitekturo ter njenim družbenim in kulturnim vidikom, vključno s tem, kako javnost dojema identiteto mesta.

Raziskovalni inštitut Almatygenplan in Inštitut za uporabni urbanizem sta med septembrom 2022 in decembrom 2023 ob podpori mestne uprave Almatyja izvedla sociološko anketo med kazahstanskimi prebivalci. V njej je sodeloval 801 posameznik iz več kazahstanskih mest, starih od 17 do 60 let. Med temi je bilo 471 (58,8 %) žensk in 330 (41,2 %) moških. Zaposlenih je bilo 55,8 %, študentov je bilo 36,9 %, brezposelnih pa 7,3 %. Pridobljeni podatki so ključni za oblikovanje razprav v okviru projektnih seminarjev, ki spodbujajo sodelovanje med prebivalci in podjetji v mestnih okrožjih. Vmesni izsledki ankete so bili objavljeni v znanstvenem prispevku (Aukhadiyeva in Karatseyeva, 2022). Anketa je potekala v spletni aplikaciji Survio, njen cilj pa je bil ugotoviti, kaj anketiranci menijo o arhitekturi Almatyja. Vključevala je vprašanja o tem, kako arhitekturne značilnosti vplivajo na njihov občutek pripadnosti kraju in na njihovo identiteto. Osredotočala se je tako na makroraven kot mikroraven, z njo so se zbirali podatki o soseskah, stanovanjskih območjih, ulicah in pomembnih stavbah v Almatyju. Anketiranci so morali glede na to, koliko so jim pomembni, razvrstiti dejavnike, ki vplivajo na identiteto Almatyja ter so bili razdeljeni na naravne (podnebje in krajina) in antropogene (arhitektura, mestno okolje, kulturni simboli in podoba mesta). Poleg tega so morali oceniti vpliv družbenogospodarskih dejavnikov na oblikovanje podobe mesta. Lahko so opredelili več kot en dejavnik, povezan z edinstvenostjo mesta.

Na podlagi analize zbranih podatkov sta avtorici določili ponavljajoče se teme in dejavnike, ki določajo identiteto Almatyja. Kvalitativne podatke, pridobljene s pregledom literature in terenskimi opazovanji, sta tematsko kodirali, kvantitativne podatke, zbrane s sociološko anketo, pa sta statistično analizirali in na tej podlagi določili vzorce v javnem zaznavanju mesta. S primerjalno analizo sta izsledke strnili v celovito predstavitev arhitekturnih dejavnikov, ki vplivajo na identiteto Almatyja. Z opisanim kombiniranim metodološkim okvirom sta lahko temeljito proučili arhitekturo kot odločilni dejavnik oblikovanja edinstvene urbane identitete Almatyja. Rezultati so poleg tega spodbudili razprave o ohranjanju identitete v času globalizacije.

4 Rezultati in razprava

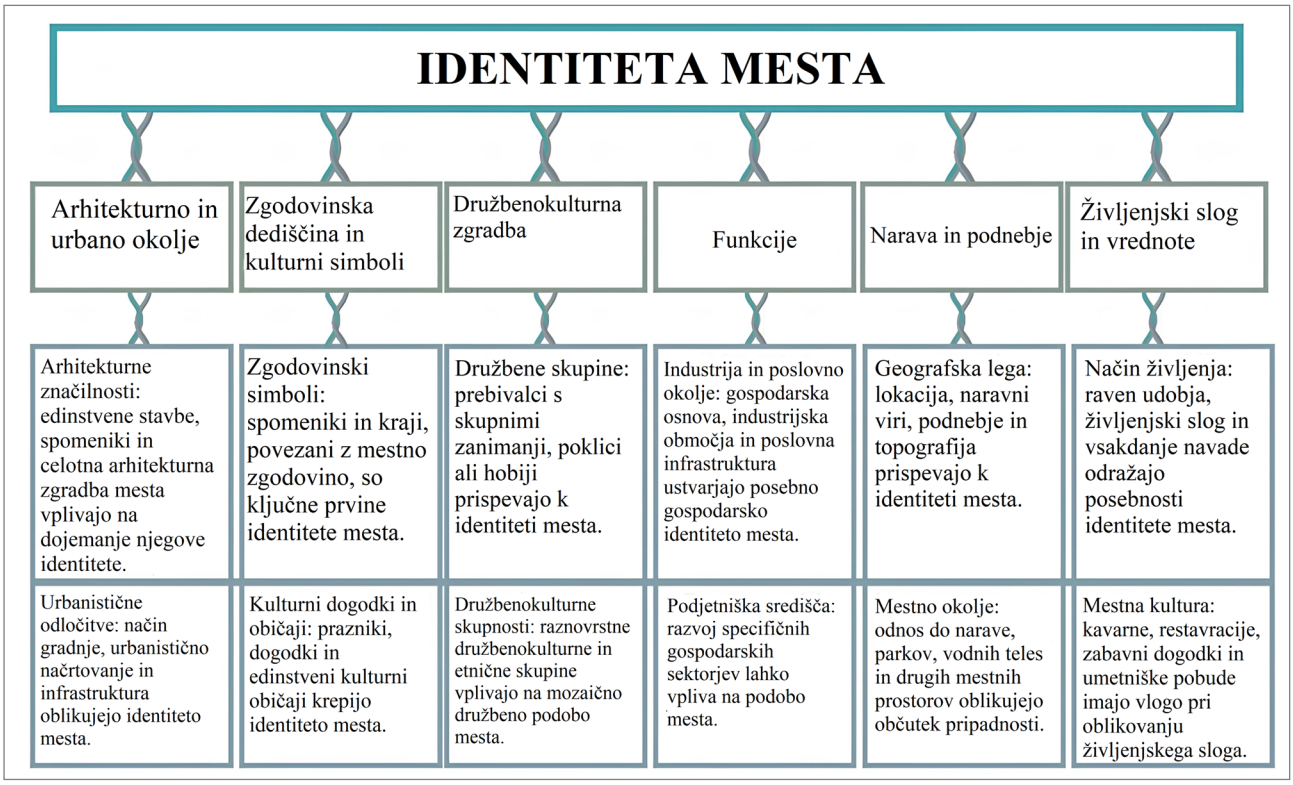
4.1 Ključni vidiki sodobne identitete mest

Posamezniki ob tem, ko prebivajo v zadevni državi, zaznavajo njeno teritorialno identiteto, pri čemer se poistovetijo z naravnimi značilnostmi, arhitekturo in kulturo, ki delujejo kot nosilci simbolov krajev (Krupskyi in sod., 2019). Ti simboli izhajajo iz pomenov, ki so za posameznika pomembni na teritorialni ravni in postanejo konkretnejši v okviru mesta ali naselja. Fedotova (2016) je mestno identiteto opredelila kot celoto urbanih pomenov, ki prebivalcem omogočajo, da se z mestom identificirajo na podlagi pomembnih simbolnih sredstev (podob, pojmov, kod itd.). Mestno okolje, ki ga sestavljajo arhitekturni objekti, javni prostori, ulice in parki, dobi pomembno vlogo pri oblikovanju identitete mesta, ko kolektivni in individualni spomin ustvarjata simbolne podobe, asociacije in mite, povezane s posameznimi prvinami mesta. Iskhojanova in sod. (2022) so v okviru svojega koncepta genius loci poudarili, da duh kraja posameznikom omogoča, da se identificirajo z okoljem.

Kakšno vlogo ima arhitektura pri prepoznavnosti mesta? Raziskave so pokazale, da na regionalno arhitekturo vplivajo raznovrstni lokalni dejavniki in da ta pomembno vpliva na samoidentifikacijo prebivalcev. Regionalna arhitektura ima ključno vlogo pri ohranjanju kulturne dediščine in spodbujanju trajnostnega razvoja regije (Amit, 2004). Ključni vidik sodobne identitete mesta je njegova podoba. Lynch (1960) je poudaril, da mora biti podoba mesta jasna in dobro določena. Menil je, da so miselne predstave o mestu povezane s tremi temeljnimi vidiki: potmi, robovi in okoliši. Ti vidiki vplivajo na dojemanje mesta kot celote in določajo njegovo funkcionalno zgradbo. Podoba mesta mora odražati vrednote in identiteto njegovih prebivalcev. Če ne odseva kulturne identitete prebivalcev, lahko povzroči dezorientacijo in nezadovoljstvo. Po drugi strani mesta, ki jim uspeva izražati svojo kulturno identiteto, pogosto postanejo privlačna za turiste in vlagatelje.

Kot navaja Gehl (2011), se kulturna identiteta mesta oblikuje v interakcij prebivalcev z okoljem, družbenimi ustanovami in zgodovinsko dediščino regije. Gehlova teorija regionalne podobe mesta je podlaga za razumevanje identitete Almatyja. V skladu z njegovim konceptom mest za ljudi (Gehl, 2010) so fizične, družbene in kulturne značilnosti Almatyja prispevale k oblikovanju njegove podobe (slika 1). Z njihovim ohranjanjem in popularizacijo se lahko ohranita in okrepita kulturna posebnost in regionalna podoba mesta.

Raziskovalci dejavnike, ki oblikujejo identiteto mesta, delijo na naravne značilnosti, ki so večinoma nespremenljive ali traj-



Slika 1: Identiteta mesta (vir: Fedotova, 2016)

ne (npr. geografska lega mesta, podnebje, krajina, rastlinstvo itd.), in umetne značilnosti, ki so lahko spremenljive ali nespremenljive (npr. simboli, blagovne znamke, stavbe, mostovi itd.) (Korotseyeva & Akhmedova, 2022). V raziskavi, predstavljeni v tem članku, sta avtorici dejavnike, ki vplivajo na oblikovanje identitete mesta, razdelili na naravne (podnebje, krajina in rastlinstvo) in antropogene dejavnike, te pa še v dve skupini: materialno-prostorske (arhitektura in prostor) in kulturno-simbolne dejavnike (podobe, miti in zgodovinske povezave).

4.2 Naravni dejavniki, ki vplivajo na oblikovanje identitete

Naravni dejavniki vključujejo najrazličnejše vidike, ki lahko vplivajo na arhitekturo in življenje ljudi. Prebivalci in obiskovalci opisujejo Almaty kot zeleno mesto ob vznožju gora. Ima zmerno celinsko podnebje s suhimi poletji in vlažnimi zimami. Povprečna januarska temperatura je −6 °C, julijska pa 24 °C. Največ padavin pade spomladi in jeseni. Mesto leži na nadmorski višini okoli 800 m, kar ustvarja razmere za gorske vetriče, ki hladijo mesto in prinašajo čistejši zrak z gora.

Za Almaty je ključni dejavnik njegova naravna lega v dolini, umeščeni med gorovja, na stičišču dveh tektonskih plošč. Posledično je za mesto značilna razmeroma visoka raven potresne aktivnosti, ki pogosto doseže 9. ali 10. stopnjo na Richterjevi lestvici. Poleg tega sta za kotlino, v kateri leži mesto, zlasti pozimi značilna izrazit temperaturni obrat in nezadostno kroženje zraka. Kakovost zraka poslabšajo dejavniki, kot so izpušni plini motornih vozil, industrijske emisije, sežiganje odpadkov in smog, ki ga povzroča kurjenje. Žal so potresna ogroženost in okoljske težave sestavni del podobe mesta. V zadnjih letih so se v mestu močno okrepile pobude za izboljšanje okoljskih razmer. Tovrstna prizadevanja vključujejo posodobitev industrijskih obratov ter vzpostavitev omrežja kolesarskih poti in območij za pešce, kar bi zmanjšalo onesnaženost zraka.

Krajina je temelj identitete mesta. Ključne prvine, ki vplivajo na razvoj današnje urbane zgradbe Almatyja, so gorske reke, zaradi katerih so ljudje že od nekdaj naseljevali to območje. V 19. stoletju so zaradi topografskih značilnosti območja začeli graditi ulice v smeri sever–jug in vzhod–zahod. Razporeditev urbanih blokov, katerih krajše stranice so bile obrnjene proti goram, je omogočila optimalno prezračevanje mesta. Temu načrtovalskemu načelu so sledili tudi sredi 20. stoletja, ko se je mesto začelo širiti proti jugozahodu. Značilne javne površine v mestu, ki prispevajo k njegovi edinstvenosti, so promenade ob gorskih rekah, ki potekajo skozi mesto.

Geografska lega, raznovrstna in edinstvena naravna krajina, naravni rezervati v predmestju in bogata kulturna dediščina, povezana s tradicionalnim nomadstvom, imajo pomembno vlogo pri oblikovanju identitete Almatyja. Navedene

značilnosti v mesto privabljajo številne domače in tuje turiste. Ena izmed obetavnih smeri kazahstanskega turističnega razvoja je ekoturizem. Poleg tega čedalje več turistov zanimajo zavarovana območja v Almatyju in njegovi širši okolici, pojavljajo se nove oblike organiziranega turizma, kot so zgodovinski, izobraževalni in kmečki turizem, med aktivnostmi, ki privabljajo turiste, pa so tudi kolesarjenje, jahanje in vodni športi.

Edinstvena naravna značilnost Almatyja so sadovnjaki z jablanami. Vrsta divje jablane *Malus sieversii*, ki izvira iz Kazahstana, velja za prednico žlahtne jablane. Drevo izvira z vznožja Džungarskega in Zailijskega Alataua v severnem delu gorovja Tjanšan, kjer raste 40 sort omenjene vrste. Njena genska čistost je vzbudila veliko zanimanja med tujimi turisti, ohranjeni in obnovljeni sadovnjaki pa so podlaga za jabolčne ekskurzije in jabolčne poti na območju Almatyja (Shadmanova idr., 2019).

Še en endemit in pravi zaklad rastlinja tega območja je divji tulipan. Po raznolikosti divjih tulipanov je Kazahstan vodilni na svetu, saj tam uspeva kar 42 od skupno 120 vrst na Zemlji. Ta dejstva so podrobneje predstavljena v članku, objavljenem v reviji *The Astana* (Akhmetkali, 2023). Podobe gora, jabolk in tulipanov se aktivno vključujejo v simboliko mestnih dogodkov, pojavljajo pa se tudi v okrasnih arhitekturnih elementih.

4.3 Antropogeni dejavniki, ki vplivajo na oblikovanje identitete Almatyja

Edinstvenost mest se najbolj pokaže v njihovem fizičnem okolju, ki ga oblikujejo raznovrstni dejavniki: naravne razmere, zgodovinske okoliščine, arhitekturne in kulturne značilnosti njegovih prebivalcev in gospodarski viri. Pri opisovanju mest se pogosto uporabljajo izrazi, kot sta občutek pripadnosti kraju in kulturna identiteta, ki omogočajo lažje razumevanje in prenos informacij o zgodovini in kulturi mesta na prihodnje generacije. Ti pojmi so ključni za ohranjanje edinstvenosti mest, saj se ta ne morejo razvijati v izolaciji, ampak nanje vplivajo zunanji dejavniki. Vse navedeno velja tudi za sodobna mesta v Kazahstanu, državi, ki se po površini (2,72 milijona km^2) uvršča na deveto mesto na svetu. Kazahstan leži v osrčju Evrazije, na stičišču številnih trgovskih poti, vključno s starodavno svilno potjo. Njegovo zgodovinsko dediščino ponazarjajo številne arheološke najdbe, iz katerih so razvidni dosežki starodavnih prebivalcev tega območja, in sicer tako nomadskih kot stalno naseljenih skupnosti. Na njegovem ozemlju je več starodavnih mest, ki jim strokovnjaki pripisujejo velik zgodovinski in kulturni pomen (Baitenov idr., 2019).

Kazahstan ima izrazito celinsko podnebje, z mrzlimi zimami in vročimi poletji. Zaradi velikosti ozemlja države so med njenimi posameznimi regijami precejšnje podnebne razlike. Na severu je podnebje hladno z dolgimi in ostrimi zimami, na jugu pa je milejše in toplejše, z vročimi poletji in kratkimi zimami. 63 % države prekrivajo stepe, 25 % puščave in polpuščave, 10 % gore in 2 % gozdne stepe (zlasti na severu) (Ministrstvo idr., 2022).

Po razpadu Sovjetske zveze in osamosvojitvi leta 1991 se je Kazahstan aktivno vključil v svetovne gospodarske, kulturne in okoljske procese. Država ima 89 mest in 6.859 podeželskih naselij. Največja mesta so Almaty (2.191.314 prebivalcev), Astana (1.383.291 prebivalcev) in Šimkent (1.205.889 prebivalcev) (Qazstat, 2023a; Qazstat, 2023b). Večina sodobnih mest se je začela intenzivneje razvijati v 20. stoletju. Mnoga imajo tradicionalno urbanistično zasnovo z mrežastim tlorisom, podedovano iz sovjetskega obdobja. V mestnih središčih je po navadi kritična infrastruktura, kot so vladne ustanove, banke, nakupovalna središča, izobraževalni, kulturni in športni objekti ter stanovanja, na mestnem obrobju pa so stanovanjska in industrijska območja.

Eno izmed dobro razvitih poseljenih območij v Kazahstanu je urbana aglomeracija Almatyja. Središčni pomen v njem ima Almaty, ki je bil med letoma 1929 in 1997 tudi kazahstansko glavno mesto. Potem ko so prestolnico leta 1997 preselili v Astano, je mesto obdržalo status finančnega, raziskovalnega, izobraževalnega in kulturnega vozlišča države. Njegova geografska lega je vplivala na poseben prostorski razvoj mesta in oblikovanje močne arhitekturne identitete. Almaty leži ob vznožju gorovja Zailijski Alatau, na nadmorski višini med 600 in 1.650 m. Obdajajo ga zasneženi gorski vrhovi, ki ustvarjajo veličastno panoramo in edinstveno podobo mesta (slika 2). Skozi mesto teče več gorskih rek, predmestna območja pa se uporabljajo zlasti za rekreacijo, turistične dejavnosti in razne športne aktivnosti.

Mesto ima več kot dve tisočletji dolgo zgodovino, ki je močno vtisnjena v njegovo arhitekturno tkivo. V 20. stoletju in zlasti v sovjetskem obdobju se je pospešeno razvijalo, po razpadu Sovjetske zveze leta 1991 pa se je zanj začela nova faza družbenogospodarskega razvoja. To preobrazbo so zaznamovali močna rast prebivalstva zaradi notranjih migracij, širjenje urbanih območij z vključevanjem primestnih naselij in okrepljena gradnja stanovanjskih, trgovskih, športnih, poslovnih in izobraževalnih objektov. Poleg tega so bili v mestu zgrajeni podzemna železnica, sodobna prometna vozlišča, obsežno omrežje kolesarskih poti in območja za pešce. Sprejeti so bili tudi ukrepi za izboljšanje dostopnosti oseb z omejeno mobilnostjo, kar je pripomoglo k oblikovanju bolj vključujočega urbanega okolja.

Arhitektura Almatyja vsebuje prvine več zgodovinskih obdobij. Oblike in elementi stavb v slogih, kot so barok, modernizem, sovjetski klasicizem in drugi, so bili prilagojeni in obogateni z motivi iz narodne umetnosti (Abdrasilova in Aukhadiyeva, 2022; Truspekova in Sharipova, 2022). Posledica tovrstnega

Slika 2: Panorama Almatyja (foto: Deonisy Mit)

združevanja slogov je eklekticizem, ki je postal sestavni del arhitekturne podobe in kulturne identitete mesta. Na sodobno arhitekturo mesta vplivajo mednarodni trendi in jo je mogoče primerjati z arhitekturo evropskih držav. Pri obravnavi razvojnih procesov je izjemno pomembno opredeliti in sistematizirati vidike, ki vplivajo na oblikovanje identitete mesta ob učinkih globalizacije.

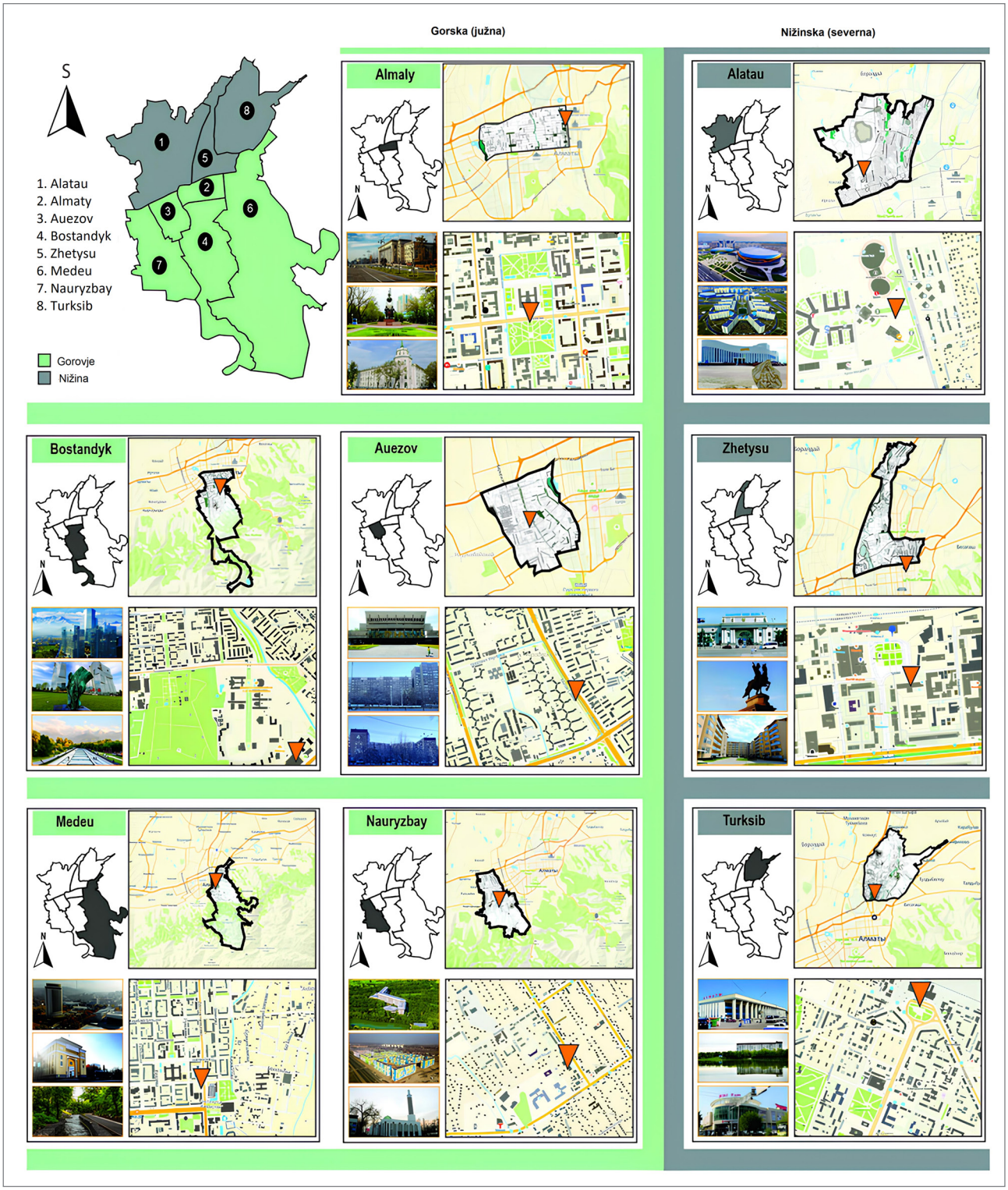
4.4 Materialne in prostorske prvine (arhitektura in urbano okolje) v Almatyju

Na prostorsko zgradbo mesta so vplivali urbanistični vidiki, kot so načrtovalska načela, funkcionalno coniranje in stavbna tipologija (UIA Architects, 2021). Generalni urbanistični načrti, izvedeni v različnih obdobjih njegovega razvoja, odražajo posebnosti posameznega obdobja. Danes je mesto sestavljeno iz osmih upravnih okrožij, ki jih je glede na topografijo mogoče razdeliti v dve skupini: južna okrožja ob vznožju gora (Almaty, Auezov, Medeu, Bostandyk in Naurizbay) in severna nižinska okrožja (Alatauskiiy, Zhetysu in Turksib) (slika 3).

Za izražanje identitete mest imajo velik pomen prenašalci njihovih edinstvenih značilnosti. Arhitektura (stavbe, spominska obeležja, parki, trgi in ulice) izstopa kot najpomembnejši vir za širjenje informacij o zgodovini, kulturi in naravnem okolju posamezne regije. Interpretacija tradicionalnih umetnostnih in arhitekturnih motivov je ključna značilnost regionalne kazahstanske arhitekture. Omogoča opredelitev identitete mest in vzpostavlja povezavo med arhitekturo in kulturo prebivalcev posameznega območja. S proučevanjem umetnostne in arhitekturne dediščine ter analizo prvin, kot so nacionalna simbolika, dekorativna in uporabna umetnost ter tradicije ljudske arhitekture (ustvarjanje oblik in lokalni gradbeni materiali), je mogoče razviti metode za preoblikovanje mestnega okolja. Raziskava morfološke zgradbe Almatyja je razkrila posebne značilnosti njegovega načrtovanja in razvoja:

- obsežni severni del mesta večinoma sestavljajo zasebna stanovanjska območja in industrijske cone (ponazarjajo drugo fazo razvoja mesta),
- urbani bloki v starem delu mesta vključujejo dve- do petnadstropne stavbe vzdolž ulic, ki potekajo v smeri sever–jug ali vzhod–zahod, in monumentalne javne objekte (zgrajene v prvi polovici 20. stoletja),
- stanovanjska območja na južnem in zahodnem obrobju mesta so pozidana z montažnimi bloki v slogu sovjetskega modernizma, ki vključujejo trgovine, šole, vrtce in klinike (zgrajeni v drugi polovici 20. stoletja).

Trenutno se po vsem mestu gradijo stanovanjske stolpnice, hkrati pa nastajajo nova trgovska, zabavna in poslovna središča



Slika 3: Upravna okrožja Almatyja (vir: avtorici)

(Abdrassilova in Danibekova, 2021). Funkcionalna in prostorska zgradba mesta je posledica njegovega zgodovinskega razvoja in zahtev sodobne družbe po udobnem življenju in gospodarskem napredku. V središču mesta je veliko arhitekturnih objektov z izrazito identiteto, ki so bili zgrajeni na koncu 19. stoletja in v 20. stoletju (Cheshmehzangi, 2020). Odražajo regionalni arhitekturni značaj, ki vključuje prvine kazahstanskega narodnega okrasja (na stanovanjskih in javnih zgradbah) in asociacije na tradicionalno kamnoseško obrt (v elementih in oblikah javnih zgradb). V 21. stoletju se arhitektura mesta razvija v skladu z mednarodnimi trendi in na podlagi sinteze sodobnih oblikovalskih načel ter novih gradbenih materialov in tehnologij gradnje (slika 4).

Slika 4: Arhitektura Almatyja v 20. in 21. stoletju (vir: avtorici)

Slika 5: Utrinki javnega življenja (vir: avtorici)

4.5 Kulturne in simbolne prvine oblikovanja identitete (okrasni elementi, podobe, miti in zgodovinske asociacije)

Urbani prostor Almatyja močno zaznamujejo simbolne prvine, kot so spomeniki, ki ponazarjajo starodavno skitsko umetnost (npr. spomenik zlatega bojevnika), in obeležja zgodovinskih dogodkov. Značilni so oblikovni elementi, ki jih je navdihnila kazahstanska okrasna in uporabna umetnost ter vključujejo zapletene rezbarije in geometrijske vzorce na pročeljih stavb, stenskih poslikavah, kovanih ograjah in raznovrstnih umetniških elementih v parkih in na trgih. Navedene prvine odražajo zgodovino in kulturo mesta ter s tem aktivno prispevajo k izražanju njegove identitete. Poleg vizualnih vidikov lokalnih običajev družabno življenje v mestu vključuje številne kulturne dogodke, kot so *nauruz* (praznovanje perzijskega novega leta), dan mesta, praznik jabolk, dan vodnjakov, knjižni praznik, filmski in glasbeni festivali, tradicionalni ulični maratoni in smučarske tekme na visoko ležečih smučiščih (Generalna skupščina ZN, 2022). Na množičnih prireditvah se uprizarjajo lokalna zgodovina in mestni miti, pri čemer so v ospredju teme, kot so mesto jabolk, mesto vodnjakov, zeleno mesto ipd. (slika 5).

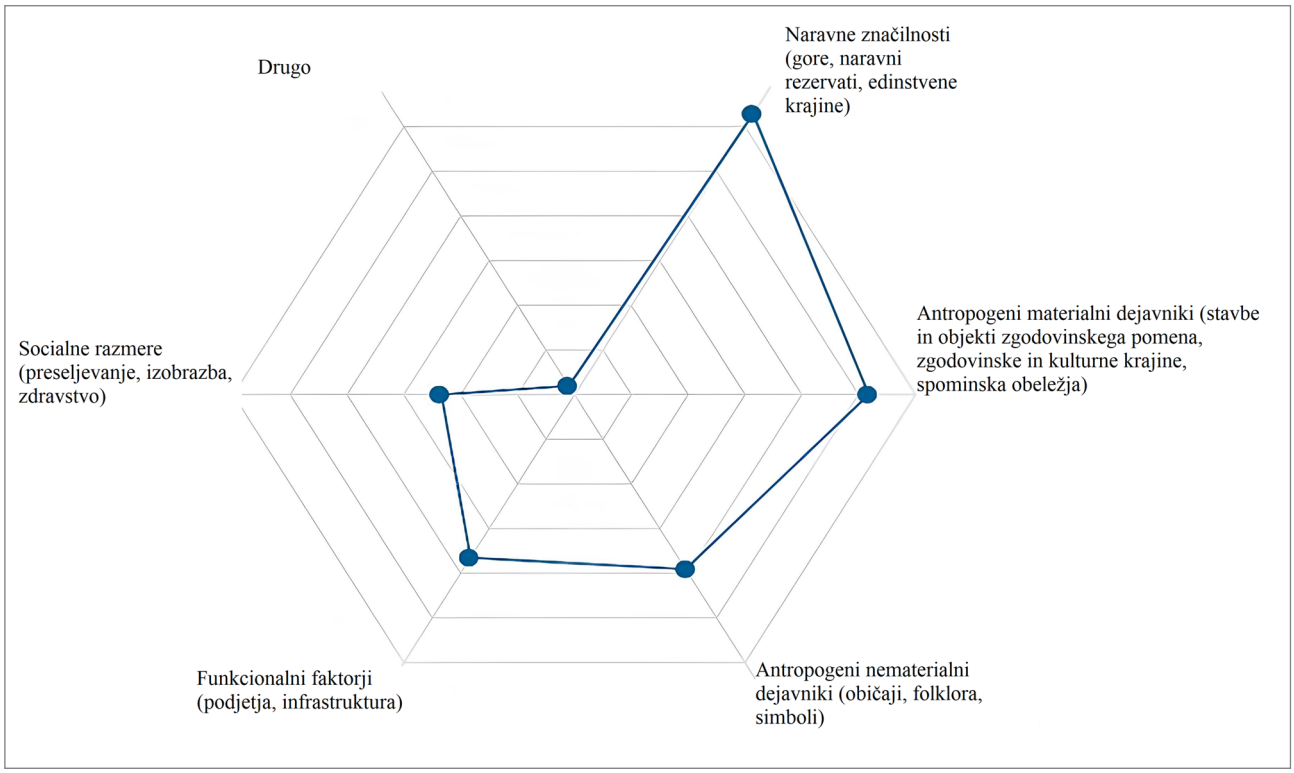
4.6 Izsledki sociološke ankete

Vprašanja, povezana z regionalno identiteto, so aktualna raziskovalna tema v kazahstanski arhitekturni znanosti. Izsledki teoretičnih raziskav so podlaga za oblikovanje normativne dokumentacije in praktičnih priporočil pri razvoju projektov (UNESCO, 2015; UNFCCC, 2022). Eden izmed učinkovitih načinov projektiranja vključuje sodelovanje prebivalcev pri obravnavi, oblikovanju in izpopolnjevanju novih projektov. Vključevanje prebivalcev je omogočeno na več načinov, na primer s sociološkimi anketami, stiki med projektanti in prebivalci ter sodelovanjem s prostovoljnimi organizacijami. Razširjena je uporaba anketnih vprašalnikov kot sredstva za pridobivanje javnega mnenja, saj se z njimi lahko opredelijo preference prebivalcev glede pomembnih vprašanj, ki se nanašajo na življenje v mestu. Izsledki anket pomembno prispevajo k oblikovanju trdne podlage za sistematično proučevanje in podrobno obravnavo javnega mnenja. Izsledki ankete, ki sta jo avtorici opravili med kazahstanskimi prebivalci, niso pomembni samo z znanstvenega vidika, ampak so tudi ključna podlaga za usmerjanje trajnostnega razvoja mesta. Največ anketirancev (78,7 %) je prihajalo iz kazahstanskih mest z več kot milijonom prebivalcev, najmanj pa je bilo tistih s podeželskih območij (3,1 %) (preglednica 1).

Preglednica 1: Izsledki ankete

Velikost mesta (št. prebivalcev)	Št. odgovorov	Delež (v %)
Velemesto državnega pomena (> 1.000.000)	629	77,7
Večje mesto regionalnega pomena (250.000–1.000.000)	66	8,1
Manjše mesto regionalnega pomena (100.000–250.000)	41	5,0
Večje mesto lokalnega pomena (50.000–100.000)	25	3,1
Manjše meto lokalnega pomena (10.000–50.000)	24	3,0
Podeželsko naselje	25	3,1

Vir: avtorici



Slika 6: Dejavniki, ki vplivajo na identiteto mesta (vir: avtorici)

Na podlagi odgovorov, zbranih z anketo, je mogoče opredeliti preference prebivalcev in obiskovalcev Almatyja. Treba je omeniti, da v raziskavo njegove identitete niso bili vključeni samo njegovi prebivalci, ampak tudi prebivalci drugih mest in naselij v Kazahstanu. S tem sta avtorici pridobili tako notranja kot zunanja mnenja o podobi mesta. Anketiranci so dejavnike, ki vplivajo na identiteto mesta, razvrstili po pomenu, pri čemer se je izkazalo, da jih 62,9 % Almaty povezuje predvsem z njegovimi naravnimi danostmi (gorami, naravnimi rezervati in edinstvenimi krajinami). Antropogeni materialni dejavniki (zgodovinske stavbe in objekti, zgodovinske in kulturne krajine ter spominska obeležja) so bili pomemben dejavnik za 51,8 % anketirancev, 39,1 % vprašanih pa je menilo, da je mesto znano zlasti po antropogenih nematerialnih dejavnikih (običajih, folklori in simbolih). 36,5 % anketirancev je izpostavilo pomen funkcionalnih dejavnikov (podjetij, storitev in infrastrukture), 23,4 % pa jih je menilo, da na podobo Almatyja pomembno vplivajo socialne razmere (preseljevanje, izobrazba in zdravstvo) (slika 6).

Iz ankete je razvidno, da prebivalci dojemajo mesto na podlagi tega, kako zaznavajo značilnosti okolice, arhitekture in simbolnih podob, značilnih za Almaty. Arhitektura, ki upošteva krajino in odraža zgodovino, ima aktivno vlogo pri oblikovanju identitete. Arhitekturne oblike in slogi izražajo edinstvene materialne in simbolne značilnosti regije ter družbenogo-

Slika 7: Simboli mesta (vir. avtorici)

spodarske in politične značilnosti posameznega obdobja. Te ugotovitve so neposredno vplivale na projekte, ki se izvajajo v okviru splošnega urbanističnega načrta Almatyja do leta 2040.

Z aktivnim vključevanjem držav in mest v svetovno gospodarstvo in kulturo se veča tveganje, da bo to oslabilo njihovo identiteto (slika 7). Pomembno je, da se globalizacija ne dojema kot negativni dejavnik, ki povzroča izgubo mestne in regionalne identitete. Pri oblikovanju objektov v Astani in Almatyju so sodelovali mednarodni arhitekti, kar kaže, da lahko globalizacija spodbudi razvoj in ohranjanje kulturnih tradicij, saj te postanejo predmet ustvarjalnosti mednarodne skupnosti (Abdrassilova in Aukhadiyeva, 2021).

Treba je poudariti, da je identiteta dinamična in se lahko spreminja glede na zgodovinske, socialne in politične spremembe v družbi. Arhitektura je eden izmed načinov izražanja kulturnih značilnosti in identitete ljudi. Kazahstanska arhitektura se še naprej razvija ter prilagaja sodobnim trendom in svetovnim družbenim izzivom. Prizadeva si postati čedalje bolj inovativna in edinstvena ter vključevati sodobne oblike in najnovejše gradbene tehnologije.

4.7 Dejavniki, ki vplivajo na oblikovanje identitete Almatyja

Analiza dejavnikov, značilnih za Almaty, je pokazala, da se identiteta mesta oblikuje na podlagi številnih prvin, ki odražajo njegove edinstvene naravne značilnosti in kulturno dediščino naroda. Raziskava je razkrila, da imajo glavno vlogo pri oblikovanju mestne identitete Almatyja tri skupine dejavnikov.

Naravni dejavniki, kot so stepa in gore, so ključni pri oblikovanju podobe mesta, saj odražajo njegovo edinstveno krajino. Krajinske značilnosti, kot je višinska razgibanost terena, so ključne za identiteto mesta, saj ustvarjajo poseben občutek pretočnosti in dinamičnosti.

Antropogeni dejavniki ponazarjajo dinamično prepletanje človeških dejavnosti z naravnim okoljem. Podnebje in relief sta močno vplivala na materialno in prostorsko tkivo mesta, katerega arhitektura odraža dediščino, prevladujočo gospodarsko dinamiko in stopnjo tehnološkega napredka posameznega obdobja ter s tem izraža identiteto mesta. Raziskava antropogenega vpliva v Almatyju je razkrila naslednje dejavnike: povečane emisije iz tovarn in stanovanjskih objektov, ki za ogrevanje uporabljajo premog, tveganja, povezana s slabšo kakovostjo zraka, in uporabo prevoznih sredstev, ki negativno vplivajo na kakovost zraka (AQLI, 2024). Nedavne raziskave mestnih središč poleg tega opozarjajo na precejšnje povečanje prometnih zastojev, ki postajajo čedalje večja težava, vpliv na okolje pa se krepi tudi zaradi pomanjkljivosti v infrastrukturi za ravnanje z odpadki.

Družbenokulturni dejavniki se nanašajo na izražanje mestne identitete na javnih dogodkih, ki oblikujejo in podpirajo mestno skupnost. Prirejanje tovrstnih dogodkov v številnih predelih mesta spodbuja angažiranost prebivalcev, njihovo vključenost v proučevanje zgodovine mesta ter sodelovanje v javnih razpravah in rekonstrukcijskih dejavnostih.

Izsledki ankete, v kateri so anketiranci navedene dejavnike razvrstili po pomembnosti, poudarjajo pomen tako naravnih kot antropogenih in družbenokulturnih dejavnikov pri dojemanju

podobe Almatyja. Razkrivajo celovito součinkovanje raznovrstnih prvin, ki določajo identiteto mesta ter v njem ustvarjajo edinstveno in bogato kulturno vzdušje. Izsledki opravljene raziskave kažejo, da imata arhitektura in fizično okolje pomembno vlogo pri oblikovanju urbane identitete Almatyja.

Kulturna identiteta mesta je večplasten pojav, ki odraža dolgotrajen proces oblikovanja individualne in kolektivne samopodobe v okviru kulturnih in družbenih vplivov. Vključuje medsebojno povezane vidike, kot so stiki s kulturno tradicijo, oblikovanje kulturnih identitet ter sodelovanje v medkulturnem in medverskem dialogu. Izsledki raziskave poudarjajo tudi vlogo narodnih vrednot in kulturnih simbolov pri oblikovanju kolektivne identitete družbe. Vrednote, kot sta gostoljubje in enotnost, so tesno povezane z zgodovinskimi in kulturnimi tradicijami območja in imajo pomembno vlogo pri oblikovanju narodne enotnosti.

Nacionalni simboli so pomembne prvine nacionalne identitete. Vključujejo neuradne simbole, kot so snežni leopard, zlati mož, *dombra* (lutnja), *jurta, samruk* (mitološka ptica) in šanirak (okrogli zgornji del *jurte*), in uradne simbole, kot so grb, zastava in himna. V sodobnem svetu, v katerem se družbenokulturna in politična dinamika nenehno spreminjata, se lahko spreminjajo in na novo razlagajo tudi pomeni identitetnih simbolov. Pri oblikovanju edinstvenosti in prepoznavnosti Almatyja pa imajo pomembno vlogo tradicionalni simboli, ki so izhajajo iz zgodovine, in novi simboli, na katere vplivajo sodobni trendi.

5 Sklep

Identiteta mesta je simbolni vir, ki s pomembnimi simbolnimi prvinami, povezanimi z naravnim okoljem, zgodovino in kulturo območja, vpliva na to, kako prebivalci dojemajo mestno okolje. Raziskava je pokazala, da na identiteto Almatyja vplivajo zlasti naravni (krajina in podnebje) in antropogeni dejavniki, ti se delijo še na materialne (arhitektura in prostor), in nematerialne značilnosti (simboli, podobe in miti).

Naravni dejavniki, kot so krajinske značilnosti in podnebje, pomembno vplivajo na teritorialno identiteto (tudi identiteto mesta), med drugim tudi na usmerjenost stavb, izbiro gradbenih materialov in vrsto objektov. Antropogeni dejavniki (arhitektura, infrastruktura in urbani prostor) ob upoštevanju geografskih posebnosti in reliefa določajo arhitekturni slog mesta, ki je ključni del njegove identitete. Družbenokulturni dejavniki temeljijo na tradicijah, običajih in kulturnih vrednotah, ki lahko postanejo simboli in podobe mestne identitete. Raziskava je pokazala, da je identiteta Almatyja skupek predstav o mestu, ki se oblikujejo s celovitim prepletom geografskih in kulturnozgodovinskih značilnosti. Prebivalci in obiskovalci arhitekturo dojemajo kot enega glavnih virov identitete Almatyja.

Model mestne identitete se oblikuje v geografskem okviru, v katerem se lokalna identiteta ustvarja v prostoru (gorat relief, morfologija ulic v starem delu mesta, arhitektura, parki in vodnjaki) in se izraža s trajnimi predstavami (mesto ob vznožju gora, mesto jabolk, mesto vrtov, mesto vodnjakov, kulturna prestolnica itd.). Arhitekturni prenašalci mestne identitete vključujejo okrasne elemente na stavbah, kot so fasadni senčniki, balkonske ograje, fasadno okrasje in poslikave.

Proučevanje identitete Almatyja je pomembno, ker se lahko z analizo njegovih značilnosti določijo smernice za raziskovanje identitetnih modelov drugih kazahstanskih mest. Izsledki tovrstnih raziskav se lahko upoštevajo pri preobrazbi mestnega okolja, ki bo posledično postalo privlačnejše za vlagatelje in turiste.

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Vpliv prostorskih poudarkov na zaznavanje varnosti v mestu: primer soseske Balat v Istanbulu

Mesta z izrazitimi prostorskimi poudarki uporabnikom omogočajo učinkovito orientacijo in prijetnejšo izkušnjo ter jim dajejo večji občutek varnosti. Avtorja sta v članku proučevala vpliv prostorskih poudarkov na gibanje in orientacijo pešcev ter njihovo povezavo z zaznavanjem varnosti v mestu. Za raziskavo sta izbrala sosesko Balat v Istanbulu, ki ima veliko prostorskih poudarkov, hkrati pa so v njej objekti in prostori, ki vplivajo na negativno zaznavanje varnosti. Na podlagi pregleda literature s področij prostorskih poudarkov in varnosti v prostoru, ki sta ga dopolnila s terenskimi opazovanji, sta opravila raziskavo s 110 posamezniki, v kateri sta analizirala njihovo izbiro poti na podlagi prostorskih poudarkov in njihov občutek varnosti na teh poteh. Izsledki so pokazali, da imajo ulice z večjim številom prostorskih poudarkov in tiste z višjo stopnjo privlačnosti pomembno vlogo pri orientaciji v prostoru. Poleg tega je raziskava pokazala povezavo med prostorskimi poudarki in zaznavanjem varnosti v prostoru, ki nakazuje, da uporabniki ulice z več izrazitimi prostorskimi poudarki dojemajo kot varnejše.

Ključne besede: prostorski poudarki, orientacija v prostoru, zaznavanje prostora, varnost v mestu, Balat, Istanbul

1 Uvod

Uporabniki v mestnih prostorih z umetnimi in naravnimi prvinami posredno ali neposredno zaznavajo razne okoljske dražljaje, in to z individualnimi kognitivnimi procesi, in jih pretvorijo v miselne podobe, na podlagi katerih sprejemajo odločitve v prostoru (Lynch, 1960; Göregenli, 2018; Cüceloğlu, 2019). Prvine, ki vključujejo eno ali več družbenih, zgodovinskih, simbolnih, gospodarskih ali estetskih značilnosti v mestnem prostoru, delujejo kot prostorski poudarki (ang. *landmarks*), ki vzbujajo pozornost prostorskih uporabnikov in posledično vplivajo na njihovo zaznavanje in orientacijo v prostoru (Gibson, 1950; Gifford, 2002; Raubal in Winter, 2002; Santos-Delgado, 2005). Ti poudarki se lahko zaznavajo tudi kot prvine mestne podobe. Mestni prostori, ki pri ljudeh vzbujajo močne miselne podobe, olajšajo navigacijo po mestu, zagotavljajo prijetnejšo uporabniško izkušnjo in ustvarjajo občutek varnosti (Lang, 1987; Lynch, 1960; Steck in Mallot, 2000; Köseoğlu in Önder, 2011). Za razlago občutka varnosti v prostoru, ki se nanaša na občutek miru in varnosti v družbenem življenju posameznikov, ki živijo na mestnih območjih, je bilo razvitih več teorij (npr. teorija razbitih stekel, teorija o branljivem prostoru, teorija racionalne izbire in teorija okoljskega stresa). V skladu z njimi uporabniki prostore, ki so zanemarjeni, zapuščeni ali so v njih razpadajoče stavbe in prvine, dojemajo kot nevarne, saj povečujejo verjetnost kriminalnih dejavnosti.

Zaznavanje prostora in varnost sta dobro raziskani področji urbanizma in psihologije, povezava med mestnimi podobami in zaznavanjem varnosti v mestu pa še ni bila podrobneje raziskana. Na podlagi Lyncheve (1960) trditve, da močni prostorski poudarki povečajo občutek varnosti, sta avtorja proučila vpliv mestnih prostorskih poudarkov na gibanje in orientacijo pešcev ter njihov morebitni vpliv na zaznavanje varnosti v mestu. Osredotočila sta se na tri temeljna raziskovalna vprašanja: 1. Ali obstaja povezava med prostorskimi poudarki ter gibanjem in orientacijo pešcev? 2. Kateri prostorski poudarki imajo večji vpliv na zaznavanje in orientacijo? 3. Ali obstaja povezava med prostorskimi poudarki in zaznavanjem varnosti v mestu? Njuna hipoteza je, da sta prisotnost in privlačnost prostorskih poudarkov v neposrednem sorazmerju z gibanjem uporabnikov in prispevata k večjemu občutku varnosti v mestu.

2 Zaznavanje prostora, vedenje in zaznavanje varnosti v mestu

Posamezniki so v nenehni interakciji z okoljem, ki jih obdaja. Svoje bivalno okolje si razlagajo prek njegovih fizičnih značilnosti, ga ustrezno umestijo v svojih mislih ali, z drugimi besedami, ga zaznavajo. Kot navaja Lewin (1951), na človekovo vedenje vpliva odnos med posameznikom in okoljem. To pomeni, da to, kako posamezniki zaznavajo svoje okolje – na kar vplivajo tako osebne lastnosti kot okoljske značilnosti – določa njihovo vedenje v prostoru. Poleg tega imajo mestno okolje in prvine, ki jih vključuje, močan vpliv na zaznavanje varnosti v mestu. Pozitivno zaznavanje varnosti v mestu je ključno za izboljšanje splošne kakovosti življenja (Barker, 1968; Koca in Erkan, 2019).

2.1 Zaznavanje prostora in vedenje v prostoru

Zaznavanje je proces prejemanja informacij iz okolja prek čutil ter njihovega urejanja in interpretacije z razvrščanjem v mislih (Norberg-Schulz, 1966; Rapoport, 1977). Na zaznavanje vplivajo številni dejavniki, ki izvirajo iz posameznika ali okolja. Med tistimi, ki izhajajo iz posameznika, so starost, stopnja izobrazbe, poklic, znanje, družbenogospodarski položaj, življenjski slog, vrednostne sodbe, potrebe, osebnostne lastnosti in izkušnje. Navedeni dejavniki vplivajo na zaznavanje, saj oblikujejo posameznikove senzorične lastnosti, kognitivne procese, vrednote in prednostne naloge, ki posledično vplivajo na to, kako si posameznik razlaga svoje okolje (Broadbent, 1958; Lynch, 1960; Kaplan, 1973; Sayar-Avcıoğlu in Akın, 2017; Göregenli, 2018).

Okoljski dejavniki, ki vplivajo na zaznavanje, vključujejo značilnosti, kot so barve, velikost, gostota, gibanje in orientacija drugih pešcev, svetloba in senca, oblika, bližina, globina, kontinuiteta, ponavljanje, razmerje, podobnost, raznovrstnost, topografija, naklon, vremenske razmere, zvok in vonj (Broadbent, 1958; Lim, 2000; Kürkçüoğlu in Ocakçı, 2015; Diker in Erkan, 2017). Prostorski poudarki (Lynch, 1960; Santos-Delgado, 2005) so pomembni okoljski dejavniki, ki vplivajo na zaznavanje. Njihova najpomembnejša značilnost je, da se fizično, funkcionalno ali pomensko razlikujejo od drugih prvin v okolici. Nekateri so znani vsem, drugi ne. Ni nujno, da jih vsi poznajo ali prepoznajo. Na ravni sosesk so to lahko kavarne, upravni uradi, živilske trgovine, grobnice, vodnjaki ali objekti, ki se od drugih izrazito razlikujejo po barvi, obliki ali materialu (Abu-Obeid, 1998; Erkan-Biçer, 2002; Köseoğlu in Önder, 2011; Zacharias, 2001). Santos-Delgado (2005) je prostorske poudarke razdelila v pet skupin: družbene, zgodovinske, simbolne, gospodarske in estetske. Družbeni prostorski poudarki so kraji, ki združujejo ljudi in spodbujajo stike (npr. verski kraji, parki in šole). Zgodovinski prostorski poudarki so kraji z zgodovinsko vrednostjo, na katerih so potekali pomembni zgodovinski dogodki. Mednje spadajo spomeniki, grobovi, domovi pomembnih posameznikov, zgodovinske stavbe in trgi. Simbolni prostorski poudarki so prvine, ki ljudem pomagajo vzpostaviti povezavo s prostorom, ko jih zagledajo. Gospodarski prostorski poudarki so kraji gospodarskega pomena, kot so tovarne, pristanišča, hoteli, trgovine in razni poslovni prostori,

estetski prostorski poudarki pa so kraji estetskega pomena, ki izstopajo po arhitekturnih in krajinskih značilnostih (Lim, 2000; Santos-Delgado, 2005; Köseoğlu in Önder, 2011; Bratina Jurkovič, 2014).

Okoljske dejavnike, ki vplivajo na zaznavanje, lahko poleg tega razvrstimo v fizične, funkcionalne in mobilne vire. Fizični spodbujevalni viri se nanašajo na obliko, material, barvo, teksturo ter razmerja med polnostjo in praznostjo sestavin grajenega okolja, ki sestavljajo prostor, ter na njihove medsebojne povezave. Funkcionalni spodbujevalni viri so tisti, ki pri uporabniku ustvarijo podobo o prostoru na podlagi njegove funkcije. Mobilni viri so povezani zlasti z množico in smerjo njenega gibanja, saj vplivajo na posameznikovo psihologijo in preference (Zacharias, 2001). Vedenje v prostoru je tesno povezano z zaznavanjem prostora, saj je zaznavanje temelj vedenja. Ljudje se gibljejo po prostoru na podlagi svojih zaznav, zato dejavniki, ki vplivajo na zaznavanje, vplivajo tudi na gibanje v prostoru (Gibson, 1950). Kot navajata Kitazawa in Batty (2004), so za gibanje pešcev v mestnem prostoru in njihovo izbiro poti značilne spremembe in nenadne odločitve. Na te vplivajo čas, fizične prvine v mestnem prostoru, naravne in umetne ovire ter posameznikove estetske in vrednostne presoje. Poleg dejavnikov, odvisnih od posameznika, in okoljskih dejavnikov, ki vplivajo na posameznikovo zaznavanje in vedenje, na gibanje in vedenje pešcev vpliva tudi čas (npr. letni čas, mesec, teden, dan in ura). Razlike v časovnem pasu lahko spremenijo dražljaje in njihovo intenzivnost, kar vpliva na zaznavanje in vedenje (Banerjee in Southworth, 1990; Bradshaw, 1993; Carmona idr., 2003; Correa, 1983; Marshall, 2005; Massey, 1994; Moughtin in Mertens, 2003; Mumford, 1937; Özer, 2006; Relph, 1976; Rykwert, 1982).

2.2 Zaznavanje varnosti v mestu in prostoru

Varnost se nanaša na materialno in duhovno varnost ter spoznanje, da ni nevarnosti. Je občutek in zaznava ter temeljna pravica vsakega človeka. Podobno se varnost v mestu nanaša na zmožnost posameznikov, ki živijo v mestu, da se počutijo varni pri zadovoljevanju svojih potreb in v medosebnih odnosih ter hkrati živijo v mirnem in varnem okolju. Za razlago občutka varnosti ali nevarnosti v mestnem prostoru so bile predlagane razne teorije o varnosti v prostoru (Akers, 2000; Anselin idr., 2000; Aksoy, 2007; Clarke, 1997; Elliott, 1952; Farrington, 2004; Ritts, 2024).

Teorija razbitih oken se osredotoča na to, kako prisotnost zanemarjenih, neurejenih in poškodovanih objektov in prvin v prostoru vzbuja občutek zapuščenosti, kar sčasoma vodi v nadaljnje propadanje. Zanemarjene ali poškodovane stavbe, nefunkcionalne krajinske prvine, nepobrane smeti ter pomensko ali vizualno problematični grafiti in poslikave dajejo vtis zanemarjenosti in nevarnosti (Welsh idr., 2015; Bilen in Büyüklü, 2018; Koca in Erkan, 2019). Po teoriji o branljivem prostoru prostori brez jasne ločnice med javnimi, poljavnimi, polzasebnimi in zasebnimi območji ter prenatrpane stanovanjske stolpnice, nefunkcionalna in neizkoriščena pritličja, zidovi brez oken, odmaknjeni prostori ter zapuščena območja, ki so posledica načrtovalskih napak in neustrezne umestitve stavb, ustvarjajo občutek nevarnosti. Take razmere namreč zmanjšujejo občutek pripadnosti, prostorsko preglednost in nadzor, zaradi česar so tovrstna območja ranljiva za kriminalne dejavnosti (Koca in Erkan, 2019). V skladu s teorijo racionalne izbire območja, na katerih je veliko gneče, kot so mestna središča in trgovske ulice, kjer lahko storilci ostanejo anonimni, slabo urejeni javni prostori, opuščena območja, ki jih zasedajo tolpe, ter slabo osvetljeni in zapuščeni javni prostori povečujejo občutek nevarnosti (Cullen in Agnew, 1999). Po teoriji okoljskega stresa lahko okoljski stresorji, kot je slaba kakovost okolja in stavb, pri posameznikih povzročajo stres, napetost, tesnobo, nemir in strah ter posledično vzbujajo povečan občutek nevarnosti. Dejavniki, kot so kakovost stavb, hrup, gneča, onesnaženost, staranje in zanemarjenost, ključno vplivajo na kakovost mestnega okolja. Slaba kakovost stavb je povezana zlasti s staranjem in propadanjem objektov (Clarke, 1997; Elliott, 1952; Farrington, 2004; Steg idr., 2015).

Posamezniki torej zaznavajo prvine mestnega okolja, v katerem živijo, na podlagi česar razvijajo vedenja in se v prostoru orientirajo. Pri tem prostorski poudarki – privlačne točke z družbeno, zgodovinsko, simbolno, gospodarsko in estetsko vrednostjo – pri opazovalcu izzovejo močne podobe mestnega okolja ter prek zaznavanja vplivajo na njegovo vedenje in orientacijo v prostoru (Lynch, 1960; Santos-Delgado, 2005). Poleg tega prostori z izrazito podobo povečujejo občutek varnosti pri ljudeh. Na podlagi navedenega sta avtorja povezave med prostorskimi poudarki, izbiro poti in zaznavanjem varnosti v mestu proučila s terensko raziskavo.

3 Metode

Na podlagi Lyncheve (1960) trditve, da mestni prostorski poudarki povečujejo občutek varnosti v prostoru, sta avtorja proučila vpliv mestnih prostorskih poudarkov na gibanje pešcev in njihovo zaznavanje varnosti v prostoru. Raziskavo sta razdelila v pet faz (slika 1).

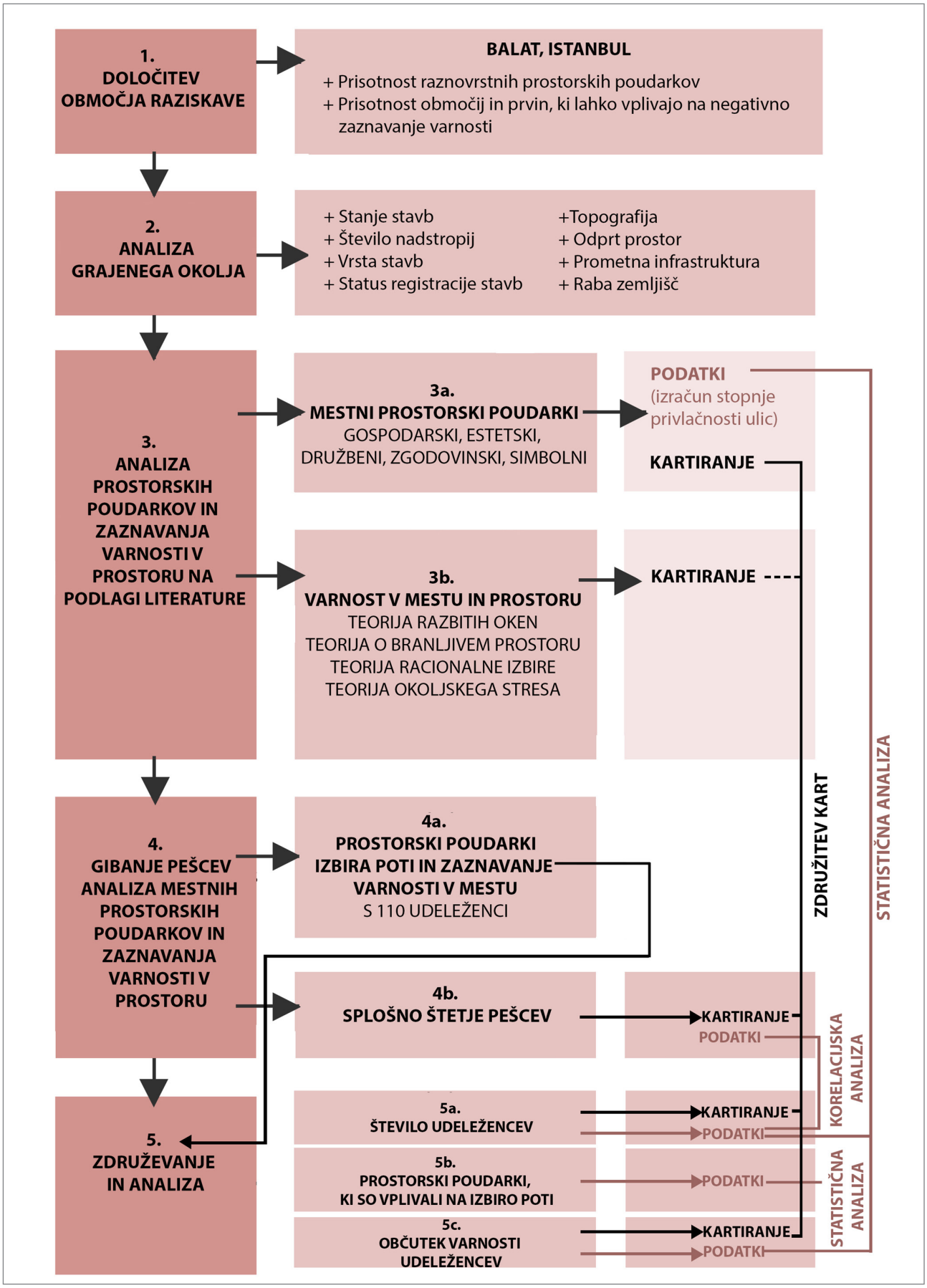
V prvi fazi sta izbrala območje raziskave, in sicer sosesko Balat, ki ima številne in raznovrstne prostorske poudarke ter prostore in prvine, ki lahko vplivajo na negativno zaznavanje varnosti (Erbey in Erbaş, 2017; Özbilge, 2018). V drugi fazi sta podrobno analizirala grajeno okolje na izbranem območju, vključno z dejavniki, kot so stanje stavb, število nadstropij, vrsta stavb,

status registracije stavb, topografija, odprt prostor, prometna infrastruktura in raba zemljišč. V tretji fazi sta na podlagi literature analizirala prostorske poudarke in zaznave varnosti v prostoru. Pri tem sta objekte in prvine na proučevanem območju analizirala posebej glede na njihove gospodarske, estetske, družbene, zgodovinske in simbolne značilnosti (faza 3a) (prim. Santos-Delgado, 2005). Objektom in prvinam z več značilnostmi hkrati sta pripisala številke, ustrezne številom vsebovanih značilnosti, na podlagi česar sta določila stopnjo njihove privlačnosti. Nato sta izračunala privlačnost vsake ulice na proučevanem območju, in sicer tako, da sta seštela stopnje privlačnosti objektov in prvin, ki so bili na posamezni ulici ali so bili z nje vidni, čeprav niso bili neposredno na njej. Nato sta privlačnost ulic ustrezno kartirala. Prostorske prvine soseske sta razvrstila na podlagi gospodarskih, estetskih, družbenih, zgodovinskih in simbolnih značilnosti. Kavarne, restavracije, vintage trgovine, obrtne delavnice, banke, trgovine z živili/tržnice/lekarne, butiki, ulične prodajalne, mladinski hoteli in bazarji imajo gospodarsko vrednost. Barva in oblika stavb, materiali, iz katerih so zgrajene, zgodovinske stavbe, porušene zgradbe, arhitekturni elementi (npr. vodnjaki) ter naravne krajine, umetniško preoblikovani prostori, topografija, ukrivljenost, odprtost in širina ulic, razgledi, senca in svetloba imajo lahko estetsko vrednost. Muzeji, cerkve, mošeje, sinagoge, kopališča, šole, bolnice, policijske postaje, raziskovalni centri, športni klubi, grafiti, viseče perilo in filmska prizorišča imajo družbeno vrednost. Zgodovinske stanovanjske, poslovne ali verske zgradbe imajo zgodovinsko vrednost, objekti, ki se običajno povezujejo s sosesko Balat, pa imajo simbolno vrednost (Erbey in Erbaş, 2017; Lim, 2000; Santos-Delgado, 2005; Köseoğlu in Önder, 2011; Özbilge, 2018). Avtorja sta poleg tega na podlagi prej omenjenih štirih teorij proučila območja, ki bi lahko prispevala k negativnemu zaznavanju varnosti, ter določila lokacije, kjer je teh območij največ (faza 3b) (prim. Cullen in Agnew, 1999; Koca in Erkan, 2019; Steg idr., 2015; Welsh idr., 2015).

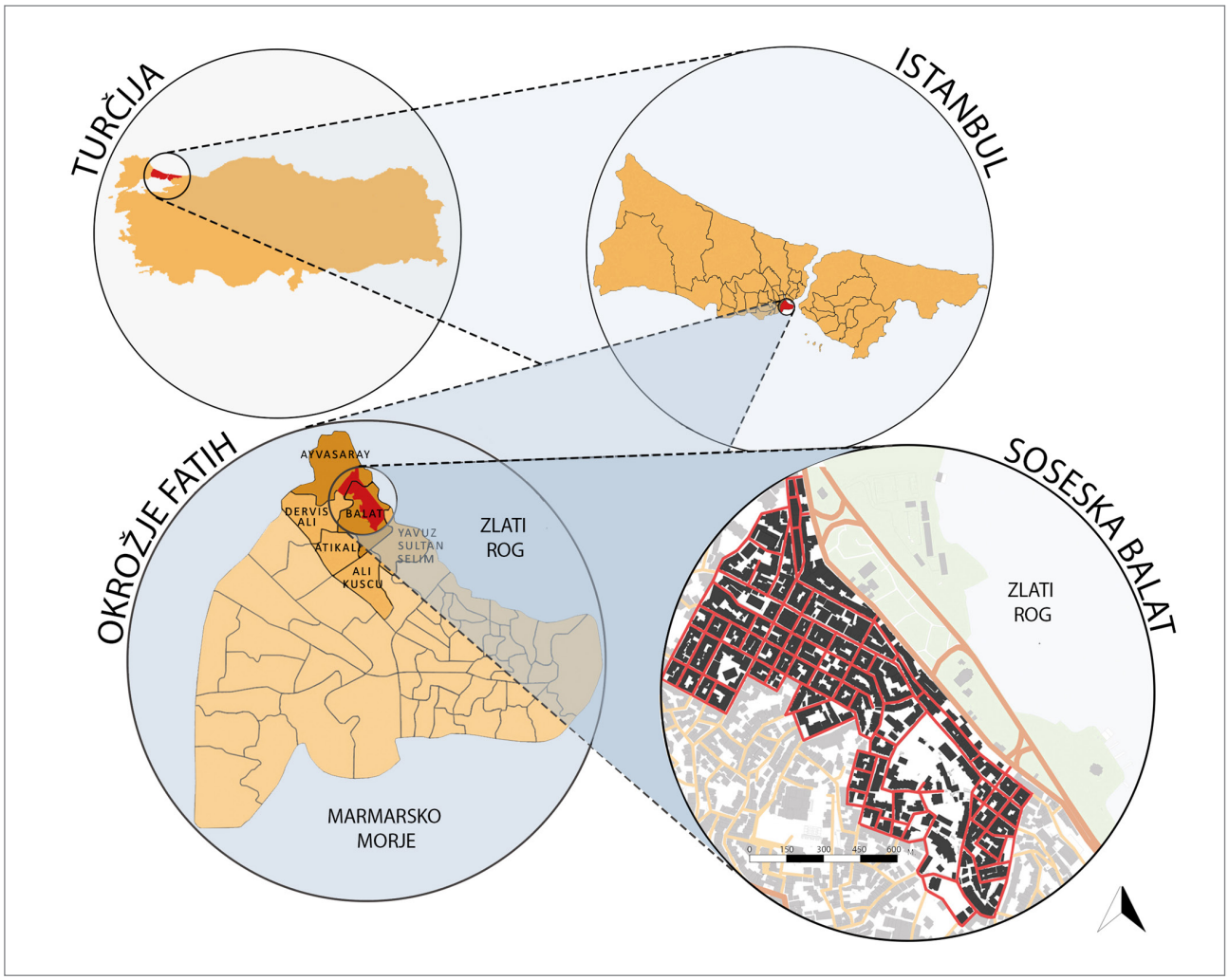
V četrti fazi sta izvedla terensko raziskavo s 110 posamezniki, ki še niso bili na proučevanem območju, pri čemer sta se osredotočila na povezavo med prepoznavanjem prostorskih poudarkov, izbiro poti in opredelitvijo varnosti v mestnem prostoru. Vsak udeleženec je eno uro z zemljevidom hodil po soseski Balat. Da bi se izognili izbiri poti na podlagi prejšnjih izkušenj s tem prostorom, so bili za raziskavo izbrani samo tisti posamezniki, ki Balata prej še nikoli niso obiskali. Udeleženci so se lahko na križiščih prosto odločali, v katero smer bodo nadaljevali pot, hkrati pa so že zaradi prostorske konfiguracije območja prečkali tako zelo privlačne kot manj privlačne ulice. Čeprav so sami izbirali poti, so torej že zaradi zveznosti ulične mreže med hojo izkusili najrazličnejše prostorske značilnosti. Ker je bilo ključno, da udeleženci vidijo in zaznajo prostorske poudarke in dejavnike varnosti v soseski, je terenska raziskava potekala podnevi. Da bi udeležencem zagotovili čim večje udobje, je poleg tega potekala samo ob jasnem in suhem vremenu. Izvajala se je od avgusta do oktobra 2020 ob upoštevanju ustreznega vremena in razmer, povezanih s pandemijo COVID-19. Avtorja sta omenjene mesece izbrala zato, ker je bilo takrat najmanj okužb, ni bilo policijskih ur ali zaprtij, zahtevana je bila samo uporaba mask na javnih prostorih. Ker je raziskava potekala na prostem, kjer so morali udeleženci nositi maske, so bili vplivi pandemije COVID-19 čim manjši. Glede na to, da so morali udeleženci znati brati zemljevid in na njem označevati izbrane poti, so bili za raziskavo izbrani posamezniki, stari najmanj 20 let. Zaradi dejavnikov tveganja, povezanih s pandemijo, so morali biti tudi mlajši od 60 let. Udeleženci so v raziskavi sodelovali prostovoljno, za raziskavo pa so se prijavili na podlagi javnih objav v družbenih omrežjih in e-sporočil, poslanih na univerzitetne e-poštne sezname in namenjenih posameznikom, ki živijo v Istanbulu. Med prijavljenimi so bili izbrani tisti, ki so izpolnjevali merila glede starosti, niso še nikoli obiskali soseske Balat in so bili na razpolago v času izvajanja raziskave.

V okviru raziskave (faza 4b) so morali udeleženci na priloženem zemljevidu cestnega omrežja označiti izbrane poti in na vsakem križišču opredeliti prostorske poudarke, ki so vplivali na njihovo izbiro. Hkrati so morali na vsakem križišču, ki so ga prečkali, oceniti svoj občutek varnosti na Likertovi lestvici (−3: najbolj nevarno, +3: najbolj varno). Poleg tega je bilo za vsako ulico na proučevanem območju v soboto popoldne izvedeno enourno splošno štetje pešcev (faza 4b). Na podlagi tega je bilo nato kartirano splošno število pešcev za vsako ulico v Balatu. Sobotno popoldne je bilo izbrano zaradi običajno velike gostote pešcev, kar so potrdile tudi druge raziskave (Erbey in Erbaş, 2017; Özbilge, 2018).

V peti fazi sta avtorja prekrila zemljevide vseh udeležencev, na podlagi česar sta določila in kartirala njihovo število na posamezni ulici (faza 5a). Nato sta prostorske poudarke, ki so jih udeleženci opredelili na vsakem križišču, razvrstila v več kategorij (faza 5b). Da bi preprečili kakršno koli vplivanje, udeleženci niso prejeli nobenih ključnih besed, poudarki pa so bili v kategorije razvrščeni na podlagi ključnih besed, ki so jih udeleženci sami zapisali. Ker ima lahko posamezna prvina več značilnosti (gospodarske, estetske, družbene, zgodovinske ali simbolne), sta avtorja ključne besede udeležencev najprej razvrstila v pet kategorij: arhitekturni elementi, fizični prostor, krajinske in topografske značilnosti, družbene in kulturne značilnosti ter gospodarski vidiki. Prve tri kategorije so bile povezane z estetsko vrednostjo, družbene in kulturne značilnosti so bile povezane z družbeno vrednostjo, gospodarski vidiki pa z gospodarsko vrednostjo. Zgodovinske stavbe imajo zgodovinsko vrednost, grška šola v predelu Fener, kavarna Naftalin in hiše na ulici Merdivenli Yokuş pa imajo simbolno vrednost.



Slika 1: Metode, uporabljene v raziskavi (ilustracija: avtorja)



Slika 2: Lokacija in meje proučevanega območja (ilustracija: avtorja; kartografska podlaga pridobljena od Oddelka za coniranje Metropolitanske občine Istanbul)

Avtorja sta na podlagi ključnih besed, ki so jih za prostorske poudarke zapisali udeleženci, izvedla statistično analizo, s katero sta določila prostorske poudarke, ki so najbolj vplivali na izbiro poti.

V nadaljevanju (faza 5c) sta avtorja z izračunom aritmetične sredine in srednje vrednosti ocen varnosti od −3 do 3, ki jih za vsako ulico podali udeleženci, določila njihov občutek varnosti. Te vrednosti sta nato združila in kartirala ulice z oceno 2 ali več. Ker je lahko občutek varnosti pri vsakem posamezniku drugačen in gre torej za subjektivno oceno, lahko uporaba srednje vrednosti skupaj z aritmetično sredino pomaga ublažiti izjemne primere. Avtorja sta vse izdelane karte (splošnega števila pešcev, števila udeležencev na posamezni ulici, zaznane varnosti udeležencev in privlačnosti ulic) prekrila in primerjala. Z rezultati analize in kartiranja na podlagi teorij s področja prostorske varnosti, pridobljenimi v fazi 3b, sta preverila ocene varnosti, ki so jih podali udeleženci. Poleg tega sta z orodjem Phyton statistično analizirala povezave med splošnim številom peščev in številom udeležencev na posamezni ulici ter med številom udeležencev na posamezni ulici, njihovim zaznanim občutkom varnosti, privlačnostjo ulic in mestnimi prostorskimi poudarki, ki so jih opredelili (slika 1).

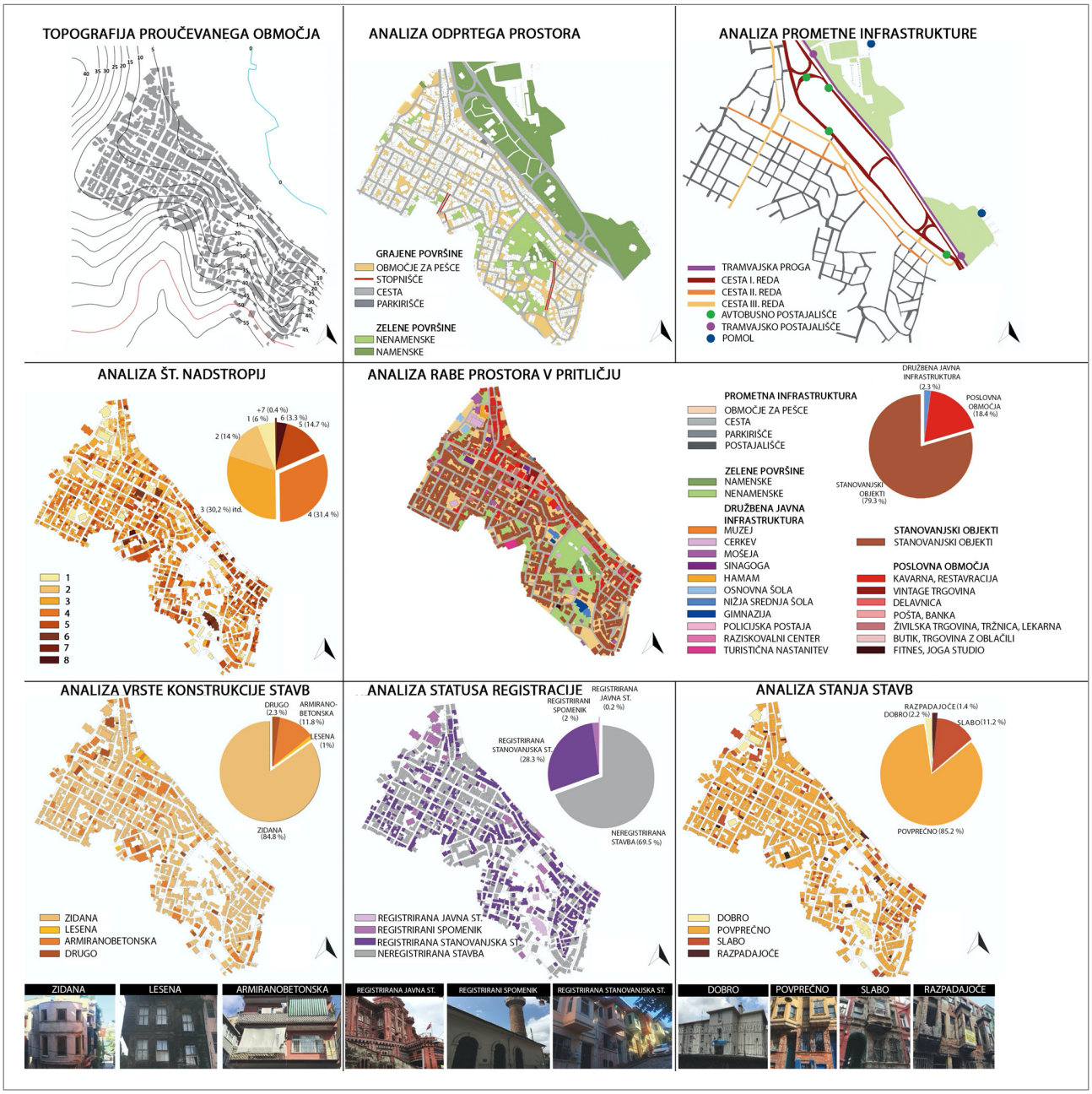
4 Rezultati

Soseska Balat je v okrožju Fatih med soseskama Fener in Ayvansaray na evropski strani Istanbula. Skozi zgodovino so v njej živeli Judje, Grki, Armenci in Turki. Ima številne objekte iz bizantinskega obdobja in časa Osmanskega cesarstva, v njej pa so vidni sledovi treh svetovnih religij (prim. Ülke, 1957; Deleon, 1991; Türkoğlu, 2002; Önem in Kılınçarslan, 2005; Şenyapılı, 2009; Özbilge, 2018). Avtorja sta območje raziskave zamejila na podlagi prisotnosti prostorskih poudarkov in prvin, kot so stare in razpadajoče stavbe, slaba osvetljenost in ozke ali slepe ulice, ki vplivajo na negativno zaznavanje varnosti (slika 2).

Preglednica 1: Analiza stavb in rabe prostora na proučevanem območju

Kategorija	Število enot	Delež (v %)
Stanje stavb		
Dobro	35	2,2
Povprečno	1.328	85,2
Slabo	181	11,2
Razpadajoče	23	1,4
Število nadstropij		
Eno	92	6,0
Dve	215	14,0
Tri	462	30,2
Štiri	481	31,4
Pet	225	14,7
Šest	51	3,3
Sedem	4	0,3
Osem	2	0,1
Vrsta konstrukcije		
Zidana	1,375	84,8
Lesena	17	1,0
Armiranobetonska	191	11,8
Drugo	38	2,3
Status registracije		
Registrirana javna stavba	2	0,2
Registrirani spomenik	33	2,0
Registrirana stanovanjska stavba	459	28,3
Neregistrirana stavba	1,127	69,5
Raba prostora v pritličju		
Stanovanje	1,288	79,3
Kavarna, restavracija	241	80,6
Vintage trgovina, starinarna	8	2,7
Delavnica	4	1,3
Pošta, banka	4	1,3
Butik	4	1,3
Fitnes, joga studio	2	0,7
Muzej	4	10,9
Cerkev	5	13,5
Mošeja	9	24,3
Sinagoga	3	8,1
Kopališče	2	5,4
Osnovan šola	2	5,4
Nižja srednja šola	2	5,4
Gimnazija	2	5,4
Policijska postaja	1	2,7
Raziskovalni center	1	2,7
Turistična nastanitev	6	16,2

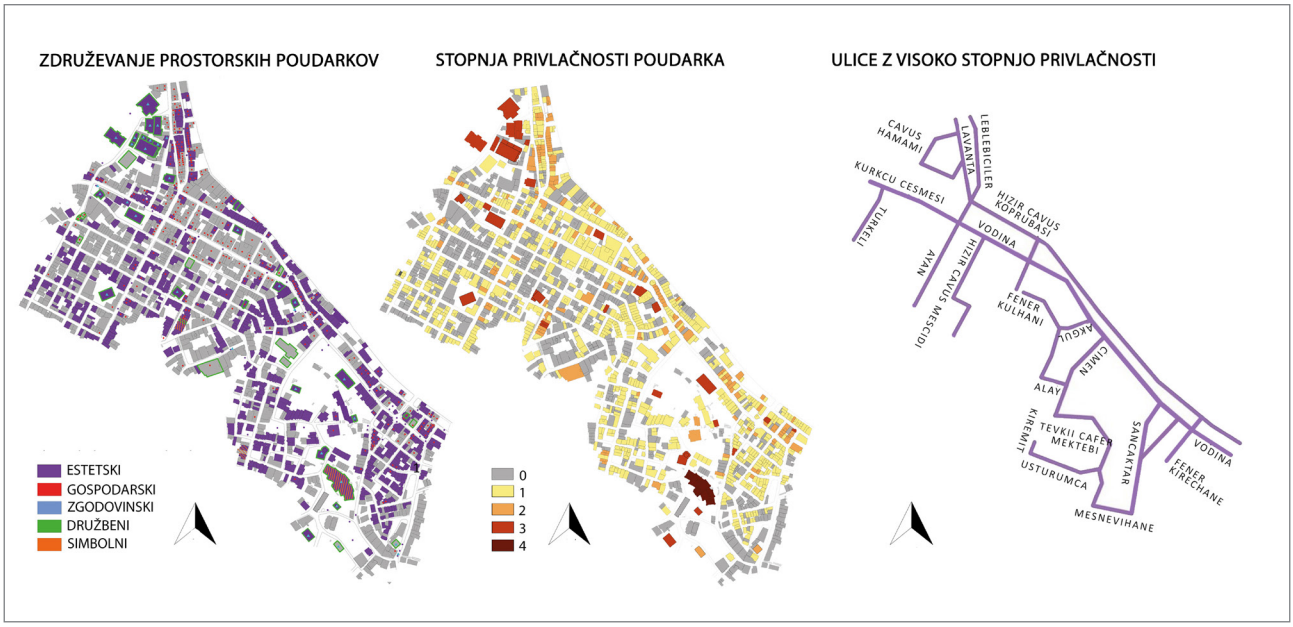
Vir: avtorja (podatki so bili pridobljeni od Oddelka za coniranje Metropolitanske občine Istanbul).



Slika 3: Analiza fizične zgradbe proučevanega območja (ilustracija: avtorja; kartografska podlaga pridobljena od Oddelka za coniranje Metropolitanske občine Istanbul)

4.1 Analiza fizičnega prostora

Območje ima mešano ulično ureditev, pri kateri prevladuje pravilna ulična zasnova. Velik del stavb je v povprečnem stanju, večina stavb v dobrem stanju pa je obnovljenih. Stavbe, ki so v slabem stanju, imajo stare, razpadajoče in poškodovane zidove in druge konstrukcijske elemente, večina je še vedno naseljena. Na pol porušene stavbe nimajo več vseh zidov in konstrukcijskih elementov ter niso primerne za bivanje. Prevladujejo tri- in štirinadstropne stavbe. Večina je zidanih, nekaj pa je tudi lesenih in drugih vrst objektov. Stavbe zgodovinskega in kulturnega pomena so zaščitene, približno tretjina je registriranih. Med njimi je veliko stanovanjskih objektov. Predeli blizu Zlatega roga so razmeroma ravni, proti notranjosti pa se naklon terena postopno povečuje. Razen vrta ob nekdanji palači družine Kantemir, obdanega z visokimi zidovi, na proučevanem območju ni večje zelene površine. Na njem so številna drevesa in zidovi, porasli z bršljanom, veliko je tudi stopnišč, ki so posledica nagnjenega terena. Glavno območje za pešce v Balatu je ulica Vodina, na kateri so restavracije, kavarne in trgovine. Za pešce so ključne ulice še Kürkçü Çeşmesi, Yıldırım, Ayan in Lavanta. V pritličjih prevladujejo tri kategorije rabe prostora: stanovanja (79,3 %), poslovni prostori (18,4 %) in družbena javna infrastruktura (2,3 %) (preglednica 1 in slika 3).



Slika 4: Združena karta prostorskih poudarkov in ulic z visoko stopnjo privlačnosti (ilustracija: avtorja; kartografska podlaga pridobljena od Oddelka za coniranje Metropolitanske občine Istanbul)

4.1.1 Analiza mestnih prostorskih poudarkov

Avtorja sta prostorske poudarke analizirala na podlagi njihovih gospodarskih, estetskih, družbenih, zgodovinskih in simbolnih značilnosti, poleg tega sta določila in kartirala območja njihove največje koncentracije. Na proučevanem območju sta med zgodovinske prostorske poudarke uvrstila osem mošej, pet cerkev, tri sinagoge, dve kopališči in dve šoli, med gospodarske poudarke pa 241 kavarn ali restavracij, osem starinarnic, štiri delavnice, štiri pošte ali banke, 36 živilskih trgovin ali lekarn, štiri butike ali trgovine z oblačili, dva fitnesa ali joga studia in šest turističnih nastanitev. Kot družbene prostorske poudarke sta opredelila štiri muzeje, pet cerkev, devet mošej, tri sinagoge, dve kopališči, po dve osnovni ali nižji srednji šoli, dve gimnaziji, policijsko postajo, raziskovalni center in šest turističnih nastanitev. Grško šolo v Fenerju, nekaj stanovanjskih stavb in kavarno Naftalin Cafe sta prepoznala kot simbolne prostorske poudarke. Med estetske poudarke sta uvrstila objekte z estetsko vrednostjo, kot so stavbe z izstopajočimi arhitekturnimi elementi in krajinskimi ureditvami (npr. kamniti zidovi, platane, vinska trta, razsvetljava, barvita svetloba, ki se iz kavarn in restavracij razliva po ulicah, posebno pohištvo, barvita stopnišča, najrazličnejši elementi umetniško preoblikovanega prostora in vodnjaki).

Objekt ali prvina je lahko pomembna z več vidikov. Grška šola v Fenerju na primer izstopa kot najmočnejši prostorski poudarek zaradi svoje zgodovinske, družbene, simbolne in estetske vrednosti. Po pomenu in privlačnosti ji sledijo verske stavbe z zgodovinsko, družbeno in estetsko vrednostjo. Na proučevanem območju so poleg tega številne registrirane stavbe z estetskim pomenom. Nekatere se uporabljajo tudi v poslovne namene in imajo zato tudi gospodarsko vrednost, kar povečuje njihovo privlačnost. Avtorja sta ulice s stopnjo privlačnosti, višjo od povprečja plus standardni odklon, opredelila kot zelo privlačne in jih nato tudi kartirala. Na splošno so to ulice, na katerih je veliko trgovin, gostinskih lokalov in drugih poslovnih objektov (gospodarsko pomembne ulice) ter potekajo vzporedno z Zlatim rogom na vhodu na proučevano območje, ter nekatere druge ulice zgodovinskega, estetskega ali družbenega pomena, ki potekajo pravokotno na prej navedene in se nadaljujejo v notranjost (slika 4).

4.1.2 Analiza varnosti v mestu

Prostori in objekti, ki vplivajo na občutek nevarnosti, prevladujejo v zahodnem, južnem, jugozahodnem in jugovzhodnem delu proučevanega območja (slika 5). V jugozahodnem delu je opazna visoka koncentracija stavb in območij slabe kakovosti, ki so ključni kazalnik okoljskega stresa.

4.2 Analiza gibanja pešcev, mestnih prostorskih poudarkov in zaznavanja varnosti

Preglednica 2 vsebuje podatke o spolu, starosti in izobrazbi udeležencev. Na proučevano območje so vstopili skozi enega od treh vhodov, dostopnih z obale. Ti vhodi so na mestu nekdanjih vrat v mestnem obzidju (prim. Özbilge, 2018). Udeleženci so vhod (V1, V2 ali V3; slika 6) izbrali povsem po svoji presoji. Vsak udeleženec je nato dobil osnovni zemljevid

Slika 5: Prostori, ki v skladu s teorijami prostorske varnosti vzbujajo občutek nevarnosti v prostoru (ilustracija: avtorja; kartografska podlaga pridobljena od Oddelka za coniranje Metropolitanske občine Istanbul)

proučevanega območja, na katerem je lahko označil svojo pot. Na osnovnem zemljevidu so bile vse ceste, stopnice in povezovalni elementi prikazani v delno abstrahirani in linearni obliki, križišča pa so bila označena s krogci. Udeleženci so se ustavili na vsakem križišču in izbrali ulico, po kateri so želeli nadaljevati, ter tako oblikovali svoje poti. Med potjo so na vsakem križišču opredelili prostorske poudarke, ki so vplivali na njihove odločitve, na Likertovi lestvici pa so ocenili svoj občutek varnosti v mestu. Vsak udeleženec je v raziskavi sodeloval eno uro.

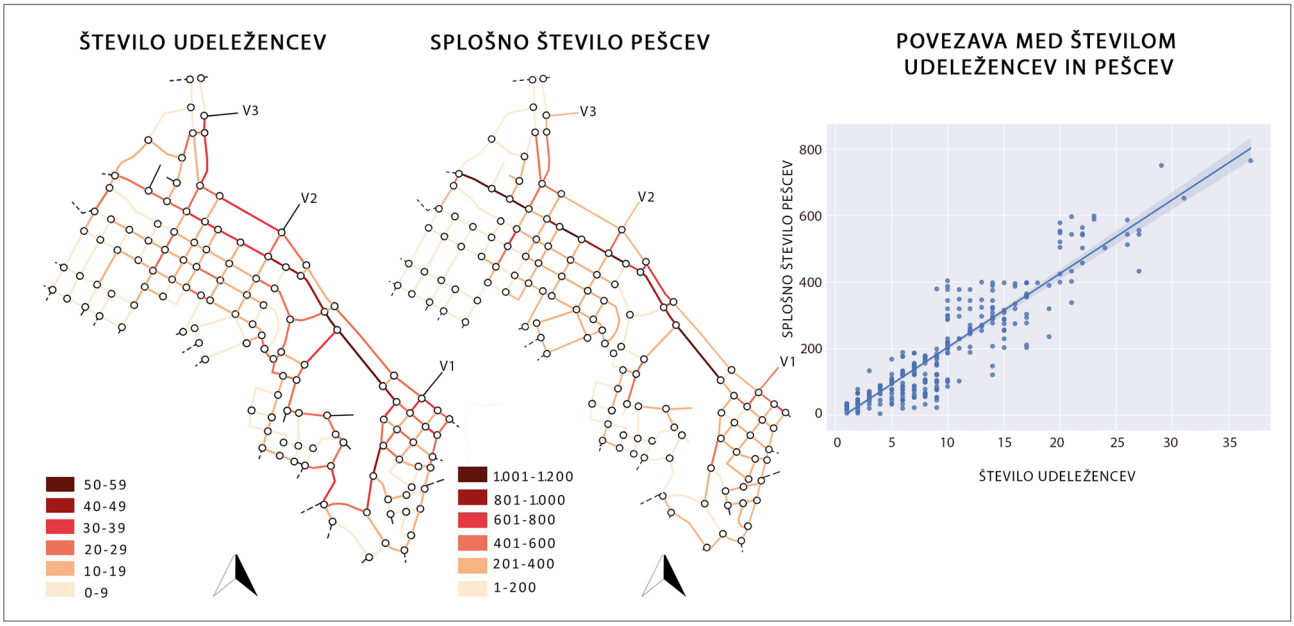
4.2.1 Splošno število pešcev in število udeležencev

Avtorja sta zemljevide, ki so jih vrnili udeleženci, prekrila, združila in izračunala število udeležencev, ki so prečkali vsako ulico. Prehode v obe smeri sta štela ločeno. Največje število udeležencev, ki so prečkali samo eno ulico, je bilo devetinštirideset, nekaterih ulic pa ni prečkal noben udeleženec. Največ udeležencev je prečkalo ulico Vodina, ki poteka vzporedno z Zlatim rogom in je glavna ulica na proučevanem območju. Poleg števila udeležencev na posamezni ulici je bilo na proučevanem območju opravljeno tudi splošno štetje pešcev. Potekalo je sočasno s terenskimi raziskavami udeležencev med avgustom

Preglednica 2: Demografske značilnosti udeležencev

Značilnost	*n*	Delež (v %)
Spol		
Ženski	52	47,0
Moški	58	53,0
Izobrazba		
Osnovna šola	17	15,5
Gimnazija	35	31,8
Univerzitetna	46	41,8
Magisterij ali doktorat	12	10,9
Starost (v letih)		
20–29	35	31,8
30–39	22	20,0
40–49	30	27,3
50–59	23	20,9

Vir: avtorja.

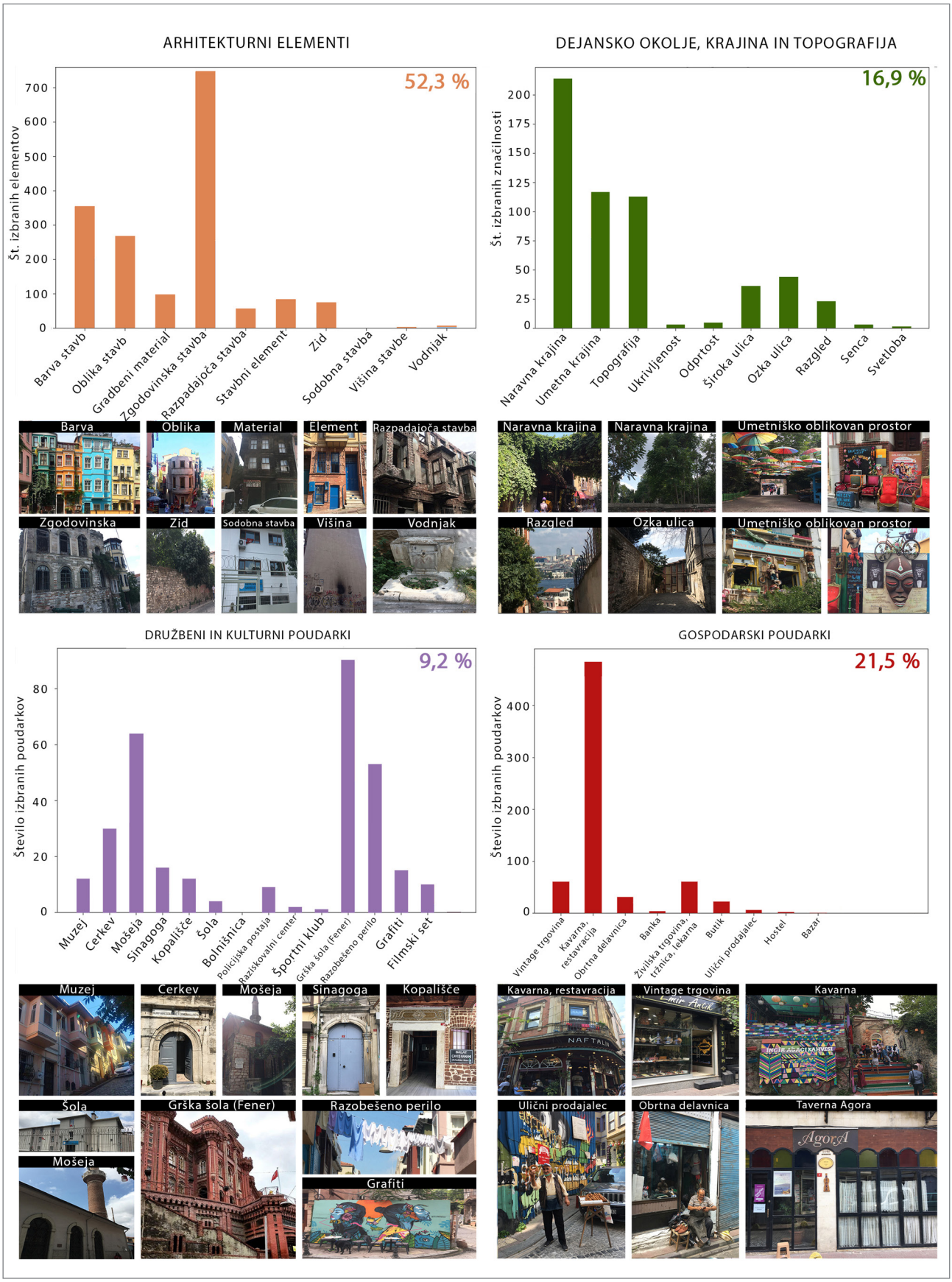


Slika 6: Število udeležencev, splošno število pešcev in Pearsonov koeficient korelacije (ilustracija: avtorja; kartografska podlaga pridobljena od Oddelka za coniranje Metropolitanske občine Istanbul)

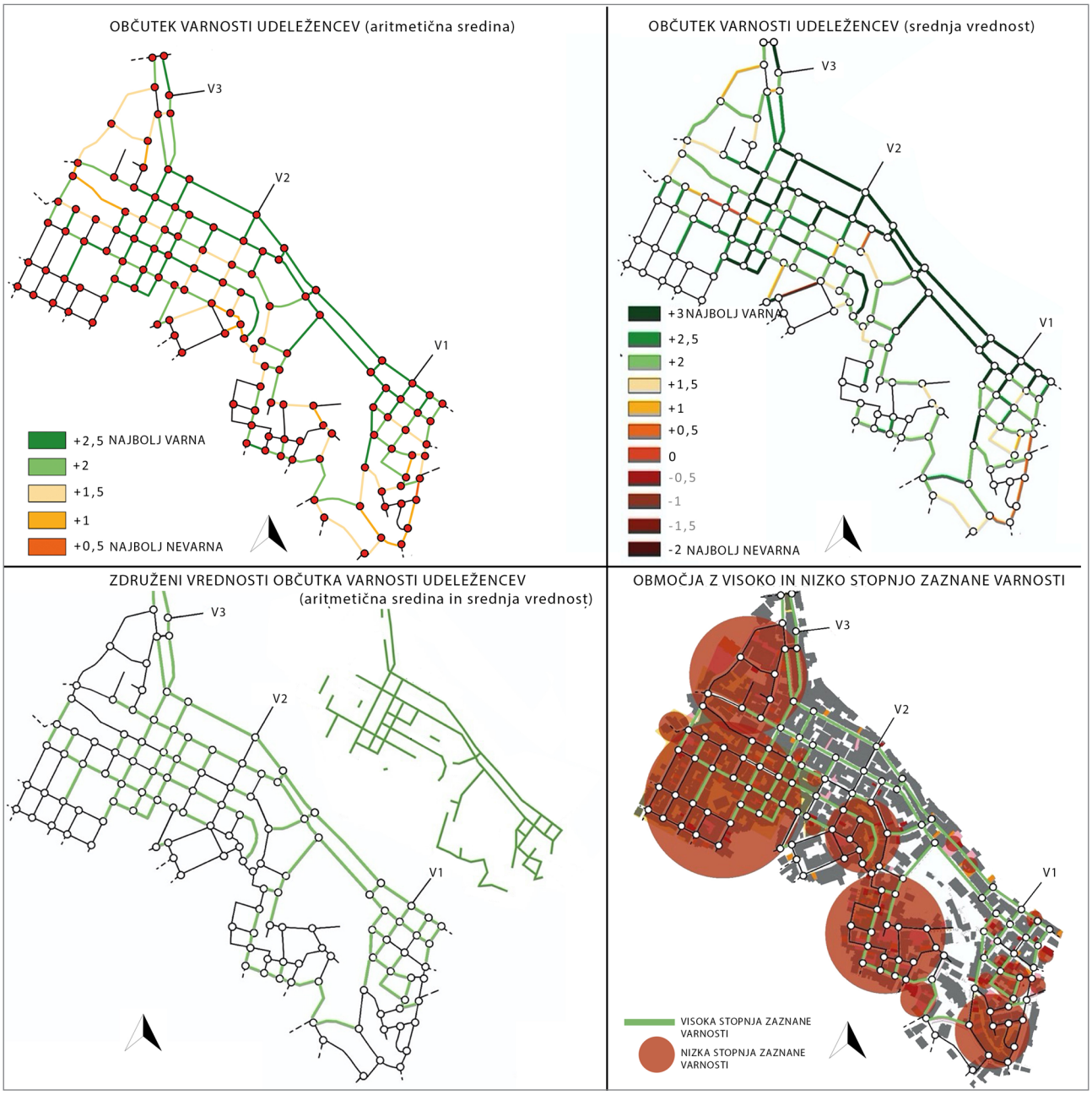
in oktobrom 2020, in sicer ob sobotah med 14. in 17. uro, da je bila zagotovljena primerljivost podatkov. Tokove pešcev v obe smeri so ročno zapisovali opazovalci, ki so stali na ključnih točkah po celotnem proučevanem območju. Vsak odsek ulice je bil neprekinjeno opazovan eno uro. Med splošnim štetjem pešcev je bilo na nekaterih odsekih preštetih od 1.000 do 1.200 pešcev. Na podlagi obeh štetij je bilo ugotovljeno, da je število pešcev največje na območju bazarja (ulica Vodina) in Fenerja (vzhod-jugovzhod), precej manjše pa je v zahodnem in južnem delu proučevanega območja. Obe štetji sta pokazali še, da je največ pešcev na ulicah z visoko koncentracijo trgovskih, gostinskih in verskih objektov. Pearsonov koeficient korelacije med splošnim številom pešcev in številom udeležencev je znašal 0,92 (slika 6).

4.2.2 Mestni prostorski poudarki in izbira poti

Terenska raziskava je pokazala, da so na izbiro poti udeležencev najbolj vplivali arhitekturni poudarki v prostoru, tem so po pomenu sledili gospodarski poudarki, poudarki, povezani s fizičnim okoljem, krajino in topografijo, ter nazadnje družbeni in kulturni poudarki.



Slika 7: Število izbranih poudarkov v prostoru (ilustracija in foto: avtorja)



Slika 8: Območja z visoko in nizko stopnjo zaznane varnosti (ilustracija: avtorja; kartografska podlaga pridobljena od Oddelka za coniranje Metropolitanske občine Istanbul)

Med arhitekturnimi elementi so na orientacijo udeležencev najbolj vplivale zgodovinske stavbe. Pomemben dejavnik sta bili tudi barva in oblika stavb, najmanj pomembni pa so bili višina stavb in vodnjaki. Med prostorskimi poudarki, ki so se nanašali na fizično okolje, krajino in topografijo, je bil najpomembnejši dejavnik naravna krajina, čeprav sta tudi umetna krajina in topografija precej vplivali na izbiro poti. Širina ulic in razgledi so imeli manjši vpliv na orientacijo, najmanj pomembni pa so bili dejavniki, kot so ukrivljenost ulic, odprtost, svetloba in senca.

Pri družbenih in kulturnih prostorskih poudarkih je na orientacijo najbolj vplivala grška pravoslavna šola v Fenerju, ki po barvi, velikosti in arhitekturnem slogu izstopa iz okolice in je ena najimenitnejših stavb na območju Zlatega roga. Po pomenu so ji sledili grafiti, mošeje in cerkve. Javna šola, policijska postaja, raziskovalni center in športni klub so imeli manjši vpliv na izbiro poti, zdravstvene in zobne ambulante, ki so spadale v kategorijo bolnišnic, pa so imele zanemarljiv vpliv.

Preglednica 3: Razvrstitev ulic glede na stopnjo privlačnosti in povprečno število udeležencev, ki so jih prečkali

Razpon vrednosti	Stopnja privlačnosti	Delež (v %)	Povprečno št. udeležencev
0 do povprečja minus SD	Nizka	16	7
Povprečje minus SD do povprečja	Nizka do zmerna	34	8
Povprečje do povprečja plus SD	Zmerna do visoka	34	11
> povprečje plus SD	Visoka	16	13

Vir: avtorja.

Med gospodarskimi prostorskimi poudarki je daleč največ udeležencev izbralo kavarne in restavracije. To lahko pripišemo številnim gostinskim lokalom na proučevanem območju, njihovi lokaciji, tematiki, barvitim mizam in stolom, senčnikom, razsvetljavi, stopnicam in stenskim poslikavam. Na orientacijo udeležencev so poleg tega vplivali tudi živilske trgovine in lekarne, vintage trgovine in starinarnice, obrtne delavnice in butiki na proučevanem območju. Zanimivo je, da manjša tržnica v predelu Ayvansaray na zahodu, na kateri prodajajo hrano in oblačila, na njihovo izbiro poti ni imela nikakršnega vpliva (slika 7).

4.2.3 Zaznavanje varnosti

Po izračunu in kartiranju aritmetične sredine in srednje vrednosti ocen zaznane varnosti, ki so jih podali udeleženci, sta avtorja obe združila, nato pa sta določila in kartirala ulice z vrednostjo 2 ali več pri obeh kazalnikih. Avtorja sta aritmetično sredino in srednjo vrednost uporabila skupaj, da bi preprečila ekstremne vrednosti ali osamelce v podatkih, ulice z majhnim številom udeležencev pa sta izključila iz analize. Ulice z visoko oceno zaznane varnosti (označene zeleno na sliki 8) sta primerjala z območji, ki bi jih po teorijah s področja prostorske varnosti zaradi zgoščenosti nekaterih objektov in elementov posamezniki lahko zaznali kot nevarne (označena s temno rdečimi krogi). Ta primerjava je pomembna za oceno točnosti subjektivno zaznane varnosti (slika 8).

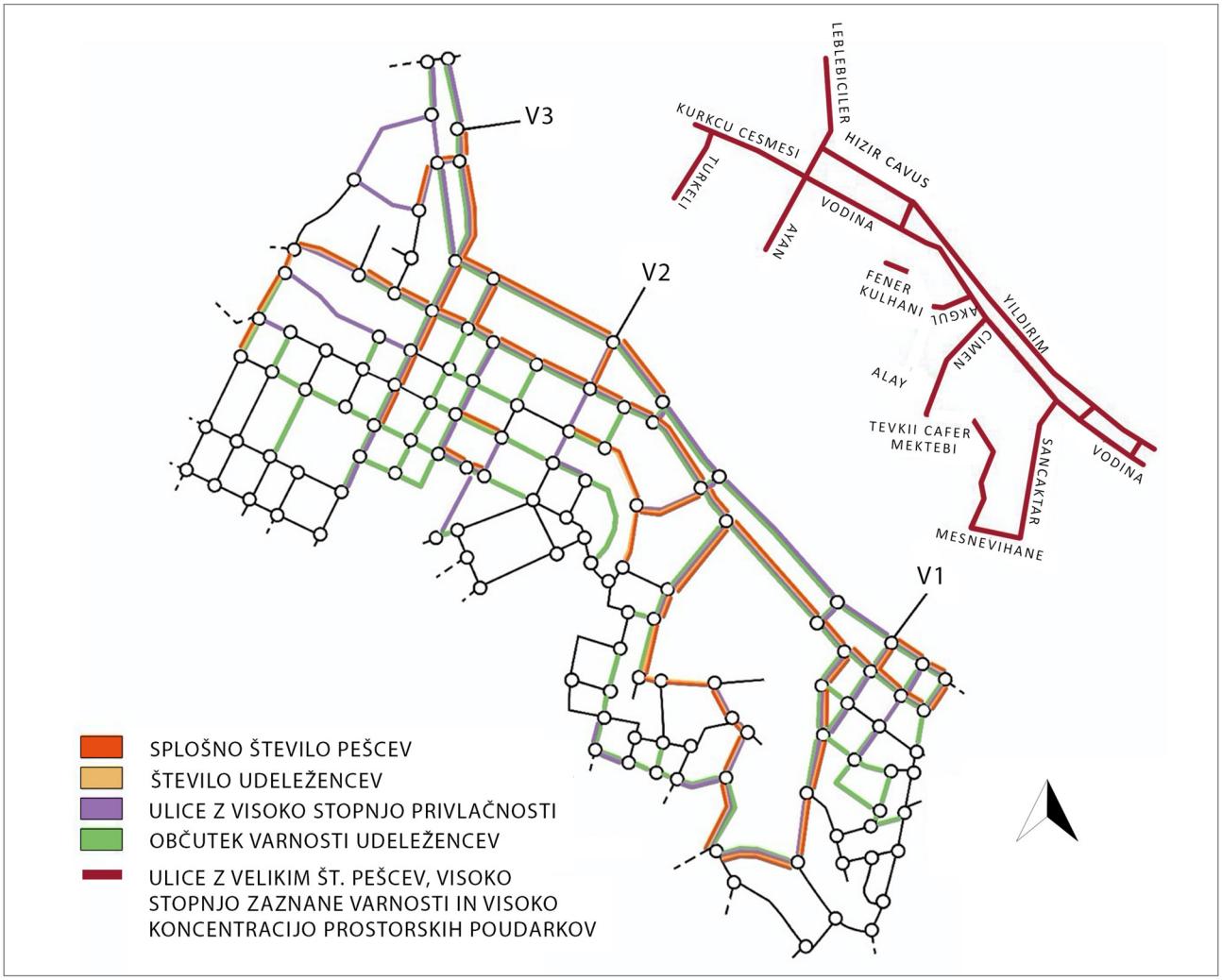
Ulice z visoko stopnjo zaznane varnosti so bile večinoma zunaj temno rdečih krogov. Aritmetična sredina in srednja vrednost zaznane varnosti pri večini ulic znotraj krogov je bila nižja od 2. Izsledki analize proučevanega območja na podlagi teorij s področja varnosti v mestu se torej ujemajo z zaznanim občutkom varnosti med udeleženci, saj se ti na območjih, ki bi morala biti po teh teorijah zaznana kot nevarna, niso počutili varne. Čeprav je večina ulic z visoko stopnjo zaznane varnosti zunaj rdečih krogov, jih nekaj vseeno ostaja znotraj. Navedeno je najverjetneje posledica vpliva individualnih dejavnikov in nekaterih prostorskih poudarkov (slika 8).

4.2.4 Število udeležencev, zaznana varnost in prostorski poudarki

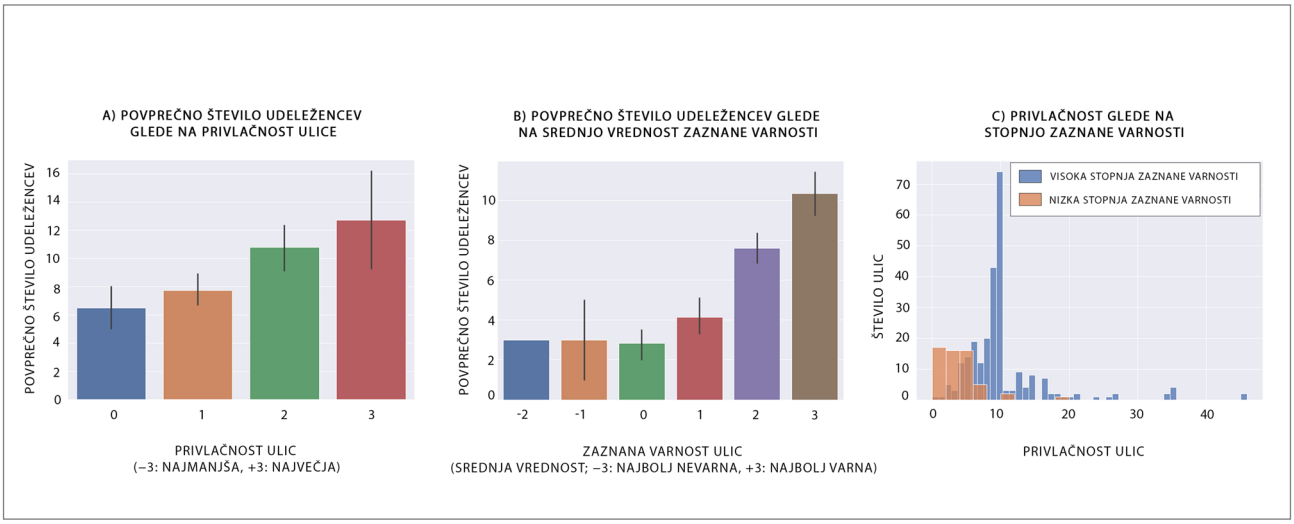
Raziskava je pokazala, da se ulice z visoko koncentracijo udeležencev in velikim številom pešcev močno prekrivajo s tistimi z visoko stopnjo zaznane varnosti in privlačnosti. Mednje spadajo ulice Vodina Street, Yıldırım, Ayan, Leblebiciler, Lavanta, Kürkçü Çeşmesi, Hızır Çavuş Köprübaşı, Akgül, Çimen, Sancaktar Yokuşu in Mesnevihane. Število pešcev in njihova izbira poti sta torej povezana s prisotnostjo, privlačnostjo in gostoto mestnih prostorskih poudarkov, ki vplivajo na privlačnost ulice in prispevajo k močnemu občutku varnosti (slika 9).

Izsledki raziskave so bili obdelani še statistično. Pri analizi povezave med privlačnostjo ulice in številom udeležencev, ki so jo prečkali, je bila povprečna stopnja privlačnosti pri vseh ulicah 8,22 (standardni odklon (SD): 6,39). Porazdelitev stopnje privlačnosti ulic se okvirno ujema s simetrično normalno porazdelitvijo. Ulice s stopnjo privlačnosti od 0 do povprečne vrednosti minus standardni odklon so bile razvrščene med ulice z nizko stopnjo privlačnosti. Teh je bilo približno 16 %. Ulice z vrednostmi med povprečjem minus standardni odklon in povprečjem so bile razvrščene med ulice z nizko do zmerno stopnjo privlačnosti. Teh je bilo približno 34 %. Ulice z vrednostmi med povprečjem in povprečjem plus standardni odklon so bile opredeljene kot ulice z zmerno do visoko stopnjo privlačnosti in teh je bilo prav tako približno 34 %. Tiste z vrednostmi, višjimi od povprečja plus standardni odklon, pa so bile opredeljene kot ulice z visoko stopnjo privlačnosti. Teh je bilo približno 16 %. Povprečno število udeležencev za vsako kategorijo ulic je prikazano v histogramu na sliki 10a. Povprečno število udeležencev na ulicah z nizko stopnjo privlačnosti je bilo 7, na tistih z nizko do zmerno stopnjo privlačnosti je bilo 8, na ulicah z zmerno do visoko stopnjo privlačnosti 11 in na tistih z visoko stopnjo privlačnosti 13. Podatki torej kažejo, da z naraščanjem privlačnosti ulice narašča tudi povprečno število udeležencev na njej (slika 10a, preglednica 3).

Pri analizi povezave med zaznano varnostjo in številom udeležencev, ki so prečkali posamezno ulico, sta avtorja izračunala srednjo vrednost zaznane varnosti, ki so jo udeleženci



Slika 9: Združena karta ulic z velikim številom pešcev, visoko stopnjo zaznane varnosti in visoko koncentracijo prostorskih poudarkov (ilustracija: avtorja; kartografska podlaga pridobljena od Oddelka za coniranje Metropolitanske občine Istanbul)



Slika 10: povezave med privlačnostjo ulic, njihovo zaznano varnostjo in številom udeležencev na njih: a) število udeležencev glede na stopnjo privlačnosti ulic, b) število udeležencev glede na stopnjo zaznane varnosti, c) stopnja privlačnosti glede na zaznano varnost (vir: avtorja)

ocenjevali na lestvici od −3 do +3. Izračunala sta jo za vse ulice, pri čemer sta decimalne vrednosti zaokrožila. Povprečno število udeležencev na ulicah v povezavi z njihovim občutkom varnosti je prikazano v histogramu na sliki 10b, iz katerega je razvidno, da povprečno število narašča skupaj z zaznano stopnjo varnosti. Analiza povezave med zaznano varnostjo in privlačnostjo ulic je pokazala, da je povprečna stopnja privlačnosti ulic z visoko stopnjo varnosti znašala 10,28, povprečna stopnja privlačnosti ulic z nizko stopnjo varnosti pa je znašala 3,33. Navedeno kaže, da se ulice z visoko stopnjo privlačnosti, na katerih je veliko izrazitih prostorskih poudarkov, po navadi dojemajo kot varnejše (slika 10c).

5 Razprava

V zvezi s prvim raziskovalnim vprašanjem je terenska raziskava pokazala, da je na privlačnejših ulicah po navadi več pešcev. Večina ulic z velikim številom pešcev se namreč prekriva z ulicami z visoko stopnjo privlačnosti (slika 9). Tudi statistične analize so pokazale, da se z naraščanjem privlačnosti ulic močno poveča povprečno število pešcev. Ulice z nizko stopnjo privlačnosti je na primer v povprečju prečkalo sedem pešcev, na ulicah z visoko stopnjo privlačnosti pa je to število naraslo na 13. Navedeni rezultati potrjujejo vpliv privlačnosti prostora na gibanje pešcev in vpliv raznolikosti prostora na vedenje uporabnikov (slika 10a).

Navedeni izsledki se ujemajo s teorijo podobe mesta, ki jo je razvil Lynch (1960) in po kateri se posamezniki v prostoru orientirajo na podlagi povezave, ki jo vzpostavijo z okoljskimi prvinami. Podobno je Zacharias (2001) poudaril, da vedenje pešcev na mestnih območjih določajo njihovi stiki z okoljem in da imajo nekateri prostorski poudarki odločilno vlogo pri izbiri smeri. Tudi model vedenja pešcev, ki sta ga razvila Kitazawa in Batty (2004), izpostavlja močno povezavo med okoljskimi dražljaji in preferencami uporabnikov. Močna povezava med izračunanimi vrednostmi in podatki o orientaciji, pridobljenimi v raziskavi, ki je predstavljena v tem članku, se torej precej ujemajo s teoretičnimi in empiričnimi izsledki v literaturi. Na splošno izsledki opravljene raziskave potrjujejo ključni vpliv privlačnih mestnih območij na mobilnost uporabnikov prostora ter posledično pomen tovrstnih območij v urbanizmu in prostorskem oblikovanju.

V zvezi z drugim raziskovalnim vprašanjem je raziskava pokazala, da so arhitekturne značilnosti prostorski poudarki, ki najbolj vplivajo na zaznavanje prostora in orientacijo njegovih uporabnikov. Po pomenu jim sledijo gospodarski poudarki in tisti, povezani s fizičnim okoljem, krajino in topografijo. Najmanjši vpliv imajo družbeni in kulturni poudarki v prostoru. Ključni elementi, ki so pri udeležencih raziskave vplivali na izbiro poti, so bili zgodovinske stavbe, kavarne in restavracije, barva in oblika stavb, prvine naravne krajine in umetniško preoblikovanega prostora, topografske značilnosti in verske stavbe.

Navedeni izsledki se ujemajo z Lynchevo (1960) teorijo podobe mesta, po kateri izstopajoče in funkcionalno pomembne urbane prvine usmerjajo uporabnike pri iskanju poti. Zaradi zgodovinskega, simbolnega, estetskega in družbenega pomena izstopa zlasti grška pravoslavna šola v Fenerju, ki je močan prostorski poudarek in orientacijska točka. To se ujema z razvrstitvijo prostorskih poudarkov, ki jo je izdelala Santos-Delgado (2005) in ki poudarja vlogo njihovega estetskega, gospodarskega, družbenega, zgodovinskega in simbolnega pomena pri oblikovanju prostorskih zaznav. Norberg-Schulz (1966) je trdil, da prostorska identiteta, ki jo določajo simbolne in estetske okoljske prvine, povečajo berljivost mestnih prostorov. Navedeno se neposredno ujema z ugotovitvami raziskave, predstavljene v tem članku, v kateri se je grška šola v Fenerju izkazala za pomembno orientacijsko točko. Tudi Bratina Jurkovič (2014) ugotavlja, da estetski javni prostori krepijo stike med uporabniki in pozitivno vplivajo na njihovo orientacijo. Navedeno se ujema z ugotovitvami avtorjev raziskave, predstavljene v tem članku, ki so pokazali, da imajo barva in oblika stavb ter urejenost njihove okolice močan vpliv na orientacijo v prostoru. Na splošno se njuni izsledki ujemajo s tistimi v literaturi (Köseoğlu in Önder, 2011; Zacharias, 2001). Prostorski poudarki z visoko estetsko in gospodarsko vrednostjo imajo torej ključno vlogo pri prostorskih odločitvah uporabnikov in njihovem vedenju v prostoru, ki temelji na prostorskih zaznavah in orientacijskih točkah (slika 7).

V zvezi s tretjim raziskovalnim vprašanjem je raziskava pokazala močno in statistično značilno povezavo med prostorskimi poudarki in zaznavanjem varnosti v mestu. Večina ulic z visoko stopnjo privlačnosti ujema s tistimi, ki so jih udeleženci ocenili kot zelo varne. Karte, na katerih sta avtorja združila aritmetične in srednje vrednosti ocen zaznane varnosti, ki so jih podali udeleženci, jasno kažejo, da se ulice, zaznane kot varnejše, močno prekrivajo s tistimi z visoko stopnjo privlačnosti (slika 9). Navedeno povezavo so potrdili tudi statistični podatki: povprečna stopnja privlačnosti ulic, ki so jih udeleženci ocenili kot varne, je znašala 10,28, za nevarne ulice pa je znašala samo 3,33. Ta skoraj trikratna razlika v vrednosti kaže, da se s privlačnostjo in kakovostjo prostorskih poudarkov močno poveča tudi občutek varnosti (slika 10c). Prostorski poudarki torej ne vplivajo samo na orientacijo in gibanje pešcev, ampak tudi na njihovo zaznavanje varnosti v mestnem okolju.

Navedeni izsledki se močno ujemajo s teoretičnimi pristopi v literaturi. Lynch (1960) je trdil, da izstopajoče in funkcionalne mestne prvine pomagajo uporabnikom pri orientaciji, hkrati

pa povečujejo njihov občutek varnosti. Santos-Delgado (2005) navaja, da imajo prostorski poudarki družbeno, simbolno in estetsko vrednost, kar zmanjšuje prostorsko dvoumnost in tako prispevajo k večjemu občutku varnosti med uporabniki prostora. Podobno teorije, kot so teorija razbitih oken (Wilson in Kelling, 1982), teorija o branljivem prostoru (Newman, 1972) in teorije okoljskega stresa (Steg idr., 2015), poudarjajo, da okoljske značilnosti, kot so estetska podoba, berljivost, jasnost in urejenost, neposredno vplivajo na zaznavanje varnosti. Prostorski poudarki prispevajo k večjemu občutku varnosti, saj oblikujejo privlačno, urejeno, jasno opredeljeno in kakovostno okolje. Izsledki raziskave so torej potrdili močno neposredno povezavo med prisotnostjo in kakovostjo mestnih prostorskih poudarkov in posameznikovim občutkom varnosti v mestnem prostoru. Navedeno poudarja pomen prostorskih poudarkov za urbanistično načrtovanje in oblikovanje, tako z vidika oblikovanja privlačnih prostorov in lažje orientacije kot zaradi psihološkega občutka varnosti, ki ga lahko ustvarjajo.

Na podlagi navedenega lahko potrdimo hipotezo raziskave. To pomeni, da so prostorski poudarki povezani in v neposrednem sorazmerju z gibanjem in orientacijo pešcev ter njihovim občutkom varnosti.

Pomembna metodološka omejitev raziskave je ta, da so v njej sodelovali samo posamezniki, ki še nikoli niso obiskali proučevanega območja. Čeprav je ta pristop avtorjema pomagal odpraviti pristranskost zaradi predhodnega poznavanja območja in jima omogočil jasnejšo osredotočenost na vpliv prostorskih poudarkov, hkrati omejuje interpretacijo izsledkov na posameznike, ki prvič obiščejo to območje. Posamezniki, ki območje poznajo, lahko na podlagi izkušenj, kognitivnih zemljevidov in ustaljenih poti, ki jih uporabljajo, drugače zaznavajo in ocenjujejo prostorske poudarke in varnost. Zato je treba izsledke raziskave razlagati previdno, zlasti z vidika njihove posplošljivosti na pogoste obiskovalce ali prebivalce območja. Treba se je zavedati tudi, da na sposobnost branja in označevanja zemljevidov ter zaznavanje prostorskih poudarkov in varnosti v prostoru vplivajo posameznikove lastnosti, kot so dojemanje prostora, raven pozornosti in občutljivost za okolje. Zato so lahko rezultati pri drugačni skupini udeležencev povsem drugačni. Poleg tega lahko na število pešcev in zaznavanje prostora vplivajo tudi čas in okoljske razmere zbiranja podatkov. Na zaznavanje prostorskih poudarkov in varnosti lahko namreč pomembno vpliva to, ali raziskava poteka med delovniki ali koncem tedna, zjutraj ali zvečer, pozimi ali poleti ter med suhim ali slabim vremenom. Čeprav je raziskava potekala v obdobju, ko so bile omejitve zaradi pandemije COVID-19 razmeroma ohlapne, je na gibanje udeležencev in njihovo izbiro poti lahko še vedno vplivalo vedenje, povezano z omejevanjem socialnih stikov. Zato je treba njene izsledke razlagati ob upoštevanju navedenih omejitev, v prihodnje raziskave pa bi bilo treba vključiti širši nabor udeležencev in okoljskih razmer, s čimer bi lahko dodatno potrdili in razširili trenutne ugotovitve.

6 Sklep

Raziskava pomembno prispeva k interdisciplinarnim povezavam med urbanističnim načrtovanjem in oblikovanjem ter okoljsko psihologijo, saj poudarja ključno vlogo mestnih prostorskih poudarkov pri oblikovanju vedenja in občutka varnosti v prostoru. Eden glavnih ciljev urbanističnega načrtovanja in oblikovanja je ustvariti vključujoče, kakovostne javne prostore, na katerih se lahko uporabniki počutijo varne in se dobro orientirajo. Na podlagi zbranih podatkov prostorski poudarki niso samo vizualne in funkcionalne orientacijske točke, ki vplivajo na vedenje v prostoru, ampak tudi prvine, ki krepijo psihološki občutek varnosti. Zato bi bilo treba prisotnost, vpliv in kakovost mestnih prostorskih poudarkov obravnavati kot ključni oblikovalski parameter pri načrtovanju varnejših, preglednejših in uporabnikom prijaznejših mestnih okolij. Glede na čedalje večjo kompleksnost mestnih prostorov in vse večji pomen urbanističnega oblikovanja, osredotočenega na človeka, je vključevanje privlačnih prvin, ki povečujejo varnost, primerna smer prihodnjih posegov v prostor in oblikovanja prostorske politike.

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Zahvala

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Zagotavljanje dostopnosti za pešce z vključujočim načrtovanjem in sodelovanjem skupnosti

Na mnogih območjih v razvoju še vedno primanjkuje vključujoče infrastrukture za pešce, ki bi invalidnim posameznikom omogočala mobilnost in samostojnost. Članek se osredotoča na regijo Jember v Indoneziji, kjer ovire, kot so ozki pločniki, poškodovane površine in to, da ni multisenzoričnih navigacijskih orodij, še naprej otežujejo dostop invalidnim osebam. Avtorji so izvedli kvalitativno raziskavo, ki je vključevala spletni vprašalnik, fokusne skupine, terenske oglede in pregled literature. Z navedenimi mešanimi metodami so opredelili dejanske izzive uporabnikov in določili lokalne načrtovalske preference na podlagi primerjave z globalnimi standardi dostopnosti. Ugotovili so, da se ovire, ki zmanjšujejo dostopnost, delijo v dve glavni kategoriji: fizične in strukturne ter čustvene in psihosocialne. Izsledki raziskave so izpostavili potrebo po multisenzoričnih infrastrukturnih prvinah (npr. oznake v brajici, zvočni indikatorji in talne taktilne oznake), ki upoštevajo lokalno okolje. V članku so predstavljena načrtovalska priporočila, ki v smislu glokalizacije združujejo primere globalnih dobrih praks z lokalnimi antropometričnimi in kulturnimi značilnostmi. Z vključevanjem mnenj uporabnikov v načrtovalski proces in prilagoditvijo mednarodnih načel regionalnim razmeram predstavljena raziskava metodološko in konceptualno prispeva k razpravam o vključujočem urbanističnem načrtovanju, zlasti na slabo raziskanih območjih, kot je globalni jug.

Ključne besede: invalidnost, mobilnost, glokalizacija, vključujoče načrtovanje, kvalitativni raziskovalni pristop, urbanizem, regija Jember, Indonezija

1 Uvod

Vključujoča infrastruktura za pešce je ključna za zagotavljanje mobilnosti, varnosti in dostojanstva vseh mestnih prebivalcev in zlasti invalidnih oseb. V številnih državah v razvoju, tudi Indoneziji, pešpoti pogosto ne izpolnjujejo standardov vključujočega dostopa, kar omejuje enakovreden dostop do javnih prostorov, izobraževanja, zdravstvenih storitev in zaposlitve (Kapsalis idr., 2024; Rebecchi idr., 2019). Navedeno je neposredno povezano s prednostnimi cilji svetovnega razvoja, zlasti z enajstim ciljem trajnostnega razvoja, ki poudarja vključujoča, varna in odporna mesta (Zainol idr., 2019).

Razlikovanje med univerzalnim in vključujočim dostopom je bilo ključno za raziskavo, predstavljeno v tem članku. Cilj univerzalnega načrtovanja je ustvariti okolja, ki so čim bolj uporabna za vse ljudi, ne da bi jih bilo treba prilagajati. Poudarek je na standardiziranih tehničnih vidikih, kot so širina poti, taktilne oznake in vizualna pomagala (Tawfeeq, 2020; Yegulla in Sravana, 2023). Vključujoče načrtovanje pa daje prednost sodelovanju uporabnikov ter upošteva raznovrstnost izkušenj in sposobnosti, zlasti med marginaliziranimi skupinami prebivalcev. Poudarja prilagoditve, ki upoštevajo dano okolje in temeljijo na dejanskih izkušnjah uporabnikov (Dalton idr., 2019; Lawson idr., 2022). Univerzalno načrtovanje določa temeljne tehnične zahteve, vključujoče načrtovanje pa zagotavlja enakopravnost, pravičnost in upoštevanje kulturnih značilnosti pri izvedbi.

Kljub dokazanim koristim vključujočih načrtovalskih načel ta po svetu, tudi marsikje v Indoneziji, še vedno niso splošno sprejeta. To velja tudi za regijo Jember, tretjo največjo regijo province Vzhodna Java, kjer dostopnost za pešce še vedno ni ustrezno urejena, čeprav v njej po uradnih ocenah živi od 10.000 do 20.000 invalidnih oseb (Marthsa in Fauziah, 2024). Težave povzročajo ozki pločniki, neravne in poškodovane površine, ovire na poteh (npr. ulični prodajalci in vozila) in pomanjkanje taktilnih ali glasovnih navigacijskih pripomočkov, kar vse močno omejuje varno gibanje (Axelson idr., 1999). Razmere še poslabšujeta pomanjkanje načrtovalskih načel, ki bi upoštevale lokalno skupnost, in omejena vključenost standardov dostopnosti v lokalne načrtovalske okvire.

Avtorji so za proučevanje tovrstnih razmer na območju, za katero je na voljo le malo načrtovalskih podatkov in ki je prostorsko zelo heterogeno, uporabili kvalitativni raziskovalni pristop. Ta je še zlasti primeren za proučevanje kompleksnih razmer na slabo raziskanih območjih (Shabbir idr., 2024), čeprav se pogosto kritizira zaradi omejene posplošljivosti in morebitne pristranskosti raziskovalcev (Lim, 2024). Avtorji so poskušali te pomanjkljivosti odpraviti tako, da so v raziskavo vključili spletni vprašalnik, fokusne skupine, terenske oglede in primerjalni pregled literature, s čimer so opredelili lokalne potrebe ob upoštevanju globalnih načel in zagotovili, da so končni načrtovalski predlogi izvedljivi in prilagojeni lokalnemu okolju.

Med navedenimi orodji imajo fokusne skupine ključno vlogo, saj omogočajo vključevanje mnenj uporabnikov, zlasti invalidnih oseb, v urejanje prostora. Bolj kot pasivni prejemniki načrtovalskih rezultatov so bili končni uporabniki aktivno vključeni v raziskavo, pri čemer so pomagali ugotavljati vrzeli v dostopnosti in predlagali praktične izboljšave. Tovrstno vzajemno sodelovanje povečuje pomen in uporabnost izsledkov raziskave in odraža čedalje večje zavedanje pomena vključujočega upravljanja v urbanizmu (Haghighi idr., 2020; Mackie idr., 2018; Ramli idr., 2023). Takšne razprave pomagajo premostiti vrzel med standardiziranimi mednarodnimi smernicami in resničnim življenjem ter razkrivajo neskladja v fizičnih razsežnostih, kulturnih praksah in stanju infrastrukture. Raziskava z obravnavo globalnih meril kot prilagodljivih okvirov, ne kot togih predlog ponuja glokalizirani pogled, ki združuje načela univerzalnega dostopa z družbeno-antropometričnimi značilnostmi regije Jember in podobnih območij na globalnem jugu (Aghaabbasi idr., 2019; Dalton idr., 2019; Mahapatra idr., 2023; Evans, 2015; Henderson, 2018).

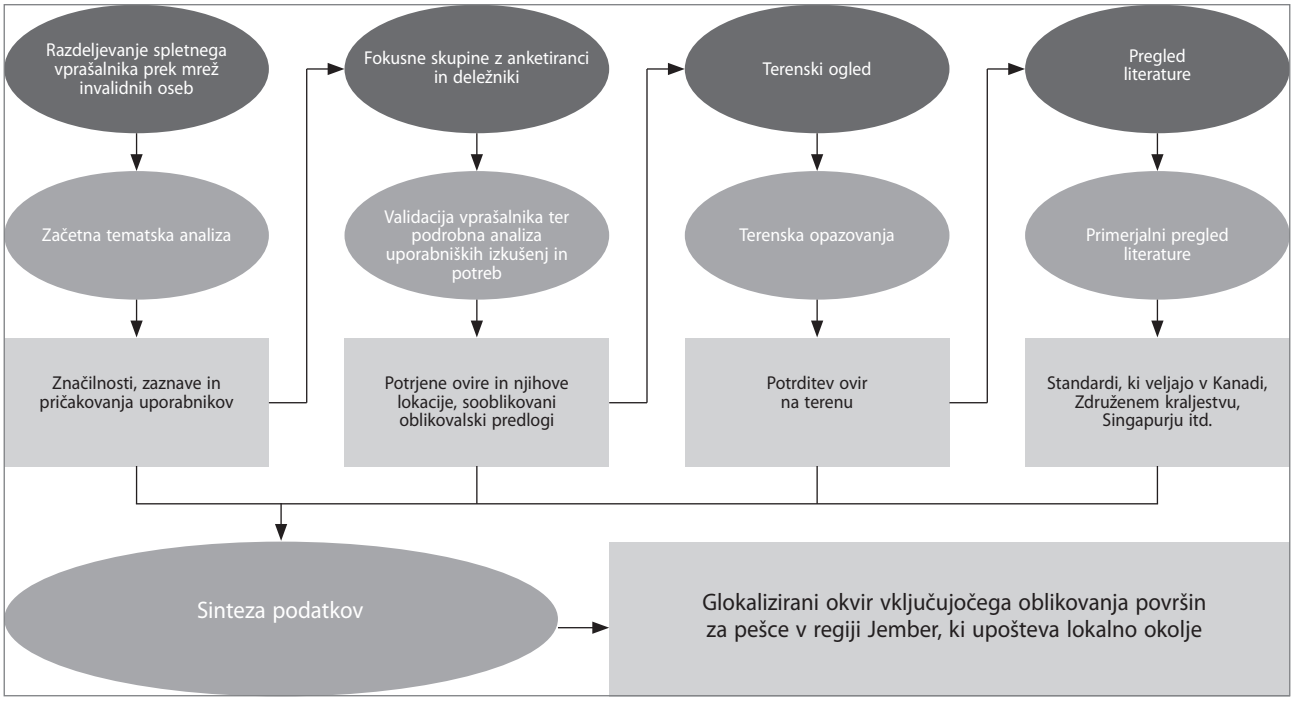
Avtorji so v okviru raziskave oblikovali strategije za vključujočo infrastrukturo za pešce v Jemberju, ki združujejo uporabniška mnenja z mednarodnimi merili dostopnosti. Izsledki so pokazali, da se lahko globalni okviri prilagodijo lokalnim okoljem z načrtovanjem, ki je osredotočeno na uporabnike in upošteva lokalne značilnosti, s čimer se krepijo temelji vključujočega urbanističnega načrtovanja, zlasti na območjih, na katerih so glokalizirane prakse še slabo raziskane.

2 Metodologija

Avtorji so v raziskavi uporabili kvalitativni pristop, ki so ga dopolnili z opisno statistiko in pregledom literature s področja urejanja prostora. Raziskava je potekala v regiji Jember v Vzhodni Javi, njen cilj pa je bil proučiti dostopnost za pešce s sodelovanjem invalidnih oseb in ustreznih deležnikov. Opazovalne točke niso bile vnaprej izbrane, temveč so bile določene na podlagi izkušenj udeležencev, opredeljenih v fokusnih skupinah (slika 1).

2.1 Zbiranje podatkov

V raziskavi je bilo uporabljeno namensko vzorčenje. Vprašalnik in fokusne skupine so bili oblikovani na podlagi vključujočega okvira, uporabljenega v programu RISE (Francis idr., 2023), ki poudarja sodelovanje skupnosti, mnenja marginaliziranih



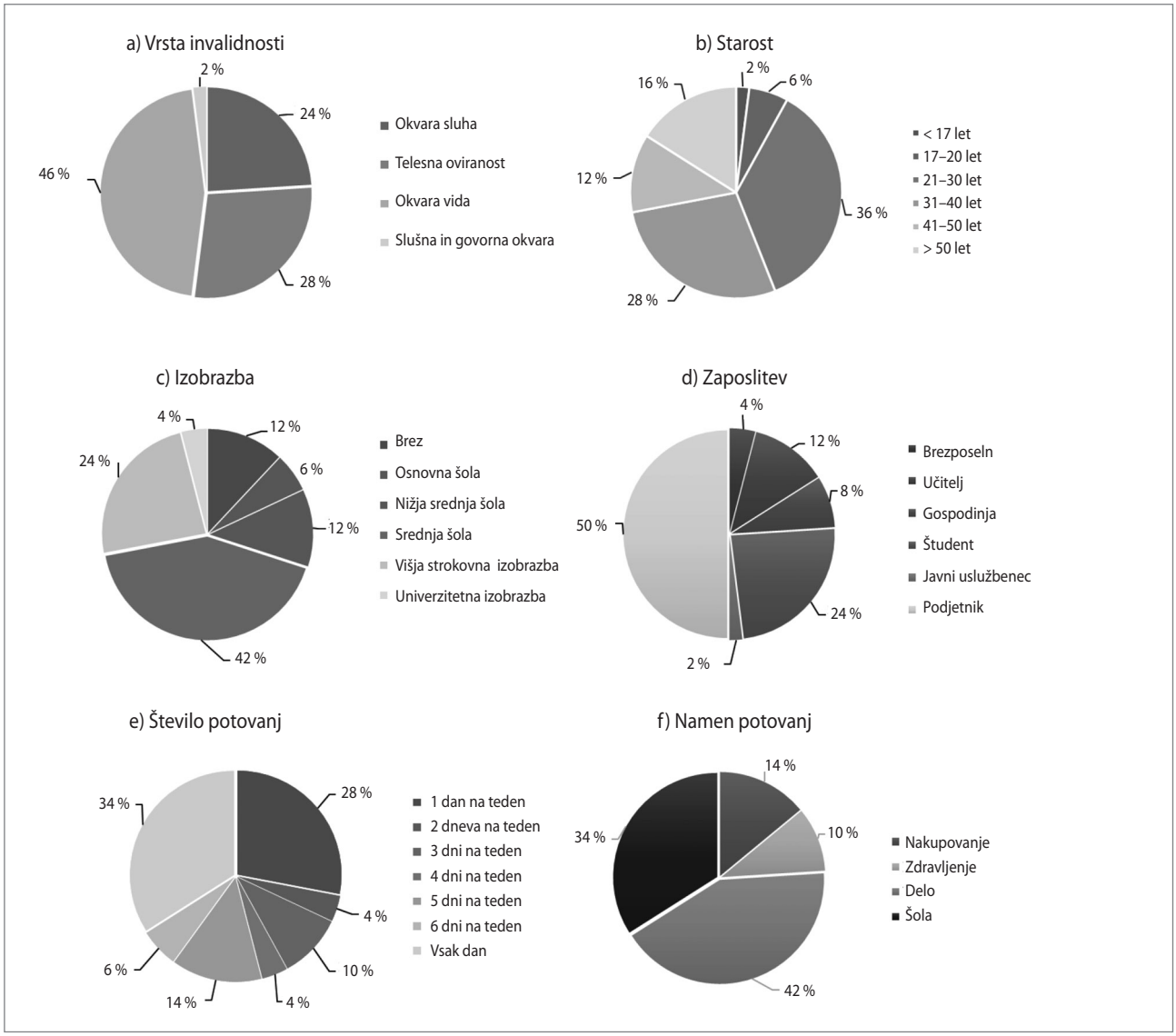
Slika 1: Metodološki ovir raziskave (ilustracija: avtorji)

skupin in pristope, ki temeljijo na upoštevanju lokalnega okolja. Tematski poudarek raziskave je bil drugačen od tistega v omenjenem programu, glavna načela vključevanja lokalnih invalidnih skupin pa so bila s strukturiranimi, a prožnimi metodami uporabljena v celotnem postopku zbiranja podatkov.

Zbiranje podatkov se je začelo z razdeljevanjem spletnega vprašalnika posameznikom s telesno oviranostjo ali okvaro vida ali sluha, ki živijo v regiji Jember. Vprašalnik je bil javno dostopen prek mrež in platform skupnosti invalidnih oseb, pri čemer avtorji velikosti vzorca niso vnaprej določili. Vseboval je 17 vprašanj zaprtega tipa in 12 vprašanj odprtega tipa. Z njim so bili pridobljeni podatki o identiteti anketirancev (ime in telefonska številka), njihovi socialno-demografski podatki (vrsta invalidnosti, spol, starost, izobrazba, mesečni izdatki na gospodinjstvo, število članov gospodinjstva, stalno prebivališče – vas in okrožje, narodnost, primarni jezik, zaposlitev in domači naslov), podatki o njihovih funkcionalnih sposobnostih (o bralni in pisni zmožnosti ter sposobnosti vizualnega razumevanja) in mobilnosti (npr. o pogostosti potovanja po regiji Jember, načinu prevoza, ki ga uporabljajo, ciljnem naslovu, poti in namenu potovanja, razlogu za izbrani način prevoza in uporabi javnega prevoza) ter mnenja o infrastrukturi na podlagi vprašanj odprtega tipa kot npr. »Kako bi opisali stanje pločnikov v svoji soseski?«, »Ali ste se kdaj odpovedali hoji ali odhodu od doma zaradi slabega stanja pločnikov?«, »S katerimi konkretnimi težavami se spopadate pri uporabi pločnikov (npr. slaba površina, oznake, ovire)?«, »Kako varni se počutite med uporabo pločnikov na vašem območju, zlasti ob različnih urah dneva?« in »Če bi pločnike preuredili, da bi izboljšali njihovo dostopnost za uporabnike, katere značilnosti bi bile nujne za vaše potrebe?«, s katerimi so avtorji dobili informacije, povezane z vključujočim načrtovanjem površin za pešce (Distefano in Leonardi, 2023). Skupno se je na vprašalnik odzvalo 50 posameznikov, ki so se opredelili za redne uporabnike infrastrukture za pešce v proučevani regiji. Na podlagi izsledkov te faze so avtorji izvedli fokusne skupine.

Po anketi z vprašalnikom so bili udeleženci povabljeni k sodelovanju v fokusnih skupinah. Skupaj se jih je udeležilo 67 posameznikov: poleg petdesetih, ki so sodelovali v anketi, še 17 predstavnikov ključnih deležnikov (šest udeležencev iz šol s posebnim programom, devet članov lokalnih invalidskih društev in dva akademska strokovnjaka). Izvedene so bile tri fokusne skupine, in sicer avgusta 2024, vsaka je trajala približno pet ur. V vsako je bilo povabljeno približno enako število udeležencev (dvakrat po 22 in enkrat 21), pri čemer sta akademska strokovnjaka sodelovala v vseh treh. Udeleženci so se razlikovali po spolu, zaposlitvi (npr. študenti, učitelji in neformalni delavci), funkcionalnih sposobnostih (telesne oviranosti, okvare vida in kognitivne motnje) in starosti (od 17 do 50 let in več).

Namen fokusnih skupin je bil potrditi veljavnost vzorcev, ugotovljenih v anketi, in podrobneje proučiti izkušnje, čustvene odzive in konkretne načrtovalske predloge udeležencev (Aghaabbasi idr., 2019). Razprave, ki so potekale v polstrukturirani obliki, so udeležence spodbudile k deljenju praktičnih povratnih informacij in sooblikovanju načrtovalskih zamisli,



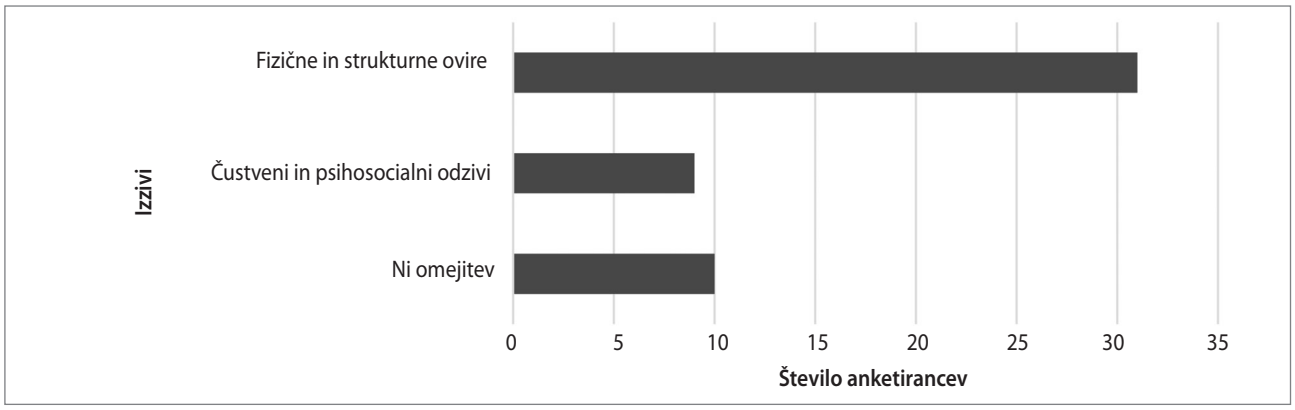
Slika 2: Socialno-demografske in potovalne značilnosti invalidnih anketirancev (n = 50) (ilustracija: avtorji)

prilagojenih urbanemu okolju regije Jember. Vsako srečanje je temeljilo na petih ključnih vprašanjih odprtega tipa, ki so se nanašala na mnenja in dnevne izzive udeležencev, povezane s površinami za pešce. Moderatorji so uporabljali ustna pojasnila in po potrebi tudi dodatno vizualno gradivo, kot so slike ali skice, ki so jih vedno dopolnili z natančnimi ustnimi opisi, da so bile razumljive tudi udeležencem z okvaro vida. Kadar je bilo smiselno, so udeležence spodbujali, naj ustno opišejo načrtovalske zamisli, s čimer so omogočili njihovo vključujoče sooblikovanje ne glede na senzorične zmožnosti. Vse razprave so bile posnete in tematsko analizirane, na podlagi česar so bila pridobljena spoznanja, ki so neposredno prispevala k okviru vključujočega načrtovanja, predstavljenega v raziskavi.

Po fokusnih skupinah si je raziskovalna ekipa površine za pešce, omenjene med razpravami v fokusnih skupinah, ogledala še na terenu, zlasti v okrožju Kaliwates – središčnem urbanem območju z veliko pešci. Z ogledi so raziskovalci potrdili obstoj ovir, kot so blokirani pločniki, poškodovane površine, pomanjkanje taktilnih oznak in preveliki nakloni, o katerih so udeleženci prej poročali v fokusnih skupinah. Ogledi teh lokacij so bili raziskovalne in opazovalne narave ter niso bili namenjeni zbiranju strukturiranih ali merljivih podatkovnih nizov. Njihov namen je bil povečati veljavnost pričevanj udeležencev. Pri proučevanju infrastrukture za pešce so tovrstne kvalitativne terenske raziskave običajna praksa za ugotavljanje ovir in fizičnih omejitev (prim. Atkin idr., 2015).

2.2 Analiza podatkov in pregled literature

Podatki, pridobljeni z vprašalnikom, so bili tabelarično obdelani v Microsoft Excelu. Demografski podatki (spol, starost in vrsto invalidnosti) ter pogostost ovir in pričakovanj v zvezi s površinami za pešce, ki so jih največkrat omenili udeleženci,



Slika 3: Izzivi na površinah za pešce, kot so jih navedli anketiranci (ilustracija: avtorji)

so bili povzeti z opisno statistiko. Na sliki 2 so predstavljene socialno-demografske in potovalne značilnosti anketirancev. Večina je imela okvaro vida, po številu so sledili posamezniki s telesnimi in slušnimi okvarami (slika 2a). Čeprav je bil vprašalnik javno na voljo raznovrstnim skupnostim invalidnih oseb, je bila opazna izrazito visoka stopnja odziva posameznikov z okvaro vida. Navedeno je lahko posledica večje angažiranosti lokalnih združenj slepih in slabovidnih oseb ali pa večje zaznane pomembnosti vprašanj, povezanih z dostopnostjo površin za pešce, v tej skupini. Pridobivanje udeležencev ni bilo ciljno usmerjeno v nobeno konkretno vrsto invalidnosti. Večina udeležencev je bila stara od 21 do 40 let (slika 2b) ter tako močno vključena v delo in družbene dejavnosti. Veliko je bilo gimnazijskih maturantov, nekateri udeleženci so imeli univerzitetno ali še višjo izobrazbo (slika 2c). Velik delež so zajemali samostojni podjetniki, glasbeniki, terapevti, trgovci in obrtniki (slika 2d), kar kaže na odvisnost od neformalnih ali samostojnih oblik zaposlitve. Večina udeležencev je potovala vsak dan (slika 2e), zlasti na delo ali v šolo (slika 2f), kar kaže na pogosto uporabo pločnikov na vsakodnevnih poteh.

Pri vprašanjih odprtega tipa so vsi anketiranci na kratko opisali izzive, s katerimi se spopadajo na površinah za pešce, ali prvine, ki bi si jih želeli v tovrstni infrastrukturi. Tak pristop se sklada z načeli kvalitativnih raziskav s področja načrtovanja mestnih površin za invalidne osebe, pri katerih so odgovori na vprašanja odprtega tipa dragoceno izhodišče za razumevanje mnenj uporabnikov (Shahraki, 2021). Uporabljen je bil formalni postopek kodiranja, pri čemer so bile kategorije oblikovane induktivno s pregledom in urejanjem izjav anketirancev med kvalitativno analizo odgovorov na vprašanja odprtega tipa. Kategorije so bile nato predstavljene in potrjene v fokusnih skupinah. Navedeni validacijski postopek je omogočil globlji vpogled v razmišljanje, čustva in izkušnje udeležencev, ki presegajo zgolj površinske opise (prim. Stewart in Shamdasani, 2015). Njihovi odgovori so bili razvrščeni v tri širše tematske kategorije: fizične in strukturne ovire (npr. poškodovane površine in nedostopni pločniki), čustveni in psihosocialni odzivi (npr. tesnoba in občutek negotovosti) ter brez navedbe omejitev.

Vzporedno je bil opravljen tudi primerjalni pregled literature, s katerim so se avtorji seznanili s primeri dobre prakse in standardi dostopnosti iz držav, kot so Singapur, Združeno kraljestvo, Kanada, ZDA in Avstralija. Navedene države so bile za primerjavo izbrane zaradi razpoložljivosti odprto dostopnih dokumentov in njihovega mednarodnega ugleda na področju vključujoče infrastrukture za pešce. Namesto metrične primerjave se je pregled osredotočal na ugotavljanje najpogosteje izpostavljenih načel, kot so dovolj široke pešpoti, uporaba taktilnih oznak in varni prehodi, ki so bila nato uporabljena kot merila za oceno stanja v Jemberju. Opisani pristop k primerjalni analizi, ki temelji na pregledu literature, se sklada z okvirom, ki so ga predlagali S. Liu idr. (2022), ki zagovarjajo uporabo odprtih podatkov in doslednih kazalnikov za analizo dostopnosti in oblikovanje urbanistične politike v mestih.

2.3 Načrtovalska priporočila

V zadnji fazi raziskave so bila spoznanja uporabnikov, pridobljena v fokusnih skupinah, pretvorjena v praktične predloge za načrtovanje vključujoče infrastrukture za pešce. Na podlagi preferenc uporabnikov so bili izdelani konceptualne skice in načrtovalska priporočila, ki so bili potrjeni s primerjalnim pregledom mednarodnih smernic za zagotavljanje dostopnosti (prim. Atkin idr., 2015). Ta korak je povezal vsakdanje izkušnje invalidnih oseb v Jemberju z uveljavljenimi načrtovalskimi načeli, kar zagotavlja izvedljivost, varnost in trajnost predlaganih posegov.

Oblikovalske prvine, ki so bile v fokusnih skupinah izpostavljene kot prednostne, so bile usklajene s primeri dobrih praks po svetu. Opisani interaktivni načrtovalski pristop sledi načelom, predstavljenim v literaturi (npr. Aghaabbasi idr., 2019), v skladu s katerimi se vključujoče načrtovanje doseže z združitvijo

a) Ozki, poškodovani in neravni pločniki

b) Nedostopen prehod ob pomembnem objektu

c) Ovire na pešpoteh zaradi drugih namenov rabe površine

Slika 4: Stanje na izbranih lokacijah, ugotovljeno med terenskimi ogledi (foto: avtorji)

mnenj lokalne skupnosti in svetovno uveljavljenih okvirov. Ta metoda je zlasti pomembna v okoljih, kot je Jember, kjer se lokalni standardi dostopnosti še razvijajo. Z združevanjem stališč deležnikov in primerov dobrih tehničnih praks so nastali infrastrukturni predlogi skladni s predpisi, hkrati pa temeljijo na kulturni in prostorski stvarnosti uporabnikov.

3 Rezultati

3.1 Izzivi pri dostopu do površin za pešce

Odgovore invalidnih oseb v regiji Jember je mogoče razdeliti v tri glavne kategorije: fizične in strukturne ovire, čustveni in psihosocialni odzivi ter brez navedbe omejitev. Kot je razvidno s slike 3, je večina udeležencev kot najpogostejšo težavo navedla

Preglednica 1: Zaželene prvine dostopnosti, izpostavljene v fokusnih skupinah

Prvina	Pogostost omemb	Opis
Oznake v brajici	16	Uporabljajo se za označevanje pločnikov, prehodov za pešce ali postajališč javnega prevoza.
Zvočna opozorila	11	Za varen prehod cest; ključni za slepe in slabovidne.
Taktilne oznake	12	Usmerjevalne in opozorilne talne taktilne oznake na pešpoteh in križiščih.
Oznake v brajici + zvočna opozorila	8	Kombinacija vizualno-taktilnih oznak in zvočnih opozoril izboljša orientacijo, zlasti v kompleksnih okoljih ali okoljih, kjer je velika gneča.
Oznake v brajici + taktilne oznake	4	Kombinacija talnih taktilnih oznak in pisnih informacij za pomoč gibalno oviranim uporabnikom s hkratno okvaro vida.
Zvočna opozorila + taktilne oznake	2	Pešpoti z zvočnimi usmerjevalnimi opozorili in vodilnimi talnimi reliefnimi oznakami.
Oznake v brajici + zvočna opozorila + taktilne oznake	16	Multisenzorična rešitev za celostno vodenje invalidnih oseb.
Drugo (prehodi, klančine, ulična oprema)	~	Udeleženci so jih pogosto omenjali.

Vir: avtorji

fizične in strukturne ovire, manjši delež pa je poročal o čustvenih in psihosocialnih odzivih, kot sta tesnoba in negotovost pri gibanju po javnih površinah. Manjši del anketirancev omejitev ni navedel, običajno zaradi uporabe zasebnega prevoza ali ker ni pločnikov na njihovih vsakdanjih poteh.

Med fizičnimi in strukturnimi ovirami so anketiranci izpostavili ozke pločnike (pogosto ožje od enega metra) ter poškodovane ali neravne pešpoti ali to, da pešpoti sploh ni. Prisotnost navedenih ovir je bila potrjena s terenskimi ogledi, ki so sledili fokusnim skupinam. Na sliki 4a so na primer prikazani ozki in slabo vzdrževani pločniki, ki ogrožajo varnost pešcev, zlasti posameznikov z gibalno oviranostjo ali okvaro vida. Udeleženci so pogosto navajali tudi pomanjkanje dostopnih oblikovalskih prvin, kot so talne taktilne oznake, klančine in ustrezno označeni prehodi. Na sliki 4b je prikazan prehod za pešce pri bolnišnici brez taktilnih oznak in ustreznih znakov za invalidne osebe, zaradi česar je tak prehod še zlasti problematičen za posameznike z okvaro vida. Tovrstne načrtovalske pomanjkljivosti so bile v fokusnih skupinah dosledno izpostavljene kot dejavniki, ki ključno prispevajo k nevarnemu okolju za pešce.

Kot pomembne izzive so udeleženci omenjali tudi ovire na pločnikih, kot so ulični prodajalci, parkirana vozila, električni drogovi in neformalne stojnice. Dokumentirane so bile na različnih lokacijah, tudi tistih, prikazanih na sliki 4c, na katerih morajo pešci zaradi ovir na pločnikih hoditi po cesti. Podobni vzorci so bili opaženi tudi na drugih urbanih območjih, kjer neformalna raba površin za pešce omejuje njihovo dostopnost (Owusu-Ansah idr., 2019). Tovrstne ovire ne omejujejo le fizičnega gibanja, temveč ogrožajo tudi varnost in dostojanstvo invalidnih oseb.

Med čustvenimi in psihosocialnimi odzivi so nekateri udeleženci navedli občutke nelagodja, strahu in negotovosti pri gibanju na slabo razsvetljenih površinah za pešce ali takih, kjer je veliko gneče. Drugi so poročali, da se pločnikom v celoti izogibajo, ker so odvisni od pomoči drugih, ali da pločnikov v njihovih soseskah sploh ni. Manjše število udeležencev ni zaznalo pomembnih ovir pri mobilnosti. Večina jih je potovala s spremljevalcem ali je uporabljala motorizirani prevoz, zaradi česar niso bili odvisni od infrastrukture za pešce. Njihovi odgovori kljub temu poudarjajo razlike v razpoložljivosti pločnikov in potrebo po gradnji vključujoče infrastrukture v vseh soseskah.

3.2 Prvine, potrebne za zagotavljanje dostopnosti

Fokusne skupine so razkrile ključne vrste prvin dostopnosti, potrebnih za izboljšanje mobilnosti invalidnih pešcev v Jemberju. Podatki o teh prvinah niso bili zbrani na podlagi strukturirane kvantitativne lestvice, temveč so bile tematske preference določene na podlagi pogostosti omemb med udeleženci. Izsledki so predstavljeni v preglednici 1 in ponazarjajo najpogosteje navedene prvine pri različnih skupinah invalidnih oseb, vključenih v raziskavo.

Oznake v brajici so bile pogosto izpostavljene kot ključne za omogočanje samostojnega gibanja posameznikov z okvaro vida. Udeleženci so navedli potrebo po jasnih oznakah v brajici na prehodih za pešce, pločnikih in postajališčih javnega prevoza, saj pomagajo pri orientaciji in iskanju poti. Potreba po tovrstnih prvinah je izražena kot posledica sestave fokusnih skupin, v katerih je sodeloval velik delež uporabnikov z okvaro vida.

Zvočna opozorila so bila izpostavljena zaradi svojega pomena na prehodih za pešce in zelo prometnih križiščih. Udeleženci so navedli, da to, da ni zvočnih opozoril, kot so zvočni signali na semaforjih ali govorjena navodila, pogosto povzroča dezorientacijo in povečuje tveganje pri gibanju v prometu. Navedene prvine so bile pomembne zlasti za gibalno ovirane udeležence s hkratno okvaro vida, saj jim omogočajo nevizualno potrditev varnih poti. V razpravah so bile pogosto izpostavljene tudi talne taktilne oznake, ki nakazujejo smer gibanja po pločnikih in spremembo smeri ali nevarne točke, kot so robniki in križišča. Mnogi udeleženci so navedli, da taktilnih oznak v regiji Jember ni ali so nedosledne, kar otežuje samostojno gibanje. Tudi kombinacije prvin, zlasti oznake v brajici v kombinaciji z zvočnimi opozorili ali taktilnimi oznakami, so bile poudarjene kot ključne za zagotavljanje redundance in zanesljivosti. Eden izmed udeležencev je na primer opozoril, da če ena prvina odpove zaradi hrupa ali obrabe, je druga še vedno uporabna za svoj namen, kar povečuje splošno zanesljivost teh pripomočkov in varnost njihovih uporabnikov.

Čeprav udeleženci niso posebej izpostavili nekaterih drugih potreb, povezanih z dostopnostjo, so omenjali še nekatere ključne prvine, ki vplivajo na njihovo mobilnost, kot so urejene pešpoti, prehodi za pešce, križišča, klančine, stopnice in ulična oprema (prim. Dhingra, 2019; Lusk idr., 2020; Lawson idr., 2022).

3.3 Razmišljanja in uporabna spoznanja za načrtovanje

V skladu z mednarodnimi standardi dostopnosti mora načrtovanje pešpoti vključevati tako fizične kot senzorične prvine, kot so talne taktilne oznake, ustrezna razsvetljava in vizualno kontrastne oznake. Čepaste oznake pred prehodi za pešce in rebraste oznake na nevarnih mestih na primer slabim in slabovidnim pomagajo pri orientaciji in varnem gibanju (UK Department for Transport, 2021). Podobno so na nivojskih prehodih za boljšo vidljivost potrebne tako taktilne oznake kot ustrezna razsvetljava in vizualne oznake (City of Sydney, 2019; City of Toronto, 2004). Pri usmerjanju uporabnikov z okvaro vida ali kognitivnimi motnjami pomagajo oznake z izbočenimi črkami, brajico in vizualnim kontrastom (Indian Roads Congress, 2012).

Poleg usmerjevalnih orodij je treba skrbno načrtovati tudi ulično opremo in krajinske prvine. Stebrički, klopi in odtoki morajo biti nameščeni tako, da ne ovirajo gibanja. Stebrički morajo biti na primer dobro vidni, visoki od 1.000 do 1.400 mm in postavljeni v razmiku 1.200 mm, da omogočajo dostop invalidskim vozičkom (Irish Wheelchair Association, 2020). Vsakih 25 do 50 m je treba zagotoviti počivališča, na katerih se lahko odpočijejo gibalno ovirani posamezniki. Zasaditve je treba načrtovati tako, da viseče veje ali korenine ne ovirajo gibanja, hkrati pa izboljšajo senzorično in prostorsko izkušnjo pešpoti (Singapore Building and Construction Authority, 2007).

Primerjalni pregled mednarodnih smernic je pokazal, da so za vključujoče načrtovanje pešpoti pomembni tudi dimenzijski standardi (preglednica 2). Pešpoti morajo biti tako široke od 1.200 do 3.000 mm, odvisno od gostote poselitve območja in lokacije poti (npr. v stanovanjskih soseskah ali poslovno-trgovskih conah). Svetla višina poti mora znašati najmanj 2.200 mm, nekatere smernice pa za varno gibanje po skupnih pešpoteh priporočajo višino do 2.400 mm (City of Toronto, 2004; City of Vancouver, 2008). Širina prehodov za pešce ni vedno izrecno navedena, vendar morajo biti prehodi dovolj široki za vse uporabnike. Območja znižanih robnikov ne smejo biti prestrma (naklon je lahko največ 1 : 12, po nekaterih smernicah tudi 1 : 14) niti preozka (široka morajo biti najmanj 1.200 mm). Oprijemala na stopniščih morajo biti nameščena na višini 900–1.000 mm, da zagotavljajo ustrezno varnost in podporo. Ob površinah za sedenje mora biti vsaj 2.000 mm širok prost prostor za uporabnike invalidskih vozičkov, varnostni stebrički pa morajo biti nameščeni tako, da zagotavljajo ustrezno ravnovesje med varovanjem in omogočanjem gibanja (Irish Wheelchair Association, 2020; Indian Roads Congress, 2012).

Vključujoče načrtovanje površin za pešce torej ni statična tehnična naloga, ampak dinamičen proces nenehnega presojanja in prilagajanja. Proučene smernice dosledno poudarjajo pozornost do detajlov, od odstranjevanja fizičnih ovir do vzdrževanja taktilnih pešpoti, in redne izboljšave. Tovrsten pristop zagotavlja, da se urbana infrastruktura razvija v skladu s potrebami uporabnikov in tako pomaga ustvarjati okolja, ki se skladajo s predpisi ter hkrati zagotavljajo pravičen dostop, funkcionalnost in dostojanstvo za vse (City of Vancouver, 2008; Indian Roads Congress, 2012).

3.4 Vključujoče načrtovanje infrastrukture za pešce

3.4.1 Pešpoti

Vključujoče pešpoti morajo zagotavljati dostopnost in udobje vsem uporabnikom, še zlasti invalidnim osebam. V skladu z izraženimi potrebami oseb z oviranostmi v regiji Jember bi morala biti uporaba napisov v brajici, zvočnih opozoril in taktilnih oznak omogočena tudi na pešpoteh, pri čemer bi morale biti na voljo tudi multisenzorične rešitve, ki so ključne zlasti za osebe z okvaro vida. Talne taktilne oznake, ki vključujejo vodilne in opozorilne oznake, pešce vodijo po poteh in jih opozarjajo na nevarna mesta, kot so stopnice ali robniki. Vsaka talna taktilna oznaka mora v širino in dolžino meriti 300 mm.

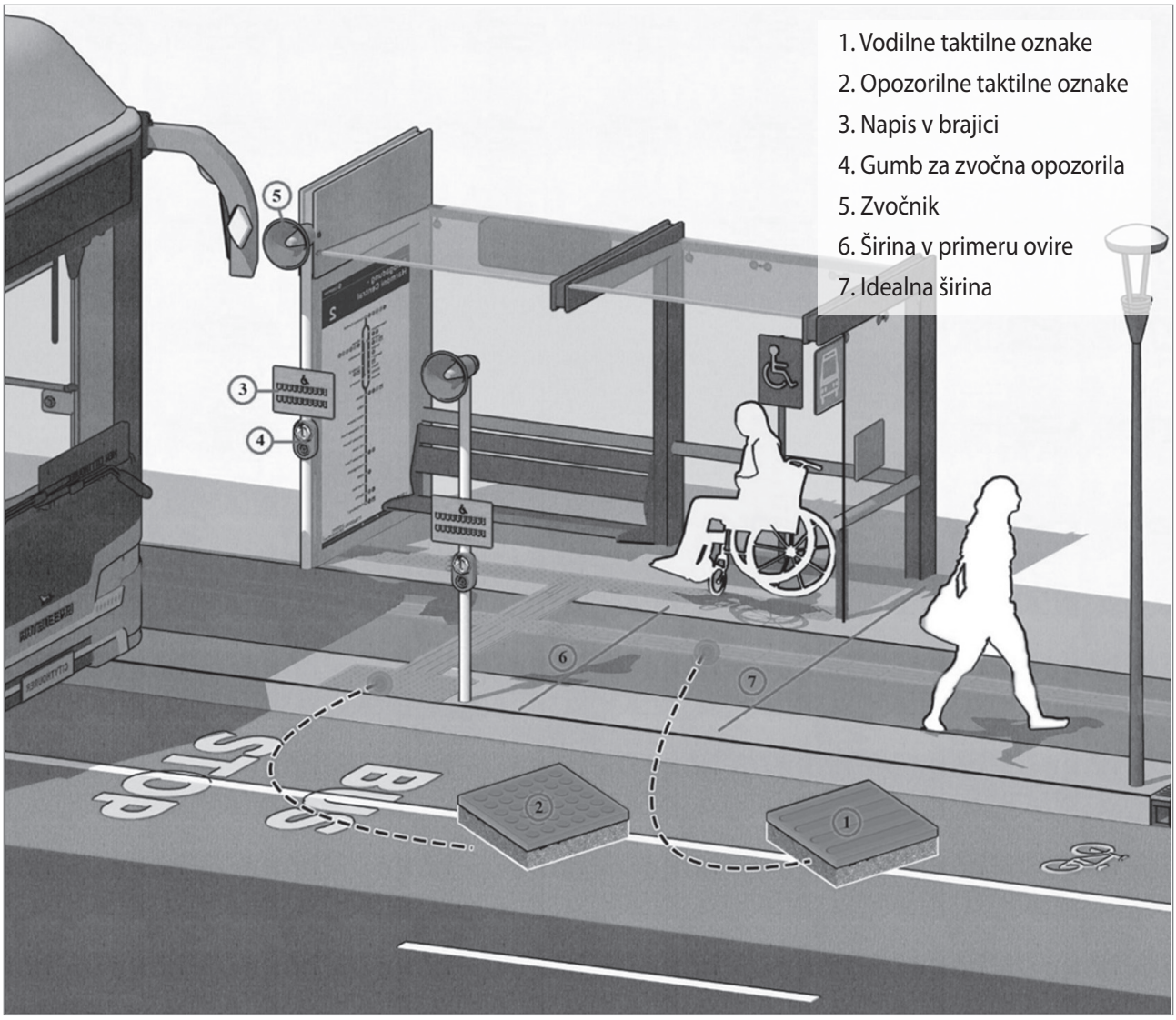
Preglednica 2: Primerjava dimenzij prvin dostopnosti za pešce na podlagi mednarodnih smernic

Prvina	Ključne načrtovalske smernice						
	1*	2*	3*	4*	5*	6*	7*
Širina poti	Najmanj 1.675 mm.	1.500 mm na redko poseljenih območjih, 1.800 na gosto poseljenih območjih, najmanj 3.000 mm na trgovskih območjih.	Najmanj 2.000 mm.	1.500 mm (sprejemljivo) ali 2.000 mm (zaželeno).	Najmanj 1.800 mm.	1.200 mm za pešpoti, 1.800 mm za manevrski prostor.	Najmanj 1.200 mm za skupne poti, najmanj 2.000 mm za poti za invalidne osebe.
Svetla višina	Ni navedeno.	Ni navedeno.	Najmanj 2.200 mm.	Najmanj 2.300 mm.	Najmanj 2.200 mm.	Najmanj 2.200 mm.	Najmanj 2.400 mm za skupne poti.
Širina prehodov za pešce	Najmanj 3.000 mm.	Ni navedeno.	Dovolj široki za vse uporabnike.	Ni navedeno.	Ni navedeno.	Ni navedeno.	Ni navedeno.
Naklon območij znižanih robnikov	Največ 1 : 12.	Največ 8 %, zaželeno 5–7 %.	Od 1 : 20 do 1 : 12.	Največ 1 : 12.	Največ 1 : 12.	Največ 1 : 12.	Največ 1 : 14.
Širina klančin	1.015–1.100 mm.	Ni navedeno.	Ni navedeno.	Ni navedeno.	Ni navedeno.	Najmanj 1.200 mm.	Ni navedeno.
Višina oprijemal	900 mm (na klančinah in stopnicah).	Ni navedeno.	900–1.000 mm.	900–1.000 mm.	760–900 mm.	800–900 mm.	Najmanj 900 mm.
Površine za sedenje	Ni navedeno.	Ni navedeno.	2.000 mm širok prost prostor ob sediščih.	Površine za sedenje vsaj na vsakih 50 m.	Počivališča vsaj na vsakih 25 m.	Ni navedeno.	Počivališča v enakomernih razmikih.
Stebrički	Ni navedeno.	Višina: najmanj 1.000 mm, razmik: 1.200 mm.	Višina: najmanj 1.000 mm, razmik: 1.200 mm.	Višina: najmanj 1.000 mm.	Višina: najmanj 1.000 mm.	Ni navedeno.	Višina: najmanj 400 mm, razmik: 1.200 mm.

* Opomba: 1 City of Toronto (2004), 2 City of Vancouver (2008), 3 Irish Wheelchair Association (2020), 4 UK Department for Transport (2021), 5 Indian Roads Congress (2012), 6 Building and Construction Authority (2007), 7 City of Sydney (2019).

Taktilne poti morajo biti neprekinjene in dosledno urejene za varno navigacijo v prostoru (Atkin idr., 2015). Poleg talnih taktilnih oznak je usmerjanje mogoče tudi z oznakami v brajici, ki se strateško namestijo na vhodih, avtobusnih postajališčih in prehodih za pešce ter posameznikom z okvaro vida omogočajo samostojno gibanje (Yang in Saniie, 2017). Dostopnost izboljšujejo tudi zvočna opozorila. S pritiskom na gumb, povezanim z zvočnikom, se predvajajo varnostna sporočila in usmerjevalne informacije (Guth idr., 2019). Tovrstni multisenzorični pristop je zelo uporaben. Lep primer so vključujoča avtobusna postajališča, ki s kombinacijo talnih taktilnih oznak na območjih vkrcanja, informativnih tabel z voznimi redi avtobusov v brajici in zvočnih opozoril, namenjenih potnikom in voznikom, zagotavljajo varno in učinkovito vkrcanje.

V skladu z mednarodnimi standardi bi morale biti pešpoti za zadovoljevanje potreb raznovrstnih uporabnikov široke najmanj 1.500 mm, kar je dovolj, da se lahko srečata uporabnik invalidskega vozička in pešec. Da lahko pot druga ob drugi uporabljata dve osebi z invalidskim vozičkom, pa mora biti široka 1.800 mm. Če so na poti ovire (npr. ulične svetilke ali znaki), je absolutna še dopustna širina 1.000 mm, pri čemer morajo biti na vsakih 30 m urejeni prostori, široki 1.800 mm in dolgi 2.500 mm, na katerih se lahko srečata dve osebi na invalidskem vozičku. Predmeti, kot so stoli, stopnice, dvigala in celo avtobusna postajališča, ne smejo biti umeščeni neposredno na pešpot, ampak ob njej, kot je prikazano na sliki 5. Na gosto poseljenih območjih so potrebne širše pešpoti, ki omogočajo lažji pretok pešcev in zmanjšujejo gnečo (Jin idr., 2019). Svetla višina poti mora znašati najmanj 2.200 mm, kar zagotavlja, da neposredno nad glavo ni ovir. Površina za hojo



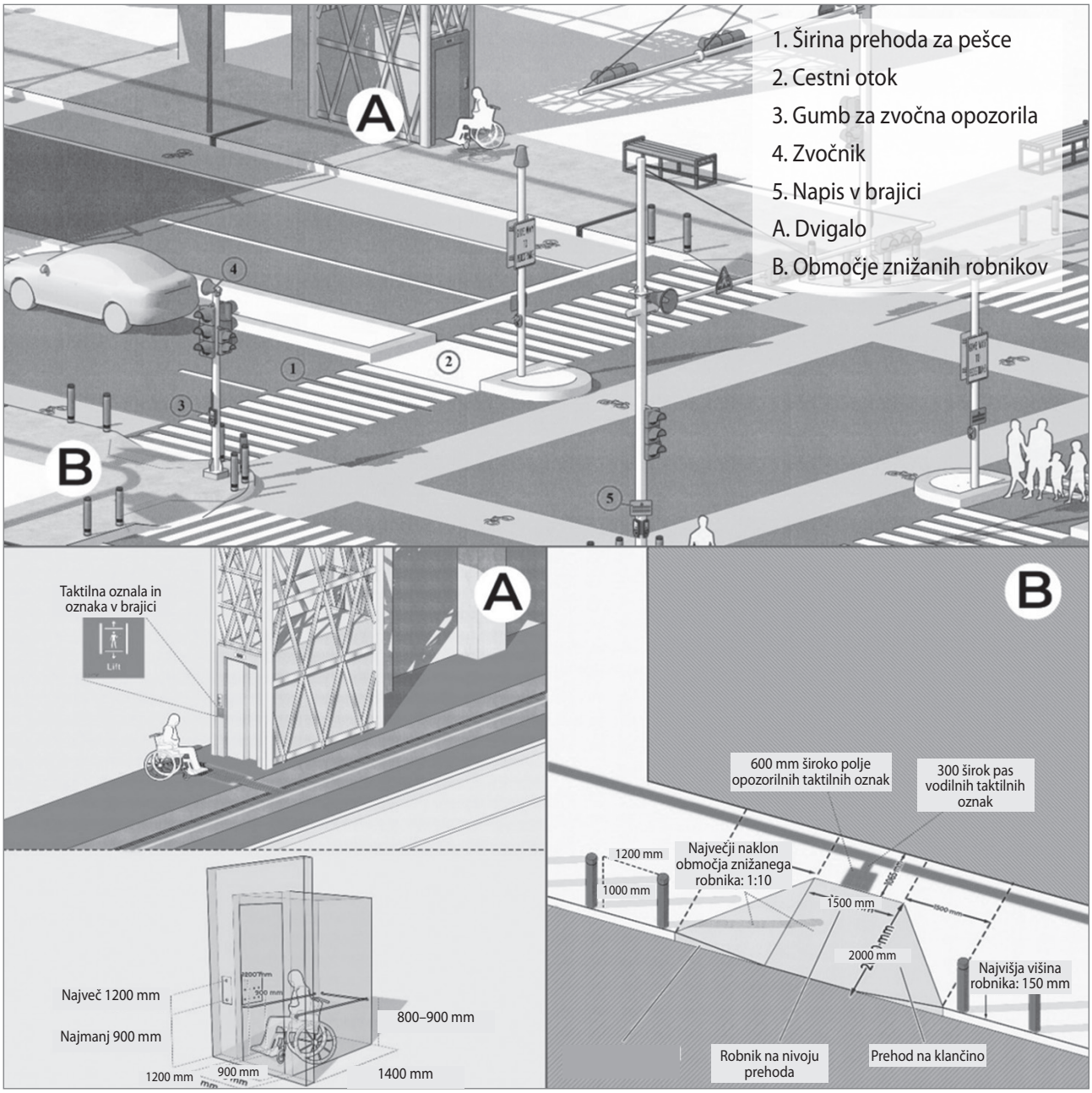
Slika 5: Vključujoče načrtovanje avtobusnega postajališča (vir: City of Vancouver, 2008; UK Department for Transport, 2021; City of Sydney, 2019)

mora biti trdna, ravna in iz materiala, ki preprečuje zdrse tako v suhih kot mokrih razmerah. Priporočeni materiali so porozni beton, utrjeni gramoz, liti asfalt, tlakovci in utrjena travna ruša, ki izboljšajo trpežnost, varnost in upravljanje padavinskih voda (Moretti idr., 2019). Deli odtočnih sistemov, kot so razni pokrovi in rešetke, morajo biti premišljeno nameščeni, da se prepreči nevarnost spotikanja, pri čemer odprtine v rešetkah ne smejo biti večje od 13 mm. Pri začasnih gradbenih delih na ulicah morajo biti zagotovljene jasne, dostopne poti ter pregrade z vidnimi in taktilnimi oznakami, ki omogočajo varno gibanje vsem pešcem (M. Liu idr., 2022).

3.4.2 Prehodi za pešce in križišča

Prehodi in križišča so ključni za mobilnost pešcev, zato morajo zagotavljati ustrezno dostopnost, zlasti za invalidne posameznike. Prehodi morajo biti široki najmanj 3.000 mm, da jih lahko varno prečkajo uporabniki invalidskih vozičkov in drugih gibalnih pripomočkov ter drugi pešci. Visoko kontrastne oznake ali naslikane bele črte izboljšajo vidljivost, dvignjeni ali reliefni prehodi za pešce pa zagotavljajo taktilne informacije za osebe z okvaro vida (Lauria, 2017). Talne taktilne oznake, vključno s čepastimi oznakami na začetku in koncu prehoda, vodijo pešce z okvaro vida in jih opozarjajo na morebitno nevarnost.

V skladu z mednarodnimi standardi so znižani robniki ključni za zagotavljanje nemotenega prehoda med pločniki in prehodi za pešce. Priporočljivo je, da imajo območja znižanih robnikov naklon 1 : 20 in so široka najmanj 1.500 mm, imajo na začetku in koncu talne taktilne oznake ter ne drsijo. Enako velja za znižane robnike na cestnih otokih, ki morajo zagotavljati

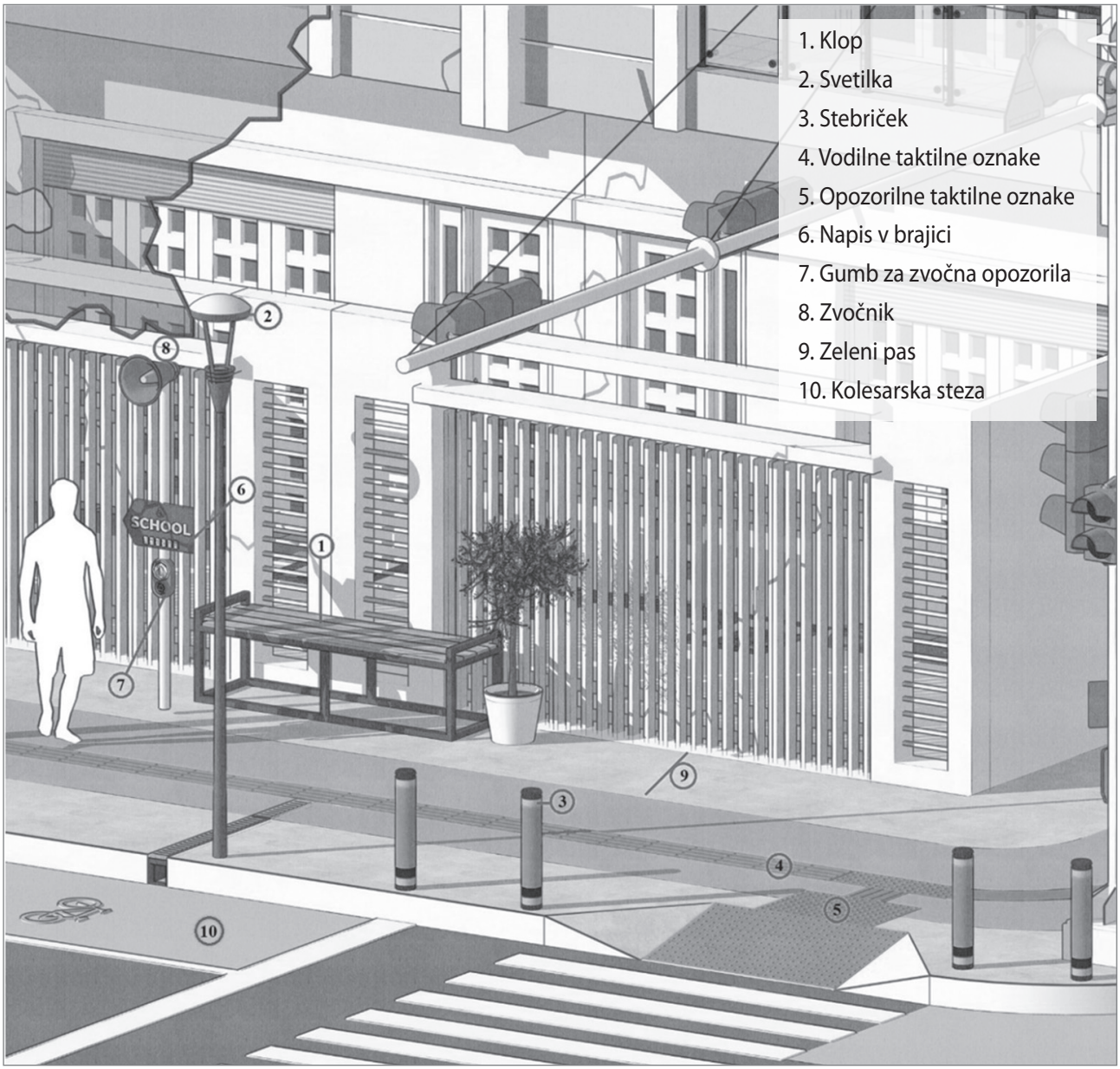


Slika 6: Vključujoče načrtovanje prehoda za pešce in križišča z dvigalom (A) in znižanimi robniki (B) (vir: City of Toronto, 2004, Indian Roads Congress, 2012, in Building and Construction Authority, 2007)

nemoteno gibanje vsem uporabnikom. Prehodi na cestah z gostim prometom morajo vključevati cestne otoke, ki pešcem zagotavljajo varen prostor za čakanje. Otoki morajo biti široki najmanj 1.200 mm (še bolje 2.000 mm), robniki pa morajo biti znižani, da omogočajo varen in nemoten prehod za invalidske in otroške vozičke.

Semaforizirana križišča morajo vključevati multisenzorične prvine, kot so dostopni signali za pešce (angl. *accessible pedestrian signals* ali APS) in talne taktilne oznake (Guth idr., 2019). Dostopni signali zagotavljajo jasna zvočna navodila, kot je Pojdi ali Počakaj (v indonezijščini Silahkan Jalan ali Mohon Tunggu), z možnostjo prilagajanja glasnosti glede na raven hrupa v okolici. Enako pomembni so napisi v brajici na prehodih za pešce, ki zagotavljajo bistvene usmerjevalne in varnostne informacije, kot so podatki o prehodu in bližnjih znamenitostih, s katerimi dopolnjujejo zgoraj omenjene dostopne signale za pešce.

Na območjih, kjer se ni mogoče izogniti stopnicam, morajo te imeti enako višino in globino po vsem stopnišču ter kontrastne robove, območje pred prvo in za zadnjo stopnico pa mora biti označeno z opozorilnimi talnimi taktilnimi oznakami (Pinheiro in da Silva, 2016). Ograja mora biti na obeh straneh



Slika 7: Vključujoča krajinska zasnova in ulična oprema (vir: UK Department for Transport, 2021, Indian Roads Congress, 2012, in City of Sydney, 2019)

neprekinjena, z držali na višini 900–1.000 mm in dodatnim držalom na višini 600 mm za dodatno oporo. Kot alternativa stopnicam bi morala biti na voljo dvigala z notranjimi dimenzijami vsaj 1.200 mm × 1.400 mm, da je dovolj prostora za invalidske vozičke (Tatano in Revellini, 2023; Chocoteco idr., 2017; Kuligowski idr., 2015). Opremljena morajo biti s tipkami z oznakami v brajici in drugimi prilagojenimi ukaznimi gumbi, ki jih lahko uporabljajo posamezniki z okvaro vida ali gibalno oviranostjo (slika 5).

3.4.3 Krajinska ureditev in ulična oprema

Krajinska ureditev površin za pešce mora združevati prvine, ki izboljšujejo njihovo funkcionalnost, varnost in dostopnost, ter s tem ustvarjajo okolje, primerno za vse uporabnike, zlasti invalidne osebe. Ključne prvine, kot so ulična oprema, zeleni pasovi in kolesarske poti, morajo biti premišljeno zasnovane in usklajene, da zagotavljajo ustrezno dostopnost in hkrati ohranjajo vizualno skladen prostor, prijazen uporabnikom.

Ulična oprema, kot so površine za sedenje, razsvetljava, stebrički, znaki in napisi, imajo ključno vlogo pri povečanju udobnosti in varnosti. Površine za sedenje bi morale biti nameščene v enakomernih razmikih po 25–50 m, da se na njih pešci, zlasti gibalno ovirane osebe, lahko odpočijejo (Bokolo, 2023). Sedišča morajo biti na višini 450–520 mm, naslonjala morajo biti visoka vsaj 455 mm, zraven pa mora biti prostor, širok vsaj 2.000 mm, za osebe na invalidskih vozičkih. Ustrezno zasnovana razsvetljava izboljšuje vidljivost, pri čemer mora osvetljenost pešpoti znašati vsaj 100 luksov, na kritičnih točkah, kot so križišča, klančine in površine za sedenje, pa mora znašati 200 luksov (Rahm in Johansson, 2021) (slika 7).

Za večjo varnost pešcev je treba namestiti stebričke, ki preprečujejo dostop motornim vozilom, razmik med njimi pa mora biti vsaj 1.200 mm, da omogočajo nemoten prehod pešcem. Visoki morajo biti od 1.000 do 1.400 mm in dovolj kontrastni, da jih je mogoče preprosto opaziti (Nakamura in Yoshioka, 2022). Ključna prvina vključujoče infrastrukture za pešce so tudi talne taktilne oznake. Za še večjo funkcionalnost se lahko talne oznake dopolnijo s strateško umeščenimi znaki, ki uporabnike dodatno usmerjajo in obveščajo. Nameščeni morajo biti na dostopni višini 1.370–1.525 mm, vključevati pa morajo napise z izbočenimi črkami, visoko kontrastne barve, brajico in zvočne informacije, da se zagotovi dostop posameznikom z okvaro vida in drugimi oviranostmi (Lee, 2019).

Zeleni pasovi delujejo kot funkcionalna in estetska tamponska območja med pešpotmi, kolesarskimi stezami in cestiščem. Rastline je treba premišljeno izbrati in umestiti, da se preprečijo tveganja, kot so viseče veje ali štrleče korenine, ki lahko ogrozijo uporabnike z okvaro vida (Lusk idr., 2020). Površine za pešce bi morale dopolnjevati varne kolesarske steze. Te morajo biti z ovirami, kot so stebrički ali zeleni pasovi, jasno ločene od pešpoti, pri čemer morajo biti enosmerne kolesarske steze široke vsaj 1.500 mm (Lawson idr., 2022).

4 Razprava

4.1 Glokalizacija standardov dostopnosti

Pojem glokalizacije na področju urbanističnega načrtovanja poudarja potrebo po združevanju standardov univerzalne dostopnosti z lokalno prilagojenimi rešitvami. To je še zlasti pomembno v okoljih, kot je regija Jember, kjer se infrastruktura in antropometrični podatki pomembno razlikujejo od tistih v državah z visokimi prihodki. Svetovne smernice na primer priporočajo najmanjšo svetlo višino pešpoti 2.200 mm, ki pa temelji na povprečni višini ljudi v zahodnem svetu. Povprečna višina moških v Indoneziji je 166 cm, v Kanadi, na Irskem in v Združenem kraljestvu pa 178–179 cm (World Ranking, 2022). Zaradi navedenih razlik so potrebne lokalne prilagoditve prostorskih dimenzij (npr. svetle višine ali višine ulične opreme), ki izboljšajo uporabnost infrastrukture brez vpliva na dostopnost.

Podobno se tudi dimenzije gibalnih pripomočkov v Indoneziji razlikujejo od tistih v standardu ISO 7176-5. Invalidski vozički so po navadi široki 650 mm in 1.060 mm dolgi (Yudiantyo idr., 2023), drugje po svetu pa so pogosto širši od 700 mm in daljši od 1.300 mm (Sariadji idr., 2024). Čeprav morajo biti po mednarodnih smernicah pešpoti široke najmanj 1.500 mm, bi lahko v Indoneziji zaradi navedenih razlik zadostovale nekoliko ožje konfiguracije. Prilagajanje tovrstnih značilnosti lokalnim normam zagotavlja, da infrastruktura ostane funkcionalna, stroškovno ugodna in prilagojena lokalni kulturi.

4.2 Prednostne naloge v vključujočem načrtovanju

Izsledki, pridobljeni z vprašalnikom in fokusnimi skupinami, potrjujejo visoko stopnjo dnevne mobilnosti invalidnih oseb v Jemberju, ki večinoma potujejo na delo, v šolo ali po opravkih. Navedeno poudarja potrebo po prednostnih infrastrukturnih izboljšavah na pogosto obiskanih lokacijah, kot so šole, tržnice, državni uradi in zdravstvene ustanove. Ker je bilo med anketiranci mnogo učiteljev, študentov, podjetnikov in javnih uslužbencev, je vključujoči dostop do teh točk ključen za enakovredno vključenost v javno življenje. Rezultati raziskave se ujemajo z ugotovitvami Annaliine Niitamo (2024), ki poudarja pomen vključevanja uporabniških izkušenj v načrtovalske procese ne le kot tehnični prispevek, ampak tudi kot demokratične prakse na področju inkluzivnega upravljanja mest.

Oblikovalske prvine, kot so talne taktilne oznake, napisi v brajici in zvočna opozorila, ki so jih uporabniki prepoznali kot najpomembnejše, morajo biti uvedene tako, da so ustrezno prilagojene okolju. Razprave v fokusnih skupinah so pokazale, da imajo številni udeleženci raje kombinacije prvin, ki lahko zadovoljijo raznovrstne senzorične potrebe. Navedene ugotovitve potrjujejo pomen vključevanja načel univerzalnega načrtovanja v lokalno prilagojene prakse, ki odražajo dejanske vzorce uporabe, navade v prostoru in vsakodnevne rutine.

4.3 Vloga lokalne politike in izvajanja predpisov

Učinkovitost infrastrukture za pešce ni odvisna samo od oblikovalskih prvin, ampak tudi od izvajanja ustrezne politike in predpisov. V fokusnih skupinah so bile večkrat izpostavljene težave, kot sta nezakonito parkiranje in poseganje uličnih prodajalcev na pločnike, ki močno ovirajo mobilnost posameznikov z oviranostmi in starejše pešce, zlasti na gosto poseljenih obmo-

čjih. Za reševanje teh izzivov morajo lokalne oblasti sprejeti in izvajati predpise, ki določajo sprejemljivo uporabo površin za pešce. V Indoneziji 101. člen zakona št. 8 iz leta 2016 (State Gazette of the Republic of Indonesia, št. 69/2016) določa, da so površine za pešce, dostopne invalidnim osebam, vključno s pločniki in prehodi za pešce, ključne sestavine vključujoče prometne infrastrukture. Tudi Mukherjee in Saha (2022) navajata, da trajnost pri načrtovanju dostopnosti ni povezana samo z načrtovanjem, ampak zahteva stalen nadzor, odzivnost politike in sodelovanje skupnosti, da infrastruktura ostane vključujoča. Kot ugotavljajo Lawson idr. (2022), neurejena uporaba pločnikov ogroža varnost pešcev in izničuje predvidene koristi infrastrukturnih izboljšav.

V skladu z odstavkom 4b 11. člena indonezijskega zakona št. 2 iz leta 2022 v povezavi z drugo spremembo zakona št. 38 o cestah iz leta 2004 (State Gazette of the Republic of Indonesia, št. 17/2022) so poti, namenjene dvokolesnim motornim vozilom, pešcem, kolesarjem in/ali invalidnim osebam, del cestišča. Cestni organi so zato dolžni zagotoviti, da površine za pešce omogočajo vključenost ranljivih skupin, kot so invalidne osebe, starejši, otroci in nosečnice. Zato so ukrepi, kot so kazni za nepravilno parkiranje, prostorske omejitve za ulične prodajalce in kampanje ozaveščanja o bontonu na skupnih površinah, ključni za zagotavljanje dolgoročne skladnosti s predpisi (Karadag idr., 2012; Savolainen idr., 2011; Getu idr., 2023; Muley idr., 2025).

5 Sklep

S proučevanjem, kako je mogoče globalne standarde dostopnosti prilagoditi lokalnim razmeram v regiji Jember v Indoneziji, članek prispeva k čedalje številnejšim razpravam o vključujočem urbanističnem načrtovanju. Z uporabo kvalitativnega raziskovalnega pristopa, ki je vključeval strukturirani vprašalnik, fokusne skupine in primerjalni pregled literature, so avtorji ugotovili pomembne vrzeli v infrastrukturi za pešce, ki najbolj prizadenejo invalidne osebe. Njihovi izsledki poudarjajo pomen multisenzoričnih oblikovalskih prvin, kot so oznake v brajici, zvočna opozorila in talne taktilne oznake, ter potrebo po ustreznih dimenzijah prostorskih ureditev in izvajanju predpisov za zagotavljanje varne in samostojne mobilnosti pešcev. Dostopnost v članku ni obravnavana samo z vidika tehnične skladnosti, ampak je opredeljena kot vprašanje družbene pravičnosti in prostorske vključenosti, ki zahteva vključujoče načrtovanje in prilagoditve mednarodnih načel, ki upoštevajo lokalno kulturo. Ta glokalizirani načrtovalski pristop prispeva k širšim razpravam o vključujočem urbanizmu, zlasti na območjih z nizkimi ali srednje visokimi prihodki.

Raziskava je imela tudi nekatere omejitve. V njej so prevladovali udeleženci z okvaro vida, kar je lahko vplivalo na močan poudarek na multisenzoričnih prvinah dostopnosti. Navedeno ni bila posledica pristranskosti pri pridobivanju udeležencev, ampak najverjetneje različne angažiranosti posameznih skupnosti invalidnih oseb. V prihodnjih raziskavah bi bilo treba uporabiti metode stratificiranega ali ciljnega vzorčenja, ki bi zagotovile bolj uravnoteženo sestavo udeležencev. Poleg tega, čeprav uporaba opisne statistike omogoča dragocene vpoglede, v celoti ne zajame kompleksnosti izkušenj z mobilnostjo. Prihodnje raziskave bi se morale osredotočati na longitudinalne in vključujoče raziskovalne pristope, ki bi omogočali proučevanje dolgoročne uporabnosti in družbene sprejetosti predlaganih rešitev ter sprotno izpopolnjevanje strategij vključujočega načrtovanja. Članek s povezovanjem empiričnih izsledkov z mednarodnimi okviri in lokalnimi življenjskimi izkušnjami daje podlago za oblikovanje občinskih ukrepov v Jemberju in hkrati razširja teoretične razprave o vključujočem urbanizmu, zlasti na slabo raziskanih območjih.

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Raziskava vpliva mestnih zelenih površin na dobro počutje v Prištini

V članku je na podlagi kvantitativnega pristopa obravnavan vpliv mestnih zelenih površin na človekovo dobro počutje v Prištini na Kosovu. Z analizo glavnih komponent in regresijsko analizo so bili analizirani podatki 384 anketirancev, izbranih s stratificiranim naključnim vzorčenjem. Izsledki so pokazali, da so kakovost in estetska privlačnost zelenih površin ter povezanost s skupnostjo ključni napovedniki dobrega počutja, kar izpostavlja pomen dobro vzdrževanih in vizualno privlačnih zelenih prostorov, ki spodbujajo družbene stike. Dejavniki, kot so dostopnost, razpoložljivost, opremljenost, funkcionalnost in varnost zelenih površin, pa niso pokazali večjega vpliva na dobro počutje, kar je najverjetneje posledica izzivov, s katerimi se na tem področju spopada Priština. Za krepitev človekovega dobrega počutja v mestu bi morali oblikovalci politik dati prednost kakovostnim in vključujočim zelenim površinam, ki omogočajo družbeno povezovanje ter hkrati odpravljajo prostorske neenakosti in vrzeli v upravljanju.

Ključne besede: mestne zelene površine, dobro počutje, dostopnost, povezanost s skupnostjo, Priština

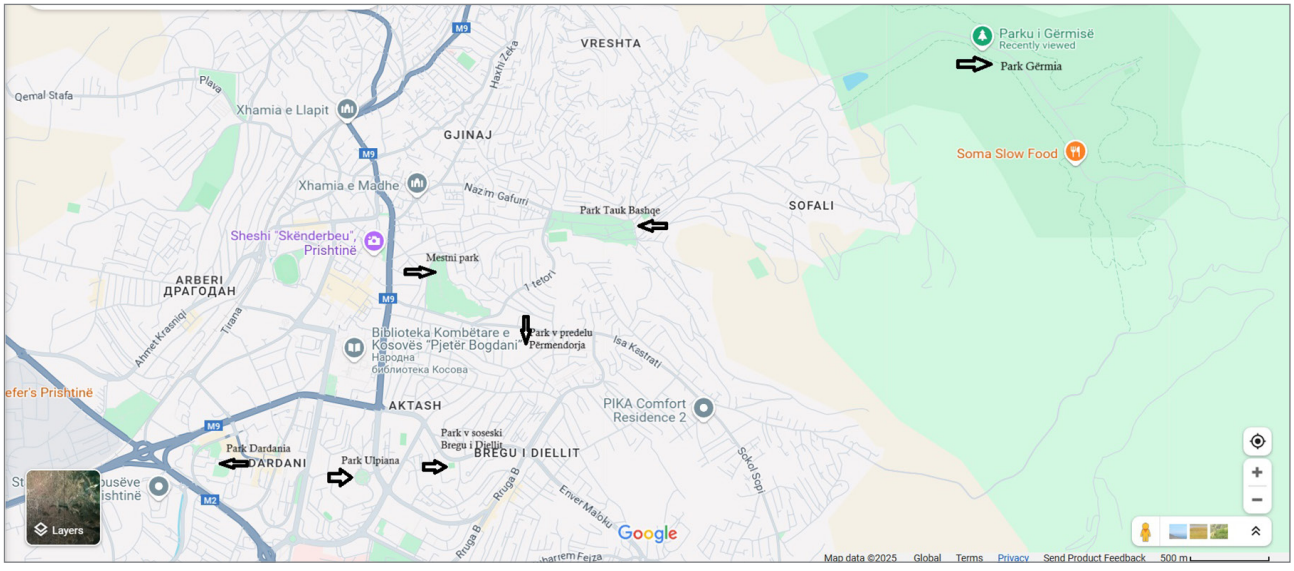
1 Uvod

Dostopnost mestnih zelenih površin je ključna za krepitev telesnega in psihičnega dobrega počutja mestnih prebivalcev, pri čemer je v urbanističnem načrtovanju čedalje večji poudarek na njihovi enakomerni porazdelitvi. Raziskave kažejo, da kumulativni kazalniki priložnosti, kot je število parkov, skupna površina zelenih površin ali raznovrstnost rekreacijskih površin, ki jih lahko prebivalci dosežejo peš, bolje napovedujejo koristi za zdravje kot kazalniki, ki temeljijo zgolj na merjenju zelenih površin najbližje domu (Ekkel in de Vries, 2017). Razlike kljub temu ostajajo: bogatejše skupnosti, kot so na primer soseske na severu Atlante, ali premožnejše soseske v Berlinu in Parizu imajo pogosto dostop do več parkov ter bolje vzdrževanih in varnejših zelenih površin kot skupnosti na revnejših ali marginaliziranih območjih (Buckland in Pojani, 2022; Chen idr., 2020; Hsu idr., 2022). V skladu z modelom 15-minutnega mesta, ki spodbuja večjo dostopnost, bi morale biti storitve in infrastruktura, vključno z zelenimi površinami, prebivalcem dosegljive peš ali s kolesom (Liu idr., 2022). Kljub temu se številna mesta v Južni Ameriki, Afriki in Aziji spopadajo z izzivi pri zagotavljanju pravičnega dostopa do teh površin – neformalna naselja v Nairobiju na primer nimajo javnih parkov v bližini, delež zelene infrastrukture na prebivalca na gosto poseljenih predelih São Paula in Dhake pa je zelo majhen (Long idr., 2022).

Na zdravje in dobro počutje ljudi pomembno vpliva tudi kakovost zelenih površin. Lepo vzdrževane, čiste in varne zelene površine spodbujajo telesno dejavnost, zmanjšujejo zdravstvena tveganja, kot je debelost (Daniels idr., 2018; Knobel idr., 2020; Stessens idr., 2020) in spodbujajo družbene stike in povezovanje (Barrera idr., 2016, Semeraro idr., 2021). Imajo psihološke koristi, ki so ključne za prijetno bivanje v mestih (Lee idr., 2015). Povezave med kakovostjo zelenih površin in zdravjem je treba podrobneje raziskati, večjo uporabo zelenih površin pa bi lahko omogočile prostorske ureditve, ki upoštevajo lokalno kulturo (npr. različne zvočne krajine) (Nguyen idr., 2021).

Zelene površine poleg tega opravljajo temeljne ekološke funkcije. Blažijo vročino, filtrirajo onesnaževala iz zraka in krepijo biotsko raznovrstnost (Kabisch idr., 2017; Daniels idr., 2018). Kot del modro-zelene infrastrukture pomagajo upravljati padavinske vode v mestih in zmanjšujejo tveganje urbanih poplav (Mu idr., 2020). Načrtovalske analize zelenih površin in njihove prostorske porazdelitve omogočajo boljše urejanje zelenega prostora (Zhang idr., 2017; Giannico idr., 2021). Načrtovanje večnamenskih in vključujočih prostorov je zelo pomembno v gosto pozidanih mestih, kjer primanjkuje prostora (Belmeziti idr., 2018; Hansen idr., 2017).

Raziskava, predstavljena v tem članku, se osredotoča na Prištino, hitro rastoče glavno mesto postsocialistične države, za katero so značilni akutno pomanjkanje zelenih površin in omejitve pri urejanju prostora. Mestna območja na Kosovu, zlasti v Prištini, se spopadajo z nenehnim pomanjkanjem kakovostne zelene infrastrukture. V Prištini je na voljo samo okoli 2,9 m^2 javnih zelenih površin na prebivalca, kar je precej manj od priporočila Svetovne zdravstvene organizacije, ki znaša 9 m^2, zaradi česar številni prebivalci nimajo ustreznega dostopa do narave (UN-Habitat, 2019, 2020). Glavne zelene površine v Prištini so parki Gërmia, Ulpiana, Dardania in Tauk Bashqe ter Mestni park, ki se razlikujejo po velikosti, biotski raznovrstnosti in dostopnosti. Največji in biotsko najbolj raznovrsten je park Gërmia, drugi parki, na primer Dardania, pa so manjši in so bolj v središču mesta, imajo nizko stopnjo biotske raznovrstnosti in slabo urejeno javno infrastrukturo (Balaj idr., 2022).



Slika 1: Lokacija proučevanih zelenih površin v Prištini (vir: Google Maps)

Slika 2: a) park Gërmia, b) Mestni park, (c) park Ulpiana, č) park Dardania, d) park Tauk Bashqe, e) park v soseski Bregu i Diellit, f) park v predelu Përmendorja (foto: Hana Hoxha)

Poleg tega so v mestu manjši zeleni prostori, na primer tisti v predelu Përmendorja ali v soseski Bregu i Diellit (sliki 1 in 2).

Zelene površine v mestu niso enakomerno razporejene, pogosto so slabo vzdrževane in ogroža jih neurejena mestna gradnja (Balaj idr., 2022). Veča se tudi okoljska nepravičnost: park Gërmia na obrobju Prištine na primer zagotavlja veliko rekreacijsko območje, ki pa je številnim prebivalcem strnjenih sosesk v središču mesta, ki v bližini nimajo drugih peš dostopnih zelenih površin, nedostopno (Kosovo Team UN, 2021; Open Government Partnership, 2024). Tovrstne neenakosti se še krepijo zaradi nenadzorovanega širjenja mesta, omejenih zmožnosti občinskega načrtovanja in pomanjkanja zeleno usmerjenih prostorskih politik (Prishtina Insight, 2019; D4D, 2022). Posledice so vidne v čedalje večji izpostavljenosti mestni vročini, večji onesnaženosti zraka in omejenih priložnostih za telesno dejavnost in druženje. Čeprav so bili ti izzivi prepoznani v strateških dokumentih, kot je prištinski Akcijski načrt za zeleno mesto (City of Pristina, 2021), je empiričnih podatkov o tem, kako prebivalci doživljajo mestne zelene površine, še vedno malo. Avtorja sta v raziskavi, predstavljeni v tem članku, poskušala odpraviti to vrzel z analizo vpliva dejavnikov, kot so dostopnost, kakovost, funkcionalnost in varnost zelenih površin ter povezanost s skupnostjo, na zaznano dobro počutje in zdravje v Prištini. Iz rezultatov analize je mogoče izpeljati pomembna spoznanja za načrtovanje pravičnejših in odpornejših mestnih območij na Kosovu in v primerljivih postsocialističnih državah. Našteti strukturni dejavniki vplivajo na to, kako prebivalci dojemajo in uporabljajo zelene površine, kar je bila tudi podlaga za to raziskavo.

S povezovanjem lokalno utemeljenih spoznanj s širšimi razpravami o pravičnosti, zdravju prebivalcev in odpornosti mest članek prispeva izvirna in pomembna spoznanja z vidika prostorske politike za mesta, ki se spopadajo s podobnimi razvojnimi in okoljskimi omejitvami. Na podlagi vrzeli, prepoznanih v literaturi, in urbane dinamike Prištine sta avtorja oblikovala naslednje raziskovalno vprašanje: Kako razne razsežnosti mestnih zelenih površin, kot so dostopnost in razpoložljivost, kakovost in estetska privlačnost, opremljenost in funkcionalnost, varnost in povezanost s skupnostjo, vplivajo na zaznano dobro počutje in zdravje prebivalcev Prištine?

Da bi našla odgovor na zastavljeno raziskovalno vprašanje, sta oblikovala in empirično preverila naslednjih pet hipotez:

- H1: Dostopnost in razpoložljivost mestnih zelenih površin pozitivno vplivata na zaznano dobro počutje in zdravje.
- H2: Kakovost in estetska privlačnost mestnih zelenih površin pozitivno vplivata na zaznano dobro počutje in zdravje.
- H3: Opremljenost in funkcionalnost mestnih zelenih površin pozitivno vplivata na zaznano dobro počutje in zdravje.
- H4: Varnost mestnih zelenih površin pozitivno vpliva na zaznano dobro počutje in zdravje.
- H5: Povezanost s skupnostjo, ki jo krepijo mestne zelene površine, pozitivno vpliva na zaznano dobro počutje in zdravje.

1.1 Pregled literature

Za sistematično obravnavo raziskovalnega vprašanja je pregled literature strukturiran glede na postavljene hipoteze, ki se nanašajo na proučevane razsežnosti mestnih zelenih površin, dodan pa je še šesti del, ki se osredotoča na širše učinke na zdravje. Najnovejše empirične raziskave z Zahodnega Balkana dajejo primerjalni okvir za ustrezno umestitev izzivov v Prištini, povezanih z mestnimi zelenimi površinami.

Dostopnost in razpoložljivost mestnih zelenih površin sta ključni za to, da jih lahko vsi prebivalci enakopravno uporabljajo. Ekkel in de Vries (2017) zagovarjata uporabo kumulativnih kazalnikov dostopnosti, ki upoštevajo skupno površino dostopnih zelenih prostorov in bolje napovedujejo koristi za zdravje kot zgolj bližina zelenih prostorov. Wang idr. (2015) poudarjajo pomen tako fizičnih kot subjektivnih dejavnikov, ki vplivajo na zaznano dostopnost mestnih parkov (tj. hodljivosti, povezanosti, občutka varnosti in kulturne podobnosti obiskovalcev). Družbenogospodarske razlike pri dostopu do zelenih površin so še vedno značilne za številna mesta po svetu, pri čemer imajo prikrajšana območja, kot so nekateri predeli Kowloona ali soseske v središčih mest, pogosto omejen dostop (Almohamad idr., 2018; Wei idr., 2022; Liu idr., 2022). Podobni vzorci se pojavljajo tudi v Sarajevu, kjer je po navajanju Tatlić idr. (2024) na razpolago samo 1,4 m^2 javnih zelenih površin na prebivalca, kar kaže na prostorske neenakosti kljub veliki pokritosti z zelenimi površinami. Tudi Novi Sad se spopada s podobnimi težavami: več zelene infrastrukture je na obrobju mesta, v središču pa primanjkuje funkcionalnih in dostopnih zelenih površin (Jevtić idr., 2021).

V zvezi s kakovostjo in estetsko privlačnostjo mestnih zelenih površin Stessens idr. (2020), Veinberga in Zigmunde (2019) ter Tan idr. (2019) ugotavljajo, da so čistoča, mir in urejena krajina ključni za večji obisk in večje zadovoljstvo obiskovalcev. Subiza-Pérez idr. (2019) navajajo, da senzorična pestrost (zvoki, teksture in sezonske spremembe) povečuje čustveno navezanost na zelene površine. V Sarajevu po velikosti izstopajo gozdni parki, ki pa so slabo vzdrževani in pogosto nedostopni (Tatlić idr., 2024), Vujčić idr., (2018) pa poudarja, da so v Beogradu vizualno privlačni parki povezani z manjšim stresom in manjšo porabo zdravil. Balaj idr. (2022) so ugotovili, da je med štirimi največjimi parki v Prištini (Gërmia, Tauk

Bashqe, Dardania in Mestni park) samo Gërmia dosegel zmerno vrednost indeksa biotske raznovrstnosti (nad 1,5), vrednost za park Dardania pa je bila samo 0,68, kar kaže na omejeno ekološko raznovrstnost in morebitno manjše zadovoljstvo uporabnikov. Njihova raziskava opozarja, da primanjkljaji v raznovrstnosti vrst in sestavi rastlinstva vplivajo na estetsko in ekološko funkcijo parkov v mestu. Navedeni primeri kažejo, kako vzdrževanje in zaznana kakovost zelenih površin vplivata na njihovo uporabo in na duševno zdravje obiskovalcev.

Pomembni sta tudi funkcionalnost in opremljenost zelenih površin. D'yachkova in Mikhailov (2023) poudarjata, da so površine za sedenje, razsvetljava in poti brez ovir ključne za vključenost vseh prebivalcev. Funkcionalnost in udobje zelenih površin dodatno povečujejo tehnološke izboljšave, izvedene v okviru upravljanja urbane infrastrukture (Abdelkarim idr., 2023). Tatlić idr. (2024) navajajo, da večina zelenih površin v Sarajevu spada v kategorijo prostorov z omejenim dostopom, ki imajo malo funkcij, namenjenih skupnosti, ali prilagodljivih elementov, kar omejuje njihovo zmožnost, da delujejo kot večnamenski in vključujoči prostori. Balaj idr. (2022) opozarjajo, da zelene površine v Prištini nimajo prilagodljive infrastrukture, ki bi zadovoljevala potrebe družin, starejših ali invalidnih oseb. Njihovi izsledki poudarjajo, da funkcionalne omejitve, kot je odsotnost igrišč, dostopnih poti in počivališč, zmanjšujejo zmožnost mestnih parkov, da delujejo kot vključujoči in v skupnost usmerjeni prostori. Navedeno velja tudi za Prištino, kjer je na gosto zazidanih območjih le malo tovrstne infrastrukture (Bejtullahu, 2015).

Na rabo zelenih površin vpliva tudi občutek varnosti, pri katerem imajo pogosto pomembno vlogo razsvetljava, vidljivost in urejenost okolja. Občutek varnosti se lahko poveča z vključitvijo pametnih oblik nadzora, razsvetljave in infrastrukture (Abdelkarim idr., 2023). Čeprav je v literaturi z območja Balkana varnost po navadi obravnavana samo posredno, Šuklje Erjavec idr. (2022) ter Kozamernik idr. (2024) izpostavljajo uspešne modele v Sloveniji, kjer urbanistični in javnozdravstveni sektor sodelujeta pri ustvarjanju varnejših in vključujočih parkov. Balaj idr. (2022) niso neposredno proučevali varnostne infrastrukture na zelenih površinah v Prištini, kljub temu pa njihovi izsledki o prevladi okrasnega rastlinstva nad funkcionalnim kažejo, da se v oblikovanju daje prednost estetskemu, ne praktičnemu pristopu, pri katerem se lahko zanemarijo osnovne varnostne potrebe uporabnikov. Navedena vrzel poudarja potrebo po lokalnih empiričnih podatkih o zaznavanju varnosti kot podlagi za vključujoče načrtovanje parkov v Prištini.

Povezanost skupnosti je glavna posledica in gonilo urejanja mestnih zelenih površin. Kot navajajo Kabisch idr. (2015) in Qin idr. (2021), parki, ki so prizorišča raznih dogodkov in omogočajo neformalne oblike druženja, krepijo zaupanje in ponos skupnosti. Ward Thompson idr. (2016) in Rugel idr. (2019) pogosto rabo mestnih zelenih površin povezujejo z manjšo socialno izolacijo. Starczewski idr. (2024) ugotavljajo, da dobro vzdrževane zelene površine v gosto poseljenih stanovanjskih soseskah postsocialističnih mest krepijo ekološko sklenjenost naravnih območij in prepoznavnost mest. Noszczyk idr. (2023) pri tem opozarjajo, da urbana rast in širjenje infrastrukture še naprej ogrožata zelene koridorje v poljskih mestih. Podobno se dogaja tudi v Prištini, kjer se urbana območja nenadzorovano širijo (Mejzini, 2015; Tahiri in Momirski, 2019). Balaj idr. (2022) navajajo, da imajo parki v Prištini zgodovinski in družbeni pomen za prebivalce (npr. Mestni park), njihova zmožnost krepitve skupnosti pa je omejena zaradi neenakomerne razporeditve rastlinstva, zastarele infrastrukture in pomanjkanja vključujočega načrtovanja. Avtorji menijo, da bi moralo načrtovanje v prihodnje vključevati bolj vključujoč pristop in kulturno ustrezne zelene prvine, ki bi spodbujale druženje in krepile dobro počutje.

Poleg navedenih petih razsežnosti mestnih zelenih površin so dobro dokumentirane tudi zdravstvene koristi uporabe zelenih prostorov. Raziskave so pokazale povezavo med razpoložljivostjo zelenih površin in nižjo stopnjo stresa, tesnobe in depresije (Callaghan idr., 2020; Kondo idr., 2018; Rugel idr., 2019). Mestne zelene površine poleg tega spodbujajo telesno dejavnost in posledično preprečujejo bolezni srca in ožilja, hkrati pa pomagajo blažiti mestno vročino in onesnaženost zraka (Jennings in Bamkole, 2019; Kabisch, 2019; Dadvand idr., 2016; Dadvand in Nieuwenhuijsen, 2018). Da vse navedeno drži tudi za Prištino, so potrdili že Balaj idr. (2022), ki so ugotovili, da parki z visoko stopnjo biotske raznovrstnosti, kot je Gërmia, omogočajo psihološke koristi in krepijo zdravje dihal, zlasti v primerjavi z močno urbaniziranimi predeli, kot je Dardania. Njihova raziskava je hkrati pokazala tudi pomanjkanje strukturiranih orodij za spremljanje zdravja ali longitudinalnih podatkov, kar omejuje razumevanje dolgoročnih vplivov zelenih površin v Prištini na zdravje. Kljub znanim koristim teh površin za zdravje številna mesta, tudi Priština, nimajo longitudinalnih podatkov, na podlagi katerih bi lahko v celoti izmerila te vplive v lokalnem okolju. To je pomembna vrzel, ki sta jo avtorja v raziskavi, predstavljeni v tem članku, poskušala zapolniti.

Pri ugotavljanju, kako učinkovito mestne zelene površine prispevajo k dobremu počutju ljudi, so ključne prostorske razmere. Dejavniki, kot so dostopnost, bližina, obseg, izpostavljenost, kakovost in zaznane značilnosti, pomembno vplivajo na to, ali se zelene površine uporabljajo in ali prispevajo k psihološkim koristim in krepitvi javnega zdravja. Številne raziskave potrjujejo, da imajo zelene površine za ljudi največje koristi, če so od njih oddaljene 30–1.000 m, pri čemer tako bližina kot skupna razpoložljivost zelenih površin kažeta nelinearno,

obrnjeno U-obliko povezave z zadovoljstvom z življenjem (Bertram in Rehdanz, 2015; Labib idr., 2019; Jia idr., 2023). Podrobnejše prostorske analize izpostavljenosti zelenim površinam na ravni soseske ali na več ravneh omogočajo natančnejšo oceno povezave med dostopom do zelenih površin in zdravjem (Labib idr., 2019; Jia idr., 2023). Enako pomembni so tudi kvalitativni vidiki: naravne značilnosti, biotska raznovrstnost, zvočna krajina, občutek varnosti in splošna uporabnost vplivajo na čustvene odzive ljudi na zelena okolja in na to, kako se v njih regenerirajo (Fisher idr., 2020; Xu idr., 2025). Ustrezna oprema in premišljena, vključujoča zasnova izboljšata tako estetsko privlačnost kot praktično uporabnost zelenih površin za raznovrstne skupine mestnih prebivalcev (Lee idr., 2015; Russo, 2024).

Kljub jasnim izsledkom s tega področja v tuji literaturi je še vedno velika vrzel v empiričnih raziskavah, ki bi se osredotočale na Prištino. Čeprav so Balaj idr. (2022) pridobili osnovne podatke o raznovrstnosti in prostorski razporejenosti rastlinstva v štirih glavnih parkih v Prištini, se je njihova analiza osredotočala predvsem na ekološki vidik, ni pa celovito obravnavala dostopnosti, zaznane kakovosti ali zdravstvenih koristi mestnih zelenih površin. V zvezi z mestom primanjkuje celovitih raziskav, ki bi se osredotočale na to, kako prostorske značilnosti in funkcionalna zasnova zelenih površin ter zaznave uporabnikov skupaj vplivajo na posameznikovo dobro počutje. V nasprotju z mesti, kot so Ljubljana, Beograd in Sarajevo, kjer so najnovejše raziskave izpostavile pomen vključujočega načrtovanja, vključenost skupnosti in pravičnega dostopa do infrastrukture, sta področji urejanja prostora in oblikovanja prostorske politike v Prištini še vedno slabo razviti. Izsledki omenjenih raziskav s primerljivih območij poudarjajo pomen medsektorskega sodelovanja in vključujočega oblikovanja, ki pa se pri urejanju zelenih prostorov na Kosovu večinoma ne upoštevata. Avtorja zato v članku predstavita potrebno, večdimenzionalno in na uporabnika osredotočeno analizo vpliva dostopnosti, estetike, funkcionalnosti in varnosti zelenih površin ter povezanosti s skupnostjo, ki jo te krepijo, na zaznano zdravje in dobro počutje v Prištini. S tem odpravljata pomembno vrzel v lokalni in regionalni literaturi ter predstavita izsledke, pomembne za pravično urbanistično načrtovanje v postsocialističnih okoljih nasploh.

2 Metodologija

2.1 Zgradba raziskave

Avtorja sta v raziskavi uporabila kvantitativni korelacijski pristop, s katerim sta proučila povezave med raznimi razsežnostmi mestnih zelenih površin (tj. dostopnostjo, kakovostjo, varnostjo in povezanostjo s skupnostjo) in njihov vpliv na dobro počutje prebivalcev Prištine. Z analizo glavnih komponent sta proučila notranjo zgradbo uporabljenega vprašalnika in opredelila osnovne komponente, nato pa sta z multiplo regresijsko analizo določila razsežnosti uporabe zelenih površin, ki najbolje napovedujejo zaznane koristi za zdravje in dobro počutje.

Uporabila sta dvodelni vprašalnik po zgledu tistega, ki sta ga razvila Grum in Temeljotov Salaj (2011). Prvi del je vseboval demografska vprašanja, povezana s starostjo, spolom in izobrazbo, v drugem delu pa sta avtorja proučevala dostopnost, kakovost, opremljenost in varnost zelenih površin, povezanost s skupnostjo in mnenja anketirancev o vplivu zelenih površin na njihovo zdravje in dobro počutje. Drugi del je bil razdeljen na več sklopov, pri čemer je vsak vseboval po osem trditev, ki so jih anketiranci ocenjevali na petstopenjski Likertovi lestvici (1 = sploh se ne strinjam, 5 = popolnoma se strinjam). Z njimi sta avtorja analizirala razne vidike zelenih površin in njihov vpliv na posameznikovo dobro počutje. Avtorja sta trditve, uporabljene v drugem delu vprašalnika, oblikovala na podlagi prostorskih značilnosti, opredeljenih pri pregledu literature, in hipotez, oblikovanih na začetku raziskave.

V sklopu, ki se je nanašal na dostopnost in razpoložljivost mestnih zelenih površin, sta avtorja proučevala lahkotnost dostopa do zelenih površin in njihovo porazdelitev po mestu. Vključene trditve so se nanašale na bližino zelenih površin, prisotnost več zelenih površin blizu bivališč in to, ali so dovolj velike, da lahko sprejmejo veliko obiskovalcev. Poleg tega sta v tem sklopu proučevala razpoložljivost javnega prevoza in prisotnost varnih pešpoti brez ovir.

V sklopu o kakovosti in estetski privlačnosti zelenih površin je bil poudarek na stanju, čistoči in vizualni privlačnosti teh. Avtorja sta proučevala vzdrževanje, čistočo (ni smeti in onesnaževal) ter zdravje dreves in drugih rastlin. Zanimalo ju je tudi, ali zelene površine ljudem zagotavljajo mirno okolje, so lepo urejene in ali so lepe ne glede na letni čas. Poleg tega sta ugotavljala, kakšno vlogo imajo pri izboljšanju podobe celotnega mesta.

Sklop o opremljenosti in funkcionalnosti mestnih zelenih površin se je osredotočal na razpoložljivost in funkcionalnost opreme, kot so površine za sedenje, območja za razne aktivnosti (otroška in športna igrišča) in stranišča. Avtorja sta proučevala tudi razpoložljivost pitne vode, varnost objektov in opreme, ustreznost razsvetljave in pešpoti ter prisotnost senčnih območij za sproščanje.

V sklopu o vplivu zelenih površin na zdravje in dobro počutje sta avtorja proučevala, kako mestni zeleni prostori vplivajo na telesno in duševno zdravje anketirancev, zmanjševanje stresa, povezanost s skupnostjo in splošno kakovost življenja. Zanima-

Preglednica 1: Struktura anketirancev v Prištini

Kategorija	Anketiranci, *n* (v %)	Prebivalci Prištine (18–65 let), *n* (v %)
Spol		
Moški	193 (50,17)	72.085 (50,17)
Ženski	191 (49,83)	71.598 (49,83)
Skupaj	384 (100,00)	143.683 (100,00)
Starost		
18–34 let	157 (41,00)	59.076 (41,00)
35–55 let	169 (44,00)	62.650 (44,00)
56–65 let	58 (15,00)	21.957 (15,00)
Skupaj	384 (100,00)	143.683 (100,00)
Izobrazba		
Osnovna šola	72 (19,00)	27.300 (19,00)
Srednja šola	153 (40,00)	57.473 (40,00)
Dodiplomski študij	139 (36,00)	51.725 (36,00)
Magisterij ali doktorat	20 (5,00)	7.185 (5,00)
Skupaj	384 (100,00)	143.683 (100,00)

Vir: Kosovo Agency of Statistics (2024)

lo ju je tudi, ali preživljanje časa na zelenih površinah izboljša razpoloženje, pomaga zbistriti misli in poveča zadovoljstvo z bivalnim okoljem.

2.2 Metoda vzorčenja

Avtorja sta uporabila metodo stratificiranega naključnega vzorčenja, s katero sta zagotovila ustrezno reprezentativnost prebivalcev Prištine, starih od 18 do 65 let (prim. Jonker in Pennink, 2010). Vzorec je vključeval 384 anketirancev, sorazmerno porazdeljenih po spolu, starosti in izobrazbi, tako da se je ujemal s strukturo prebivalstva Prištine iz popisa leta 2024 (Kosovo Agency of Statistics, 2024). Za dosego proporcionalne reprezentativnosti vzorca so bile v fazi zbiranja podatkov uporabljene stratificirane kvote, nabor anketirancev pa je bil sproti prilagojen glede na starost, spol in izobrazbo. Pristop na podlagi kvot je zagotovil, da se je končni vzorec čim bolj skladal z dejansko strukturo mestnega prebivalstva. Vzorec je podrobneje razčlenjen v preglednici 1. Delež moških v vzorcu je na primer znašal 50,17 %, kar se ujema z deležem moških v splošni populaciji Prištine. Podobno so bili v vzorec vključeni tudi ustrezni deleži anketirancev glede na stopnjo izobrazbe, od osnovne šole do magisterija ali doktorata.

Prebivalci, stari od 18 do 65 let, zajemajo 68 % vseh prebivalcev Prištine. Posamezniki, mlajši od 18 let, in tisti, stari med 65 in 85 let, so bili izključeni iz vzorca. Pri izobrazbi so bili pri izračunu števila anketirancev v vsakem stratumu upoštevani delovno aktivni prebivalci, stari od 18 do 65 let. Starostna skupina nad 65 let v končni vzorec ni bila vključena zaradi omejenega dostopa do digitalnih tehnologij in majhne zastopanosti na Facebooku (Hallakate, 2020), ki je bil glavna platforma za zbiranje podatkov. Čeprav sta se avtorja zavedala, da se starejši pogosto spopadajo z edinstvenimi ovirami pri dostopu do zelenih površin, je bila njihova izključenost posledica metodološke omejitve, povezane z digitalnim formatom ankete.

Glede na to, da ima Priština skupno 143.683 prebivalcev (Kosovo Agency of Statistics, 2024), je velikost končnega vzorca (tj. 384 anketirancev) v mejah napake 5 %. To je še dopustna meja v družboslovju, ki naj bi znašala od 3 do 7 % (Cochran, 1977).

Anketiranci so bili pridobljeni prek Facebooka, saj se veliko prebivalcev Kosova in izrecno Prištine zadržuje na tej platformi. Ker Facebook uporablja kar 86 % prebivalcev Prištine (Hallakate, 2020), sta bili s spletno anketo zagotovljeni ustrezna dostopnost ankete in reprezentativnost vzorca. Stopnja odzivnosti je bila 85 %, kar pomeni, da je anketo izpolnilo 384 posameznikov.

2.3 Postopek

Anketirancem je bil dostop do vprašalnika omogočen s funkcijo Google Obrazci. Avtorja sta vprašalnik dopolnila s kratko predstavitvijo namena raziskave, navodili za izpolnjevanje in zagotovili glede zaupnosti podatkov. Za spletno anketo sta se odločila zato, ker ima večji doseg, je priročna in učinkovita (prim. Evans in Mathur, 2005). Ker svetovni splet uporablja kar 96 % prebivalcev Kosova (Kosovo ICT Association, 2019), je bila s spletno anketo dosežena ustrezna reprezentativnost pridobljenega vzorca.

2.4 Statistična analiza

Avtorja sta pridobljene podatke analizirala s programskim orodjem IBM SPSS 23.0. Z analizo glavnih komponent sta določila latentne komponente v vprašalniku, pri čemer sta zaradi predpostavljene korelacije med komponentami uporabila poševno rotacijo promax. Z omenjeno analizo sta trditve preoblikovala v komponente, ki so pojasnile največji delež variance. Nato sta z multiplo regresijsko analizo proučila napovednike dobrega počutja in zaznanega vpliva na zdravje, pri čemer sta ugotovila pomembne povezave med dostopnostjo, kakovostjo, opremljenostjo in varnostjo zelenih površin, povezanostjo s skupnostjo ter zaznavanjem dobrega počutja in zdravja. Navedena metodologija zagotavlja dragocene vpoglede v dostopnost, kakovost in vpliv zelenih površin na dobro počutje prebivalcev Prištine. Za pomoč pri izvedbi regresijske analize sta avtorja oblikovala tudi konceptualni model predpostavljenih povezav med posameznimi razsežnostmi zelenih površin (dostopnostjo, kakovostjo, opremljenostjo, varnostjo in povezanostjo s skupnostjo) ter zaznanim dobrim počutjem in zdravjem.

3 Rezultati

Avtorja sta najprej opravila analizo zanesljivosti v programu IBM SPSS 23.0, s katero sta preverila konsistentnost 28 spremenljivk, povezanih z dostopnostjo in razpoložljivostjo, kakovostjo in estetsko privlačnostjo, opremljenostjo in funkcionalnostjo ter varnostjo zelenih površin, povezanostjo s skupnostjo in mnenji anketirancev glede vpliva teh površin na dobro počutje in zdravje. Najprej sta opravila test primernosti vzorca in Bartlettov test sferičnosti. Vrednost Kaiser-Meyer-Olkinovega (KMO) testa je znašala 0,872, kar pomeni, da je bil izbrani vzorec primerne velikosti. Bastič (2006) navaja, da mora biti vrednost testa KMO večja od 0,5, da je vzorec dovolj reprezentativen. Rezultat testa sferičnosti je znašal 4523,891 točke, kar kaže na statistično značilne razsežnosti, ki napovedujejo mnenja anketirancev glede vpliva zelenih površin na dobro počutje in zdravje. Korelacijska matrika je pokazala, da so bile korelacije med večino postavk zmerno do močno pozitivne, kar kaže na dobro konsistentnost spremenljivk, povezanih z dostopnostjo, kakovostjo in opremljenostjo zelenih površin in njihovim vplivom na zdravje. Korelaciji z dvema postavkama – »Na zelenih površinah je urejen dostop do pitne vode ali so v bližini prodajalci, ki ponujajo pijačo.« in »Dostop do zelenih površin povečuje zadovoljstvo z bivalnim okoljem.« – pa sta bili negativni (−0,015 in −0.095), zato sta ju avtorja izločila in s tem izboljšala zanesljivost modela (prim. Field, 2017). Po njuni izločitvi je vrednost Cronbachovega koeficienta alfa za preostalih 26 postavk znašala 0,887, kar potrjuje, da je imela prilagojena lestvica visoko notranjo konsistentnost in se je bolje ujemala z osnovnim konstruktom.

Avtorja sta poleg tega v začetni fazi analize določila lastne vrednosti vsake komponente v podatkovnem nizu. Šest komponent je izpolnjevalo Kaiserjev kriterij lastne vrednosti nad 1 (prim. Field, 2017), skupaj pa so pojasnile 63,93 % celotne variance. Avtorja sta se odločila v analizi obdržati šest komponent zaradi velikosti vzorca ter konvergence grafa drobirja in Kaiserjevega kriterija. Ker se te komponente nanašajo na različne razsežnosti dostopnosti, kakovosti in funkcionalnosti zelenih površin ter njihovega vpliva na dobro počutje, se lahko posamezne postavke v njih prekrivajo ali je med njimi korelacija. Za izboljšanje interpretativnosti komponent sta avtorja uporabila poševno rotacijo (promax) in določila nasičenost postavk s posamezno komponento (preglednica 2).

Nasičenost postavk, ki so sestavljale iste komponente, je morala biti večja od 0,5 (prim. Field, 2017), na podlagi česar sta avtorja določila naslednjih šest komponent:

- komponenta 1: dostopnost in razpoložljivost zelenih površin (sestavlja jo osem postavk, ki se nanašajo na bližino zelenih površin, večje število zelenih površin blizu doma, njihovo velikost in razpoložljivost, njihovo uporabo brez časovnih omejitev, preprost dostop, možnosti javnega prevoza in varne pešpoti brez ovir);
- komponenta 2: kakovost in estetska privlačnost zelenih površin (sestavlja jo osem postavk, ki se nanašajo na vzdrževanje zelenih površin, zelene površine brez odpadkov, skrb za rastline, zagotavljanje vizualno privlačnega okolja, privlačnost krajinske zasnove in ureditve zelenih površin, lepota teh površin kljub različnim letnim časom, zagotavljanje mirnega okolja in pozitiven vpliv na podobo celotnega mesta);
- komponenta 3: opremljenost in funkcionalnost zelenih površin (sestavljajo jo tri postavke, povezane z razpoložljivostjo površin za sedenje, prostorov, namenjenih raznim dejavnostim (npr. otroških in športnih igrišč) in zadostnega števila stranišč);
- komponenta 4: varnost (sestavljena iz dveh postavk, ki se osredotočata na varnost uporabe opreme in ustrezno razsvetljavo);
- komponenta 5: povezanost s skupnostjo in bivalno okolje (sestavljena iz dveh postavk, ki se nanašata na vlogo zelenih površin pri krepitvi družbenih vezi in izboljšanje splošne kakovosti življenja na posameznem območju);
- komponenta 6: zaznavanje vpliva zelenih površin na dobro počutje in zdravje (sestavljajo jo tri postavke, povezane s koristmi zelenih površin za duševno in telesno zdravje, vključno z izboljšanim telesnim zdravjem, razpoloženjem, bistrejšimi mislimi, manjšim stresom in na splošno dobrim počutjem zaradi dostopa do zelenih površin).

Komponente so pogosto zanesljivejša metoda za merjenje kompleksnih pojavov kot posamezna vprašanja. Avtorja sta

Preglednica 2: Nasičenost postavk vprašalnika s komponentami

Postavka	Komponenta					
	1	2	3	4	5	6
Živim dovolj blizu zelenih površin, da jih zlahka dosežem.	,510	–,172	–,422	,144	,369	–,107
V bližini mojega doma je več zelenih površin.	,590	–,247	–,533	,051	,297	–,016
Zelene površine na območju, kjer živim, so dovolj velike, da se na njih lahko zadržuje veliko obiskovalcev.	,590	–,392	–,402	,158	,234	–,084
Menim, da so zelene površine na voljo v različnih delih mesta.	,587	–,262	–,027	–,090	–,282	,337
Zelene površine lahko obiščem kadar koli brez težav, kot je omejen delovni čas ali zaprtje.	,540	–,361	–,317	–,024	–,231	,128
Do zelenih površin lahko pridem zlahka in hitro.	,568	–,377	–,479	–,026	,084	,079
Javni prevoz mi omogoča preprost dostop do zelenih površin.	,562	–,158	,026	–,145	–,278	,473
Do zelenih površin vodijo varne pešpoti brez ovir.	,506	–,404	,024	–,059	–,314	,322
Zelene površine, ki jih obiskujem, so dobro vzdrževane.	,324	–,586	,141	–,066	–,350	–,324
Na zelenih površinah na območju, kjer živim, ni smeti in onesnaževal.	–,329	,544	,067	,035	–,252	–,489
Drevesa in druge rastline na zelenih površinah so videti zdravi in dobro negovani.	–,156	,624	,093	–,046	–,279	–,380
Zelene površine omogočajo vizualno privlačno okolje, ki deluje naravno.	,273	,620	,065	–,481	,008	–,216
Krajinska zasnova in ureditev zelenih površin se mi zdita privlačni.	,377	,503	,060	–,586	,153	–,030
Spremembe, ki so posledica menjave letnih časov, povečajo lepoto zelenih površin.	,431	,507	,024	–,432	,036	–,007
Zelene površine so dovolj mirne in omogočajo pobeg od mestnega hrupa.	,477	,566	,067	–,259	,212	,023
Zdi se mi, da zelene površine pozitivno prispevajo k podobi mesta.	,391	,620	–,192	–,088	,004	,203
Na zelenih površinah je dovolj klopi za vse.	143,	–,243	550,	,425	,181	,206
Na zelenih površinah so območja, namenjena posebnim dejavnostim (npr. otroška in športna igrišča).	,039,	–,191	540	,384	,244	,232
Menim, da je na voljo dovolj stranišč.	,235	–,294	,502	,104	,316	–,027
Pri uporabi objektov ali opreme na zelenih površinah, kot so igrišča ali klopi, se počutim varno.	,106	–,171	,048	,564	,183	–,028
Zelene površine so dovolj osvetljene, da jih lahko obiščem zgodaj zjutraj ali zvečer.	078	–,311	,030	,519,	,133	,045
S preživljanjem časa na zelenih površinah si lahko zbistrim misli in se sprostim.	049	,662	–,069	,198	–,052	,578,
Po obisku zelenih površin se počutim manj pod stresom.	–,077	,642	,040	,299	–,041	,562
Razpoložljivost zelenih površin koristi mojemu duševnemu počutju.	–,009	,411	,016	,448	–,131	,557
Ko se zadržujem na zelenih površinah, se počutim bolj povezanega s svojo skupnostjo.	–,083	,435	,106	,437	,513	–,058
Menim, da zelene površine povečujejo splošno kakovost življenja na območju, kjer živim.	–,141	,490	–,098	,260	,514	,140

Opomba: Metoda ekstrakcije = analiza glavnih komponent; metoda rotacije = promax s Kaiserjevo normalizacijo.

Preglednica 3: Koeficienti linearne regresije

	Nestandardizirani koeficienti		Standardizirani koeficient beta	*t*	Sig.
	B	SD			
(Konstanta)	,997	,193		5,154	,000
Dostopnost in razpoložljivost	–,046	,049	–,042	–0,935	,350
Kakovost in estetska privlačnost	,311	,059	,249	5,245	,000
Opremljenost in funkcionalnost	–,023	,056	–,020	–0,417	,677
Varnost	–,047	,051	–,046	–0,921	,357
Povezanost s skupnostjo	,588	,042	,583	13,917	,000

Opomba: Odvisna spremenljivka = zaznavanje dobrega počutja. Matrika korelacij med postavkami je bralcem na voljo na zahtevo kot dodatno gradivo.

zanesljivost šestih glavnih komponent preverila tako, da sta za vsako izračunala Cronbachov koeficient alfa (vrednosti so bile: 0,828 za komponento 1, 0,793 za komponento 2, 0,692 za komponento 3, 0,694 za komponento 4, 0,691 za komponento 5 in 0,814 za komponento 6). Vrednosti vseh šestih komponent so bile enake ali višje od 0,69, kar naj bi bila po Nunnallyju (1978) spodnja sprejemljiva meja. Na podlagi teh rezultatov sta avtorja z linearno regresijo določila še vpliv prvih petih komponent kot neodvisnih spremenljivk na šesto komponento kot odvisno spremenljivko.

Z multiplo regresijsko analizo sta nato napovedala zaznavanje vpliva na dobro počutje in zdravje kot odvisno spremenljivko. Rezultati regresije so pokazali, da je vrednost R^2 0,485, kar kaže, da preostalih pet komponent pojasnjuje 48,5 % variance zaznavanja vpliva zelenih površin na dobro počutje in zdravje prebivalcev, preostanek variance ($1 - R^2$ ali 51,5 %) pa pojasnjujejo drugi dejavniki, ki niso bili vključeni v regresijski model. Rezultati regresije torej potrjujejo, da omenjenih pet komponent pojasnjuje pomemben delež variance zaznavanja dobrega počutja ($F(5, 357) = 67{,}118$, $p < 0{,}001$, $R^2 = 0{,}48$, $R^2_{adj} = 0{,}47$).

V preglednici 3 so navedeni koeficienti regresije, iz katerih je razvidna statistično značilna pozitivna korelacija med komponentama (tj. kakovostjo in estetsko privlačnostjo ter povezanostjo s skupnostjo) in odvisno spremenljivko (tj. zaznavanjem vpliva na dobro počutje). Dostopnost in razpoložljivost, opremljenost in funkcionalnost ter varnost zelenih površin pa niso pokazale statistično pomembnih korelacij z odvisno spremenljivko v tem modelu.

Na podlagi multiple regresijske analize sta avtorja preverila pet postavljenih hipotez, povezanih z napovedniki zaznanega vpliva mestnih zelenih površin na dobro počutje in zdravje. Hipoteza 2, po kateri kakovost in estetska privlačnost pomembno vplivata na zaznano dobro počutje, je bila potrjena ($p < ,001$), enako tudi hipoteza 5, ki je predvidevala, da je povezanost s skupnostjo pomemben napovednik dobrega počutja ($p < ,001$). Hipoteze 1 (dostopnost in razpoložljivost), 2 (opremljenost in funkcionalnost) in 3 (varnost) pa so bile ovržene, saj niso imele statistično značilne korelacije z odvisno spremenljivko ($p > ,05$). Navedeni izsledki kažejo, da imajo subjektivni in družbeni vidiki zelenih površin v Prištini večji vpliv na dobro počutje prebivalcev kot fizične ali infrastrukturne značilnosti.

4 Razprava

Raziskava prinaša nova spoznanja o tem, kako na zaznano dobro počutje in zdravje prebivalcev Prištine bolj vplivata kakovost in družbena funkcija mestnih zelenih površin kot pa njihova dostopnost ali infrastruktura. Izsledki so pokazali, da kakovost in estetska privlačnost ter povezanost s skupnostjo pomembno napovedujejo zaznano dobro počutje, dostopnost in razpoložljivost, opremljenost in funkcionalnost ter varnost zelenih površin v modelu pa niso pokazale statistično značilnih korelacij. Navedeno kaže, da imajo ljudje v Prištini, kjer je malo zelenih površin in te niso enakomerno razporejene, največ koristi od estetske vrednosti in družabniških izkušenj, ki jih zagotavljajo zelene površine, ne od njihove bližine ali osnovnih storitev.

Kot navajajo Balaj idr. (2022), zelene površine v Prištini niso enakomerno razporejene, rastlinje na njih je različne kakovosti in nimajo infrastrukture, ki bi krepila njihovo funkcionalnost in vključujočo naravo. Navedene strukturne omejitve najverjetneje pojasnjujejo, zakaj se dostopnost, opremljenost in varnost niso izkazale za pomembne napovednike: zaradi omejene izbire in nezadostnih vlaganj v te površine prebivalci verjetno dajejo večjo prednost kakovosti in družbeni vrednosti tistih nekaj zelenih prostorov, ki jih imajo na voljo.

Navedeno se razlikuje od mest, kot sta Sarajevo in Beograd. Čeprav so gozdni parki v Sarajevu zaradi nedostopnosti in oblikovalskih nepravilnosti premalo izkoriščeni, njihova lokacija in velikost prispevata k dobri zaznani kakovosti okolja (Tatlić idr., 2024). Estetsko privlačni parki v Beogradu pa so na primer povezani z manjšim stresom in manjšo uporabo zdravil (Vujčić idr., 2018). Navedeni primerjalni izsledki potrjujejo ugotovitve, predstavljene v tem članku, saj poudarjajo večji vpliv zaznane kakovosti in stikov s skupnostjo, kadar infrastruktura in dostop do zelenih površin nista najboljša. V nasprotju z Ljubljano in drugimi slovenskimi mesti, kjer urejanje zelenih površin temelji na vključujočih načrtovalskih politikah in medsektorskem sodelovanju (Šuklje Erjavec idr., 2022; Kozamernik idr., 2024), Priština na tem področju še vedno nima ustreznih institucionalnih okvirov.

S teoretičnega vidika se izsledki raziskave ujemajo z ugotovitvami drugih raziskovalcev (npr. Cleary idr., 2019; Giannico idr., 2021), ki kažejo, da imajo lahko subjektivne zaznave, zlasti tiste, povezane z naravnostjo in oblikovanostjo zelenih površin in čustveno povezanostjo z njimi, pomembnejši vpliv na dobro počutje kot zgolj fizični vidiki, kot sta velikost in bližina teh površin. V okoljih, kjer je zelenih infrastruktur malo ali so slabo razporejene, pa družbena funkcionalnost in estetika postaneta še pomembnejši (Zhang idr., 2017; Zhan idr., 2022).

V zvezi z urbanistično politiko izsledki raziskave jasno kažejo, da bi morala mestna uprava Prištine dati prednost ekološki in estetski revitalizaciji parkov ter vključiti vključujoče mehanizme urejanja prostora, s čimer bi zagotovila, da zelene površine v mestu izpolnjujejo potrebe skupnosti. Naložbe v krajinsko oblikovanje, biotsko raznovrstnost, površine za sedenje in skupnostne programe lahko veliko bolje prispevajo k dobremu počutju prebivalcev kot preprosta širitev parkovnih površin brez zagotavljanja ustrezne kakovosti. Družbeno vključujoče vsebine v parkih, kot so festivali, izobraževalni dogodki in medgeneracijske dejavnosti, lahko okrepijo povezanost skupnosti.

Z vidika širše družbe raziskava ne nazadnje potrjuje, da zaznano vrednost zelenih površin sooblikujejo njihove fizične značilnosti in družbene izkušnje, ki jih omogočajo. V mestih na prehodu iz socializma v kapitalizem, kot je Priština, lahko usmerjene naložbe v kakovost in družbeno infrastrukturo spodbudijo razvoj bolj zdravih in povezanih skupnosti.

5 Sklep

V članku so predstavljena pomembna spoznanja o vplivu mestnih zelenih površin na zaznano dobro počutje prebivalcev Prištine, pri čemer so kakovost, estetska privlačnost in varnost najpomembnejši napovedniki tega vpliva. Izsledki se ujemajo z ugotovitvami raziskav, opravljenimi v Beogradu in Sarajevu, in poudarjajo nujno potrebo po bolje vzdrževanih in vključujočih zelenih površinah v kosovskem glavnem mestu, ki bi hkrati omogočale in krepile družbene stike. Komponente, kot so dostopnost, opremljenost in varnost zelenih površin, niso bile pomembni napovedniki vpliva na dobro počutje, kar je najverjetneje posledica neenakomerne prostorske razporeditve zelene infrastrukture v Prištini ter slabo razvitih podpornih politik in vključujočih načrtovalskih praks. Članek razširja literaturo s tega področja, saj vključuje večdimenzionalni, v uporabnika usmerjeni okvir, prilagojen postsocialističnemu urbanemu okolju Prištine, s čimer zapolnjuje pomembno vrzel v empiričnih raziskavah.

Z vidika urbanistične politike izsledki raziskave poudarjajo pomen dajanja prednosti ne samo količini, ampak zlasti kakovosti in družbeni funkciji zelenih površin v urbanističnih strategijah. Z naložbami v oblikovalske rešitve, ki krepijo čustveno navezanost, občutek pripadnosti skupnosti in vizualno privlačnost zelenih površin, lahko postanejo mesta kljub omejenemu prostoru in virom prijetnejša za bivanje.

Omejitve raziskave se nanašajo na samoporočanje in uporabo korelacijske analize, ki omejujeta oblikovanje vzročno-posledičnih povezav. Prihodnje raziskave bi morale vključevati longitudinalne in prostorske podatke ter podrobneje proučiti vpliv upravljanja, infrastrukture in kulturnih preferenc na povezavo med zelenimi površinami in dobrim počutjem v urbanih okoljih na prehodu, kot je Priština.

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Netnografija kot metoda proučevanja vzdušja na območjih kulturne dediščine: primer medine v Tlemcenu

Pojem vzdušja, ki ga ustvarjajo območja kulturne dediščine, na novo opredeljuje področje ohranjanja kulture z osredotočanjem na veččutne izkušnje in človeško subjektivnost, s čimer presega statično arhitekturno analizo. Proučevanje tovrstnih nesnovnih razsežnosti, ki temeljijo na čutnih zaznavah, spominu in lokalnih zgodbah, je metodološko še vedno velik izziv. Avtorji so v študiji primera medine v Tlemcenu v Alžiriji z metodo netnografije proučevali povezave med vzdušjem in kolektivnim spominom v zgodovinskih urbanih prostorih. Analiza digitalnih pripovedi, razprav na družbenih omrežjih in vsebin, ki jo ustvarjajo skupnosti, je pokazala, kako se z laičnim znanjem rekonstruirajo dediščinske vrednote, ki so pri tradicionalnih konservatorskih pristopih pogosto zapostavljene. Rezultati raziskave kažejo, da vzdušje, ki ga ustvarja medina, ni samo kulisa, ampak dinamičen arhiv doživetih izkušenj, v katerem se prepletajo vonji, zvoki in teksture ter ustvarjajo kulturno identiteto. Na podlagi izsledkov avtorji namesto prevladujočih institucionalnih pristopov zagovarjajo vključevanje mnenj lokalnih prebivalcev v konservatorske strategije. Z združitvijo digitalne etnografije in čutnega urbanizma predlagajo ponovljiv metodološki okvir za novo zamišljanje dediščine kot žive, vključujoče prakse, pri kateri duh kraja živi skozi skupnostno upravljanje.

Ključne besede: vzdušje, urbana dediščina, netnografija, duh kraja, medina v Tlemcenu, Alžirija

1 Uvod

Po sodobni opredelitvi urbana dediščina presega zgolj materialni vidik ter obsega tako prestižne spomenike in primerke vsakdanje arhitekture kot manj oprijemljive elemente, ki jih po navadi kolektivno imenujemo vzdušje ali duh kraja (UNESCO, 2003). V Quebeški deklaraciji (ICOMOS, 2008) je duh kraja opredeljen kot dialektični proces, ki se hkrati konstruira in rekonstruira ter združuje materialne (grajena okolja in krajine) in nematerialne razsežnosti (ustno izročilo, obrede in obrtne prakse). Prepletanje teh razsežnosti daje dediščinskim območjem simbolni, afektivni in interpretativni pomen.

Vzdušje kot fenomenološki konstrukt izhaja iz prepletanja čutnih zaznav in čustev, za njegovo dojemanje pa je potreben telesni angažma (Flécheux, 2019). Zumthor (2006: 17) je navedeno povzel z naslednjimi besedami: »Vstopim v stavbo, zaznam prostor, začutim vzdušje in v trenutku dojamem, kaj tam biva.« Filozof Gernot Böhme je tovrstno razumevanje nadgradil in vzdušje opredelil kot prostorsko razpršen afekt, ki prežema okolje. S tem uteleša razpršeno neopisljivost – čutno enkratnost, vezano na predmete, situacije, prostore in različna okolja (Böhme, 2014; Griffero, 2014).

Z opisanega izkustvenega vidika živa dediščina zagotavlja privilegiran observatorij za proučevanje čutnih razsežnosti, pri čemer v razvijajočo se dinamiko vključuje grajene objekte in družbene prakse. Njena zgodovinska globina – zmožnost zaznavanja starodavnosti območja brez strokovnega predznanja – spodbuja močno čustveno vez med uporabniki in njihovim okoljem (Albertsen, 2019; Böhme, 2014). Ta čustvena povezava, ki jo oblikujeta individualni in kolektivni spomin, razkriva razhajanje med strokovnjaki in laiki: strokovnjaki s področja varstva kulturne dediščine pogosto dajejo prednost objektivnim merilom (npr. reprezentativnosti in tipičnosti) in poskušajo nevtralizirati čustveno subjektivnost, splošna javnost pa izraža občudovanje, navezanost, nostalgijo ali ogorčenje ter aktivno naseljuje ali brani kraje, na katere je čustveno navezana (Heinich, 2012; Parker idr., 2024). Čustva tako postanejo gonilo nove opredelitve praks na področju varstva dediščine.

Posledica navedenih izzivov je paradigmatska sprememba v konservatorskih pristopih: v nasprotju s konvencionalnimi metodami, ki dajejo prednost formalni avtentičnosti, kar lahko povzroči estetsko homogenizacijo in izbris zgodovinskih sledi (Simonnot, 2012), Brandijev (1963) pristop kritičnega konservatorstva poudarja pomen patine kot površine čutnih zapisov, ki zagotavlja prenos dediščine, ki je hkrati zvest in smiseln. Za uskladitev kontinuitete dediščine in funkcionalne prenove so ključni vključujoči in interdisciplinarni okviri, ki združujejo zgodovinarje, arhitekte, sociologe in lokalne skupnosti okrog skupnih ciljev, ki povezujejo tehnične omejitve, pričakovanja ljudi in estetsko skladnost.

Prenova bolšjega trga v pariškem predelu Saint-Ouen (Milliot, 2016) se je namesto stremljenja k idealizirani podobi osredotočala na ohranjanje enkratnega vzdušja trga, pri čemer so upoštevali pomen patine ob hkratni vključitvi sodobne rabe, s čimer so zgodovinske ostanke lepo uskladili s sodobnimi funkcijami (Belakehal, 2012; Said, 2014). Navedeno je primer prilagodljive obnove, ki združuje kontinuiteto dediščine z inovacijami v skladu z načelom varovanja brez zamrznitve (Simonnot, 2012; UNESCO, 2023).

Primer omenjene prenove kaže, da upravičenost prilagodljive obnove izhaja iz duha kraja, in poudarja, da živost dediščine temelji zlasti na afektivnih vezeh, ki jih posamezniki in skupnosti stkejo z okoljem, pri čemer imata ključno vlogo navezanost in nostalgija.

1.1 Navezanost na kraj

Navezanost na kraj se razvija na podlagi stalnih izkušenj, od osnovnega poznavanja in pasivnega zavedanja kraja do aktivnega sodelovanja pri njegovem ohranjanju, ki vključuje močno uveljavljene oblike povezanosti (Relph, 1976; Altman in Low, 1992; Shamai, 1991; Twigger-Ross in Uzzell, 1996). Izvira iz prepleta spominov, družbenih stikov in kulturnih reprezentacij ter se krepi z vključenostjo v lokalno skupnost in kakovostjo sosedskih odnosov (Lewicka, 2009; Shumaker in Taylor, 1983), pri čemer se identifikacija s skupnostjo krepi s trajanjem bivanja v njej (Twigger-Ross in Uzzell, 1996).

Topofilija (Tuan, 1988) to vez obogati z intimno razsežnostjo, saj osebno zgodovino prepleta s kolektivnim spominom. Deluje na treh soodvisnih ravneh: na 1. čutni ravni, ki vključuje zvoke, vonje in teksture, ki takoj vzbudijo čustveni odziv, 2. kognitivni ravni, ki obsega pripovedi in simbole, ki oblikujejo pomen kraja, in 3. čustveni ravni, ki vključuje občutke varnosti, svetosti in kontinuitete, ki upravičujejo njeno zagovarjanje (Lei idr., 2025).

V jedru te dinamike je nostalgija, ki deluje kot gonilo: krepi občutek avtentičnosti in skupne identitete (Slivar idr., 2024), pri čemer je povezana tako s pozitivnimi čustvi (npr. občudovanje in hvaležnost) kot negativnimi občutki (npr. krivdo in razočaranja), ne glede na izvor obiskovalcev in neodvisno od zaznane avtentičnosti (Prayag in Del Chiappa, 2021).

Na navedene procese vpliva tudi izobrazba: manj izobraženi posamezniki so po navadi bolj navezani na domače okolje, bolje izobražene skupine pa se identificirajo s širšim prostorom,

ne samo z bližnjo okolico (Rollero in De Piccoli, 2010). Jakost vezi s krajem se kaže tudi v izboru besed, s katerimi ga posamezniki opisujejo. Če je vez močna, uporabljajo raznovrstne in pozitivne izraze, če pa je navezanost šibkejša, je izražanje bolj nevtralno ali celo kritično (Stedman, 2002).

Na podlagi navedenih teoretičnih dognanj so avtorji v raziskavi dali prednost metodam zbiranja podatkov, ki omogočajo analizo afektivnih vezi, da bi celovito razumeli, kako vplivajo na uporabniške izkušnje in živo dediščino.

1.2 Opredelitev problema in hipoteza

Na podlagi načel prilagodljive obnove in varovanja brez zamrznitve so se avtorji v raziskavi osredotočili na proučevanje čutne razsežnosti žive dediščine. Druge raziskave (npr. Djedi in Belakehal, 2022; Alves, 2016, in Said, 2012) so pokazale, da je za celovito razumevanje vzdušja, ki ga ustvarjajo območja kulturne dediščine, nujno treba povezati pripovedi, čutne zaznave in vsakdanje prakse ljudi. To vzdušje, ki ga ustvarjajo zvoki, vonji, teksture in osebni spomini, prispeva k oblikovanju pomena kraja in je njegovo bistvo.

Dosedanje raziskave so se večinoma osredotočale na vodene oglede območij in terenska proučevanja tega vzdušja. Said (2012) je na primer ugotovil, da so med vodenimi sprehodi po kairski soseski, obogatenimi s potopisnimi pripovedmi in filmi, prišle do izraza čutne zaznave obiskovalcev. Djedi in Belakehal (2022) sta z enako metodo analizirala vzdušje v kazbi v Alžiru, Karoui in Ben Fraj (2016) pa sta vohalne in slušne vtise v zgodovinski četrti Hara v Tunisu evidentirali na podlagi intervjujev s prebivalci.

Navedene konvencionalne metode imajo omejitve pri obravnavi minljive in subjektivne narave vzdušja: tovrstne bežne izkušnje pogosto niso zajete v formalne popise in standardizirane protokole. Še vedno ostaja vrzel med bogastvom živetih čutnih izkušenj (tj. laičnim znanjem, vtkanim v geste, občutke in zgodbe) in klasičnimi raziskovalnimi orodji, s katerimi je težko zajeti fluidnost duha kraja.

Navedeno odpira osrednje vprašanje raziskave: Kako lahko sistematično zbiramo in združujemo laično znanje (tj. pripovedi, afektivne odzive in prakse), da bi izboljšali ohranjanje in vrednotenje vzdušja, ki ga ustvarjajo območja kulturne dediščine?

Hkrati so na področju proučevanja človekovih izkušenj v prostoru družbena omrežja postala ključno orodje za obravnavo kompleksnosti prostorskih interakcij in ustvarjanje večdimenzionalnih podatkovnih zbirk (Nummi, 2018; Redi idr., 2018). Vsebine, ki jih ustvarjajo uporabniki (npr. spominske pripovedi, čustveni odzivi na kraje in spontane kritike), dajejo dragocen vpogled v družbene prakse in nematerialne vrednote, povezane s prostorom.

V zvezi z vključujočim urbanističnim načrtovanjem je Nummi (2018) ugotovila, da je s kombinacijo participativnih GIS metod in objav na Facebooku mogoče kartirati kolektivne spomine in pričakovanja ljudi, s čimer se razkrijejo simbolične plasti, ki jih s klasičnimi pristopi pogosto ne moremo odkriti. Redi idr. (2018) so na podlagi geografsko označenih fotografij s platforme Flickr in tehnik računalniškega vida kartirali vzdušje v londonskih soseskah, pri čemer so oblikovali izvirno taksonomijo zaznanega vzdušja (npr. umetniško, tradicionalno ali hipstersko). S to metodo so ugotovili, da lahko ikonične vizualne prvine, kot so ulična umetnost v londonski soseski Shoreditch ali fasade viktorijanskih stavb v južnem Kensingtonu, spadajo v isto zaznavno kategorijo, hkrati pa odražajo različno vzdušje, ki ga oblikujejo kolektivne predstave.

Zlasti pronicljiva je raziskava, ki jo je izvedel Wight (2020), v okviru katere je z metodo kritične netnografije analiziral zaznave obiskovalcev treh pomembnih krajev spomina na holokavst (hiše Anne Frank v Amsterdamu, koncentracijskega taborišča Auschwitz-Birkenau na Poljskem in Judovskega muzeja v Berlinu). S foucaultovsko diskurzivno analizo spletnih vsebin je opredelil štiri pripovedne arhetipe: družbeni spomin, čustvene odzive, obveznost in obred ter transgresivno vedenje obiskovalcev. Izpostavil je etične vidike, kot je neprimerno snemanje sebkov, in poudaril potrebo po kritičnem proučevanju potrošniških praks, povezanih s spominskimi obeležji.

Navedeni pristop kaže, da digitalne platforme ne odražajo samo javnega diskurza, ampak so prostor soustvarjanja pomenov dediščine, saj omogočajo raziskovanje in izmenjavo doživetih kulturnih izkušenj (Lian in Xie, 2024). Z razkrivanjem kulturnih prednostnih izbir in afektivnih vrednot obiskovalcev zagotavljajo vpogled brez primere v čustveno dinamiko, povezano z območji kulturne dediščine (Svensson in Maags, 2018).

Vse navedene raziskave potrjujejo, da so družbena omrežja postala živ laboratorij, ki omogoča boljše razumevanje prilaščanja dediščine in nastajajočih kolektivnih občutij. Z mešanimi orodji, kot so semantične analize, računalniški vid in geografsko označevanje, lahko raziskovalci kartirajo vzdušje območij dediščine in skupni spomin nanje (Psomadaki idr., 2018).

Avtorji so raziskavo, predstavljeno v članku, zasnovali na tej podlagi in oblikovali naslednjo hipotezo: digitalne pripovedi na družbenih omrežjih so legitimen in bogat vir za prepoznavanje nematerialnih sestavin dediščine, zlasti vzdušja, ki ga zaznava in doživlja splošna javnost. Avtorji so z netnografijo – kvalitativno analizo spletnih praks, diskurzov in interakcij v raznovrstnih družbenokulturnih kontekstih – proučevali me-

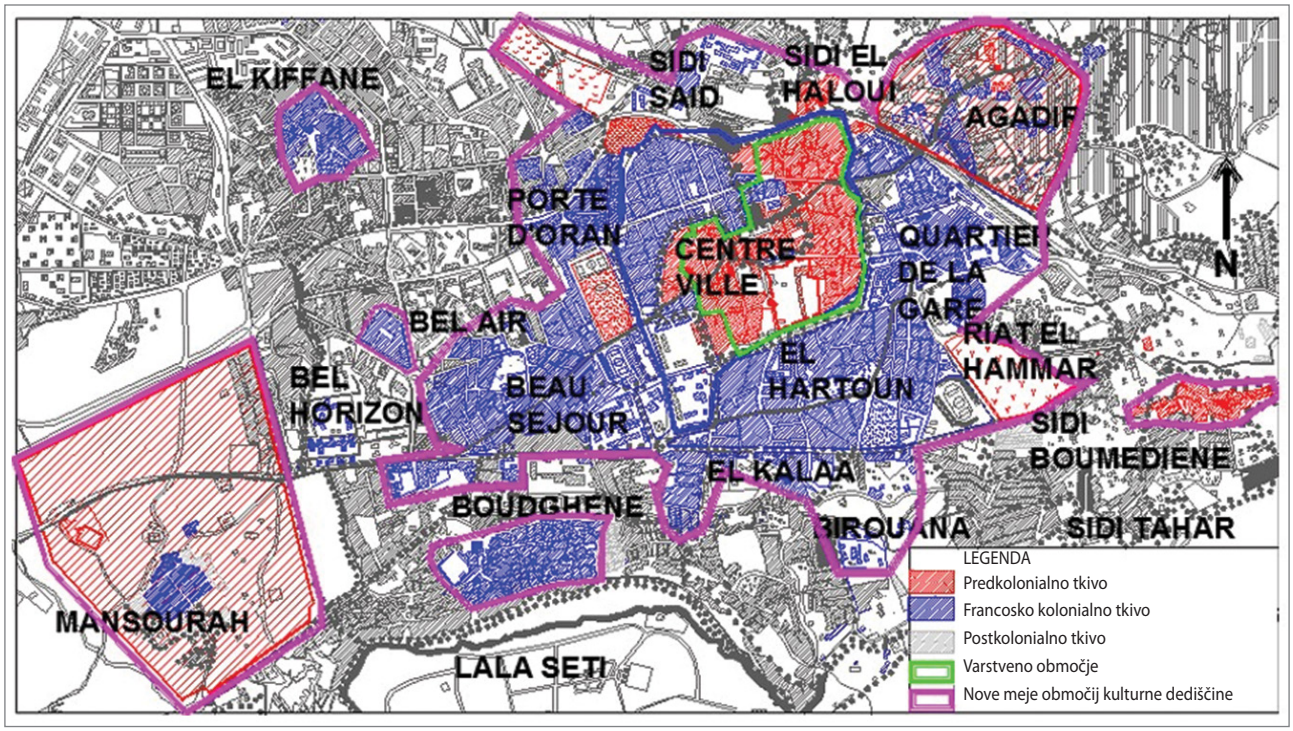
dino v Tlemcenu v Alžiriji, na podlagi česar so oblikovali metodološki okvir za razumevanje tovrstnih občutljivih izrazov, ki se s klasičnimi strokovnimi metodami pogosto ne odkrijejo. Ta okvir jih vključuje v razširjeno razumevanje dediščine, ki temelji na kolektivnem spominu in doživetih izkušnjah.

1.3 Študija primera

Medina v Tlemcenu v severozahodni Alžiriji vsebuje zgodovinske sledi vladarskih dinastij, ki so si na tem območju sledile od antike do srednjega veka. Njeni začetki segajo v čas rimske naselbine Pomaria (ustanovljene leta 201), na mestu katere je bilo pozneje ustanovljeno muslimansko mesto Agadir (670–1078). Leta 1078 so Almoravidi tam ustanovili Tagrart, njegov položaj pa so dodatno utrdili Almohadi, ki so oblast prevzeli leta 1147. Mesto je vrhunec doseglo kot prestolnica osrednjega Magreba pod vladavino dinastije Zajanidov (1236–1517), ko je doživelo izjemen gospodarski razcvet in urbani razvoj (Lagardère, 1988).

Medina je kompleksen urbani prostor, ki ima za prebivalce Tlemcena velik družbeni in identitetni pomen. Morfološko je sestavljena iz zgodovinskega jedra, ki ga obdaja mešana raba prostora. Glavne pešpoti povezujejo ključna središča verske, izobraževalne in trgovske dejavnosti (tj. mošeje, gostišča za trgovske karavane ali *funduki*, tržnice ali *suki*, islamske šole ali *medrese*, sufijska svetišča in koranske šole), stranske pa

Slika 1: Prenova ulic v medini v Tlemcenu, ki so jo izvedli prebivalci (vir: Tourisme Tlemcen, 2019)



Slika 2: Lokacije predkolonialnega, kolonialnega in postkolonialnega mestnega tkiva Tlemcena glede na zavarovano območje medine (vir: Hamma idr., 2016)

peljejo v stanovanjske četrti in slepe ulice (Tahar, 2018). Ta prostorska hierarhija prehaja z javnih območij (gospodarskih in upravnih četrti) na zasebna stanovanjska območja, vmes pa so javni trgi kot prostori druženja, kulturnega izražanja in skupne dediščine.

Leta 2009 je bilo z vladnim odlokom št. 09-403 (fr. *Décret nº 09-403*, JORA, št. 71/2009) staro mestno jedro Tlemcena uradno razglašeno za varstveno območje kulturne dediščine, pri čemer so zaščitili arhitekturne ostanke iz almoravidskega, zajanidskega in osmanskega obdobja ter zamejili območje starodavnega almoravidskega mesta Tagrart (*Décret nº 09-403*, JORA, št. 71/2009). Kot stičišče arabskih, turških in francoskih vplivov je Tlemcen izoblikoval kozmopolitansko identiteto (Ghoumari, 2009), ki se odraža v večplastnem mestnem tkivu in arhitekturnem eklekticizmu. Zaradi mešanja kultur na območju medine ima ta izjemno dediščinsko vrednost, pri čemer mešanica magrebskih, andaluzijskih in turških motivov ustvarja edinstveno grajeno okolje.

Varstveno območje starega mestnega jedra pokriva 51 hektarjev (*Décret nº 09-403*, JORA, št. 71/2009). Nadmorska višina sega od 769 m pri mošeji Bab Zir *Hadid* do 817 m pri starih mestnih vratih Bab el Hadid. Višinska razlika med tema točkama znaša 48 m, razdalja med njima pa je 1.300 m, kar ustreza naklonu 3,6 %. Medina torej leži na nagnjenem terenu, ki se spušča od juga proti severu.

2 Metodologija

2.1 Postopek

Avtorji so v raziskavi uporabili pasivno netnografijo, interpretativno metodologijo, izpeljano iz digitalne etnografije, ki vključuje nevsiljivo proučevanje organskih vsebin (besedil, slik in videov), ki jih ustvarjajo spletne skupnosti. Metoda zagotavlja nevsiljivo zbiranje podatkov in ohranjanje avtentičnosti diskurza (Kozinets, 2015). Z izogibanjem aktivni netnografiji zmanjšamo pristranskost, povezano z družbeno zaželenimi vsebinami, in zagotovimo, da analizirane objave odražajo spontane uporabniške izkušnje z dediščino (Wight, 2020). Z osredotočanjem na digitalne pripovedi premoščamo vrzel med nesnovno dediščino in doživetimi izkušnjami, na podlagi česar lahko ugotovimo, kako se vzdušje na spletu oblikuje in ohranja ter kako ljudje o njem razpravljajo.

Avtorji so se namenoma osredotočili na podatke, ki niso geografsko označeni, saj so se želeli izogniti omejitvam pristopov, ki temeljijo na označenih geografskih lokacijah ali turističnem obisku (Redi idr., 2018; Bassols-Gardella in Coromina, 2022). Spontano posnete fotografije medine v Tlemcenu (rezljana vrata, osenčene ulice in arhitekturni detajli) so bogato gradivo za proučevanje čustvene in simbolne navezanosti na prostor ne glede na lokacijo (Svensson in Maags, 2018; Laaksonen in Varga, 2023).

Ti posnetki delujejo kot orodja za pogovore ob fotografijah (fotoelicitacijo) (Du in Meyer, 2008; Riom idr., 2018), saj pri uporabnikih vzbudijo afektivne in veččutne spomine: samo ena slika notranjega dvorišča lahko vzbudi spomine na dišeč vonj začimb, šumečo vodo ali hlad, ki ga ustvarja senca rastlin, in s tem razkrije skrite občutke (npr. nostalgijo ali čaščenje), ki jih terenske etnografske raziskave pogosto ne morejo odkriti, čeprav vključujejo tudi tipne ali vohalne zaznave (Hammersley in Atkinson, 2007).

Zadnja in hkrati ključna metodološka faza je bila tematska vsebinska analiza, s katero so avtorji sistematično uredili in interpretirali korpus vsebin, zbranih z netnografijo. Metoda, ki jo je utemeljil Bardin (1977) in jo opredelil kot rigorozni postopek za ugotavljanje skritega pomena sporočil ter sledi načelom oblikovanja utemeljene teorije, ki jih je uvedla Kathy Charmaz (2006), združuje metodološko objektivnost in interpretativno globino. S tehniko kodiranja vzdušja in potrjene v raziskavah vzdušja na območjih dediščine (Belakehal in Farhi, 2008; Gamal Said, 2014; Zidelman in Belakehal, 2016), so bile čutne in čustvene izkušnje, ki so se pojavile v spletnem diskurzu, zvesto rekonstruirane v treh ponavljajočih se fazah: 1. predanaliza: opredelitev enot evidentiranja in tematskih kategorij, 2. analiza: zbiranje podatkov (združevanje digitalnih pripovedi), filtriranje (odstranjevanje nepomembne vsebine) in kodiranje (prepoznavanje vzorcev) in 3. sinteza: razvrščanje rezultatov v kategorije, ki odražajo kolektivne zaznave vzdušja.

Opisana metodologija se je ujemala s ciljem raziskave: opredeliti nematerialne vrednote dediščine v skupnostnih pripovedih in posledično zapolniti vrzel med strokovnimi okviri ohranjanja dediščine in doživetimi čutnimi izkušnjami.

2.2 Predanaliza

Pri proučevanju povezave med zaznavami vzdušja in prostorskimi značilnostmi medine so arhitekturne in urbanistične tipologije ključni parametri za ugotavljanje afektivnih odnosov. Na podlagi načrta rabe zemljišč v Tlemcenu (ANAT, 2001) so bili prostori v medini razvrščeni v sedem tipov: 1. objekti z dediščinsko vrednostjo (npr. palača El Mechouar, velika mošeja in mošeja Sidi Belahcen), 2. objekti manjše dediščinske vrednosti (npr. tradicionalne hiše, skupne peči in manjša javna kopališča), 3. objekti brez dediščinske vrednosti (francoski postkolonialni dodatki), 4. urbanistične ureditve (ulice, vključ-

no s slepimi ulicami), 5. urbane javne površine (trgi in tržnice), 6. krajinske ureditve (vrtovi in vodni sistemi) in 7. objekti kulturne dediščine zunaj varstvenega območja.

Avtorji so namenoma uporabili takšno prožno klasifikacijo, saj nekatera območja spadajo v več kategorij. Ta klasifikacija zagotavlja jasen konceptualni okvir za kodiranje digitalnih vsebin in analizo vpliva prostorske konfiguracije na čutne in čustvene pripovedi prebivalcev.

Za operacionalizacijo pojma »vzdušje« v tematski analizi so avtorji uporabili deduktivni pristop s sintezo interdisciplinarnih teoretičnih okvirov. Augoyard (1998) je vzdušje opredelil kot rezultat interakcij med materialnostjo območja (prostorsko zgradbo, premičnimi in nepremičnimi elementi) in njegovo notranjo razsežnostjo (osebnimi občutki in kolektivnimi čustvi). Suzanne Elizabeth Bott (2000) je na tej osnovi predlagala štiri med seboj odvisna področja, ki označujejo duh kraja: fizični okvir (morfologija območja), kulturni okvir (prepričanja in obredi), afektivno področje (čustvena navezanost) in funkcionalno področje (prakse in rabe). Belakehal in Farhi (2008) sta poudarila pomen hkratnega vpliva raznovrstnih dejavnikov, na primer konteksta (podnebja, kulture in družbe), arhitekturnega prostora (ureditve in rabe), čutnega okolja (toplotnih, vohalnih, zvočnih in vidnih dražljajev) ter zaznav in vedenj uporabnikov. Amphoux idr. (1998) so poleg tega izpostavili skupni vpliv grajenega okolja, družbenih praks in ambientalnih dejavnikov na čutno doživljanje območij kulturne dediščine.

Na podlagi navedenega so avtorji oblikovali štiri analitične razsežnosti: 1. materialne dejavnike (grajene oblike, prostorske hierarhije, geometrijo, materiale, opremo in predmete), ki se ujemajo z Augoyardovimi teoretičnimi konstrukti (glej Augoyard, 1998), 2) družbenokulturne dejavnike (prepričanja, ustno izročilo, obrede, obrtniška znanja, osebne pripovedi, spomine in občasne rabe (praznovanja in dogodki)), ki se skladajo s kulturnim in funkcionalnim področjem Suzanne Elizabeth Bott (2000), 3. čutne dejavnike (vizualne, svetlobne, tipne, toplotne, zvočne, vohalne in kinestetične pojave), kot sta jih pri raziskavah vzdušja na medini opredelila Belakehal in Farhi (2008), in 4. kontekstualne dejavnike (podnebje, časovni vidik (letne čase in praznike) in zgodovinski razvoj), ki se ujemajo s kontekstualno razsežnostjo, ki so jo izpostavili Belakehal in Farhi (2008) ter Amphoux idr. (1998).

Navedeni večdimenzionalni okvir omogoča kodiranje besedilnih ali vizualnih podatkov v eno področje ali več področij, s čimer zagotavlja deduktivno in prilagodljivo orodje za tematsko analizo. Z omogočanjem hkratnega kodiranja v več področij (npr. hkratno kodiranje območja kot čutnega in funkcionalnega) zagotavlja metodološko koherentnost, hkrati pa se z njim ohranja interpretativna globina, potrebna za razumevanje vzdušja, ki ga ustvarjajo območja dediščine.

2.3 Analiza

2.3.1 Zbiranje podatkov

Zasebna skupina na Facebooku *S.O.S l'antiquité Tlemcen l'authenticité* (SOS: starine – avtentičnost Tlemcena), v kateri je približno 100.500 članov, je prostor, namenjen razpravam o vseh temah, povezanih s kulturno dediščino medine v Tlemcenu. Združuje trenutne in nekdanje prebivalce mesta ter ljubitelje urbane zgodovine, ki si aktivno izmenjujejo osebne spomine, zgodovinske anekdote in arhivske fotografije ter se poglobljeno pogovarjajo o raznovrstnih temah, od ljudske arhitekture do urbanega razvoja mesta.

Analiza objav v skupini je pokazala precejšnjo jezikovno in slogovno raznovrstnost, ki niha med pogovornim jezikom, poetičnimi izrazi, omembami znanstvenih izsledkov in terminologijo. Navedena diskurzivna raznovrstnost odraža pluralnost lokalnih pogledov in spominov ter zagotavlja plodno podlago za proučevanje dinamike oblikovanja identitete in prenosa znanja o dediščini.

Avtorji so podatke za raziskavo zbirali s pasivnim opazovanjem javno dostopnih objav od maja 2021 do maja 2022. Da bi zagotovili preglednost postopka zbiranja podatkov, so pridobili soglasje administratorja skupine, razkrili svojo identiteto, anonimizirali vse podatke in izločili zasebne vsebine.

2.3.2 Filtriranje podatkov

Zaradi velike količine zbranih surovih podatkov (več kot tristo objav in štiri tisoč komentarjev) je bil nujen temeljit postopek filtriranja. Avtorji so postopek večkrat ponovili, pri čemer so podrobno pregledali vsak vnos, odstranili odvečne in nepomembne vsebine ter obdržali samo tisto gradivo, ki se je neposredno nanašalo na cilje raziskave.

Po filtriranju so avtorji opravili poglobljeno analizo izčiščenega nabora podatkov, ki je vseboval 138 objav in 1.325 komentarjev, da bi dobili odgovore na glavna raziskovalna vprašanja. Izbrane podatkovne vnose so sistematično kodirali, da bi prepoznali vzorce, teme in afektivne odzive, povezane z vzdušjem na medini.

2.3.3 Kodiranje podatkov

Temeljni del analize sta bila kodiranje in razvrščanje podatkov v kategorije, pri čemer so avtorji podatke sistematično uredili v koherentne tematske sklope. Kot navaja Dey (1999, navedeno

Kategorije in kode	Tipologija krajev						
	Stavbe z dediščinsko vrednostjo	Objekti manjše dediščinske vrednosti	Objekti brez prave dediščinske vrednosti	Urbanistična ureditev	Urbane javne površine	Krajinske ureditve	Objekti na obrobju medine
Materialni dejavniki: oblika, zgradba, materiali, prostornina, razporeditev, oprema, predmeti v prostoru itd.							
Družbeno-kulturni dejavniki: prepričanja, mnenja, zgodbe, obredi, spretnosti, osebno ozadje (npr. subjektivni spomini), čustva in vedenje posameznika itd.							
Čutni dejavniki: vidni, svetlobni, tipni, toplotni, zvočni, vohalni, kinestetični itd.							
Funkcionalni dejavniki in običajne formalnosti: redna praznovanja in dogodki ali primarne ali sekundarne dejavnosti							
Kontekst: podnebje, zgodovinsko obdobje, kultura, časovni vidik							

Slika 3: Analitični obrazec za ugotavljanje afektivnega odnosa med posamezniki in kraji (vir: avtorji)

v Saldaña, 2013: 95), s kategorijami pripisujemo pomene, s kodiranjem pa jih izračunavamo.

Avtorji so v raziskavi uporabili metodo predhodnega kodiranja (Miles in Huberman, 1994: 58), pri kateri so med predanalizo vnaprej določili kode in jih uskladili s cilji raziskave. Zaradi nujne prilagodljivosti, ki sta jo izpostavila Miles in Huberman (1994), pa so jih na podlagi novih spoznanj pri obdelavi podatkov sproti izpopolnjevali.

Kodiranje je temeljilo na petih glavnih kategorijah, razdeljenih v 28 kod. Te kategorije so bile navzkrižno povezane s tipologijo krajev (uporabljeni analitični obrazec je prikazan na sliki 3), na podlagi česar so lahko avtorji določili povezave med prostorskimi značilnostmi in prvinami vzdušja (npr. med čutnimi dražljaji in družbenokulturnimi praksami). Tak pristop je omogočil teoretično rekonstrukcijo afektivnega odnosa med posamezniki in prostori kulturne dediščine, ki razkriva, kako materialni in nematerialni dejavniki skupaj oblikujejo vzdušje.

Naslednji primeri ponazarjajo uporabo tematskega kodiranja na reprezentativnem vzorcu komentarjev. Opisne kode (besede ali kratke fraze) povzemajo prevladujočo temo vsakega komentarja, ki je lahko jasna ali prikrita. Na podlagi glavne teme ali podteme je bila vsakemu komentarju dodeljena najustreznejša koda (glej sliko 3). Ta metoda je poenostavila analizo podatkov, saj je omogočila hitro prepoznavanje ključnih tem. V nadaljevanju so navedeni prevedeni komentarji s pripadajočimi kodami.

Primer 1, komentar 81.E: »Živel sem v Derb Sidi Hamedu (ulici na medini) in sem vsak dan prečkal ta trg na poti v gimnazijo. Spomnim se žvrgolenja ptic[1] in sence dreves[2].« Kodi: [1]zvok, [2]svetloba.

Primer 2, komentar 169.F: »Žalostno je videti, kako izginjajo tlakovci[1], ki so mestu umetnosti in zgodovine dajali lep videz[2].« Kodi: [1]materialnost, [2]estetika.

Primer 3, komentar 45.B: »Spominjaš me na čudovite vonjave[1] obar, ki so se kuhale na žerjavici pred vrati na ulici. To je bil čar dobrih sosedov.[2] Žal je to izginilo kot sanje.« Kodi: [1]vonj, [2]družbene vezi.

Primer 4, komentar 74.B: »Znašla se je v rodni ulici, kjer jo je preplavil občutek pripadnosti: svet kruha z vzorci[1], četrt z andaluzijskimi pevci, kjer odmeva zvok tradicionalne lutnje[1], starejši, ki počivajo na pragu in opazujejo vnuke pri igri[2], in skupna peč, ki se še uporablja za svoj namen[3].« Kode: [1]obrtništvo, [2]medgeneracijska povezanost, [3]vsakdanji obredi.

Kot je razvidno iz zgornjih primerov, so nekatere podatkovne enote že same po sebi kompleksne, saj vsebujejo več razsežnosti ali prekrivajoče se teme, ki jih ni mogoče zreducirati na eno samo kodo. Ta kompleksnost je posledica raznovrstnih kontekstov in različnih interpretacij (Saldaña, 2013). Z omogočanjem dodeljevanja več kod uporabljeni pristop zajame bogastvo pripovedi, ki jih ustvarjajo uporabniki, in hkrati ohranja analitično rigoroznost.

3 Rezultati

Rezultati raziskave so pokazali zelo različno dinamiko na medini v Tlemcenu. Tradicionalne soseske, ki jih zaznamuje organsko mestno tkivo (ozke ulice in prostorska hierarhija), so se izkazale za središča družbenih interakcij, saj so bila tema 29 % objav in 25,8 % komentarjev (preglednica 1). Pred kratkim zgrajene urbane javne površine (javni trgi in sodobna infrastruktura) in objekti na obrobju medine pa so slabo zastopani, kar kaže, da se skupnost s temi območji malo ukvarja.

Iz preglednice 1 je razvidna močna povezava med pogostostjo objav in številom komentarjev za štiri prostorske tipe: objekte brez prave dediščinske vrednosti, krajinske ureditve, urbane javne površine in objekte na obrobju medine. Navedeno kaže,

Preglednica 1: Porazdelitev podatkov, analiziranih glede na tipologijo krajev

	Tipologija krajev							
	Stavbe z dediščinsko vrednostjo	Objekti manjše dediščinske vrednosti	Objekti brez prave dediščinske vrednosti	Urbanistične ureditve	Urbane javne površine	Krajinske ureditve	Objekti na obrobju medine	Skupaj
Zbrane in analizirane objave	23 (16,7 %)	20 (14,5 %)	16 (11,6 %)	40 (29,0 %)	23 (16,7 %)	10 (7,2 %)	6 (4,3 %)	138 (100 %)
Kodirani komentarji	153 (11,5 %)	281 (20,2 %)	134 (10,1 %)	342 (25,8 %)	277 (20,9 %)	81 (6,1 %)	57 (4,3 %)	1.325 (100 %)

Vir: avtorji

Preglednica 2: Rezultati tematske analize podatkov

Kategorija	Koda	Število pojavitev	Pogostost kod (v %)	Pogostost kategorije (v %)
Materialni dejavniki	Oblika in prostornina	70	3,90	22,0
	Razporeditev	42	2,40	
	Materiali	37	2,10	
	Oprema, predmeti v prostoru	135	7,60	
	Konstrukcija	29	1,60	
	Prostorski poudarek	79	4,40	
Družbenokulturni dejavniki	Prepričanja in mnenja	34	1,90	26,2
	Zgodbe	246	13,80	
	Obredi in spretnosti	38	2,10	
	Osebno ozadje, npr. subjektivni spomini	78	4,40	
	Pozitivni občutki	66	3,70	
	Negativni občutki	5	0,30	
Čutni dejavniki	Vidne zaznave	103	5,80	16,9
	Svetloba	8	0,40	
	Tipne zaznave	16	0,90	
	Toplota	15	0,80	
	Zvok	29	1,60	
	Vonj	26	1,50	
	Kinestetične zaznave	44	2,50	
	Okus	27	1,50	
	Negativne zaznave	34	1,90	
Funkcionalni dejavniki	Periodična praznovanja	26	1,50	16,2
	Primarne stalne dejavnosti	130	7,30	
	Sekundarne stalne dejavnosti	132	7,40	
Kontekst	Negativni kontekst	25	1,40	18,5
	Časovni vidik	17	1,00	
	Kultura	59	3,30	
	Zgodovinsko obdobje	207	11,60	
	Podnebje	21	1,20	

Vir: avtorji

da večja medijska izpostavljenost kraja sistematično krepi odzive javnosti, kar poudarja ključno vlogo tovrstne izpostavljenosti pri spodbujanju državljanskega udejstvovanja v povezavi z urbano dediščino.

Nekatere kategorije pa odstopajo od tega vzorca. Za objekte manjše dediščinske vrednosti in urbane javne površine je značilna majhna pogostost objav (14,5 % oziroma 7,2 %), hkrati pa ti prostori pritegnejo veliko komentarjev (20,2 % oziroma

6,1 %), kar kaže na stalno odzivnost skupnosti ali polarizirane razprave (npr. razprave o funkcijah tradicionalnih peči). Na stavbe z dediščinsko vrednostjo se nanaša 16,7 % objav in samo 11,45 % komentarjev, kar lahko kaže na bolj formalno ali institucionalno zanimanje kot na pristno čustveno navezanost.

Tematska analiza na podlagi uporabljenega kodirnega okvira (glej preglednico 2) je pokazala zelo neenakomerno porazdelitev zaznav vzdušja na medini, ki jih je mogoče razdeliti v pet konceptualnih kategorij: družbenokulturno (26,2 %), materialno (22 %), kontekstualno (18,5 %), čutno (16,9 %) in funkcionalno (16,2 %). Desetodstotna razlika v pogostosti med najbolj zastopano (družbenokulturno) in najmanj zastopano (funkcionalno) kategorijo nakazuje zmerno uravnoteženo porazdelitev kategorij, pri kateri nobena ne prevladuje. Navedeno potrjuje, da na vzdušje na območjih kulturne dediščine vplivajo raznovrstni dejavniki.

V kategoriji družbenokulturnih dejavnikov (26,2 %) prevladujejo zgodbe, prepričanja in čustva. Najpogostejša koda Zgodbe, povezane s prostorom poudarja simbolni in pripovedni pomen krajev v kolektivnem spominu. Materialni dejavniki (22 %) se osredotočajo na materialno okolje in predmete. Prevladujoča koda Oprema in predmeti odraža vlogo materialnih prvin kot vizualnih podlag za prilaščanje prostora. Kontekstualni dejavniki (18,5 %) obsegajo zgodovinske, podnebne in kulturne vidike. Prevladujoča koda Zgodovinsko obdobje poudarja časovni vidik pri zaznavanju vzdušja. Čutni dejavniki (16,9 %) se nanašajo na veččutne zaznave uporabnikov. Med kodami po pogostosti prevladujejo vidne zaznave, ki jim sledijo slušne, kinestetične in vohalne zaznave. To kaže na izrazito občutljivost uporabnikov za vidne elemente prostora, čeprav na dojemanje vzdušja hkrati vplivajo tudi druge čutne zaznave. Funkcionalni dejavniki (16,2 %) se nanašajo na rabo prostora in dinamiko njegove zasedenosti. Izstopata dve glavni kodi: Primarne stalne dejavnosti in Sekundarne stalne dejavnosti, katerih skoraj enakomerna porazdelitev ponazarja raznovrstnost vsakdanjih praks.

4 Razprava

Pojem navezanosti na kraj je v literaturi opredeljen kot afektivna in identitetna vez med posameznikom in grajenim okoljem (Altman in Low, 1992). Da to drži, so potrdile tudi ugotovitve raziskave, predstavljene v tem članku. Hkrati so pokazale prostorske razlike v navezanosti, ki se izraža različno glede na tip kraja, od institucionalnih spomenikov do vsakdanjih okolij.

Tematska analiza je pokazala uravnoteženo porazdelitev zaznav (materialnih, čutnih in družbenih), kar potrjuje, da vzdušja na območjih kulturne dediščine ni mogoče zreducirati na samo eno razsežnost, ampak nanj vplivajo raznovrstni senzorični in kulturni dejavniki. Zaradi te raznovrstnosti vplivov se področje ohranjanja dediščine razvija v smeri celostnega pristopa, ki poleg arhitekturnih objektov vključuje tudi duh kraja ter tako obsega tudi nematerialne in veččutne razsežnosti.

S povezovanjem tipov krajev z izbranimi tematskimi kategorijami so bili v analizi izpostavljeni trije ključni vidiki, povezani z razširjenim razumevanjem dediščine: 1. afektivni razkorak med objekti z veliko dediščinsko vrednostjo in objekti manjše dediščinske vrednosti, na katerega vplivajo značilnosti lokalnega prostora (npr. gostota družbenih obredov v tradicionalnih soseskah), 2. ponovno vrednotenje urbanega obrobja: obrobna območja in kolonialna dediščina so nosilci žive dediščine, saj povezujejo kolektivni spomin z obrtniškimi znanji in praksami, in 3. metodološki prispevek netnografije, ki zajame mikropripovedi o vzdušju, ki so pogosto izključene iz klasičnih metod raziskovanja dediščine.

4.1 Vloga prostorov manjše dediščinske vrednosti pri ustvarjanju vzdušja

Rezultati raziskave so pokazali izrazit poudarek na prostorih z manjšo dediščinsko vrednostjo (npr. ulice, hiše z notranjim dvoriščem, tradicionalne peči in javna kopališča), ki kljub razmeroma skromni prisotnosti v objavah (14,5 %) pritegnejo nesorazmerno veliko komentarjev (20,2 %). Čeprav so ti prostori v institucionalnih razpravah pogosto zapostavljeni, so središča družabnega življenja, njihov mnemotehnični pomen pa se krepi s pripovedmi in vsakdanjimi praksami.

V povezavi s tradicionalnimi pečmi so uporabniki v komentarjih poudarjali spomine iz otroštva, skupno peko kruha in medgeneracijsko izmenjavo izkušenj in znanj, kar ponazarja, kako vzdušje na območjih kulturne dediščine razširja obseg nesnovne dediščine. Ti kraji se ne dojemajo samo kot materialni artefakti, ampak tudi kot čustveni nosilci, s katerimi se ohranjajo prakse kljub urbanim preobrazbam. Navedeno ponazarjata naslednja etnografska odlomka:

241-B. Izginjajoča tradicija skupne peke kruha v pečeh *etterah* simbolizira izgubljeni senzorični obred. Ob zori so ženske vodile celoten postopek, otroci pa so oblikovali testo v simbolične oblike. Vrhunec je bil zlatorumen hrustljav hlebec, izvlečen iz krušne peči, ki je ustvaril pravi spektakel vonja in otipa, neločljivo povezan z družinskimi vezmi. Danes so te peči le še ostanki preteklosti v ostarelih četrtih Tlemcena.

170-E. Z odstranitvijo železnega paviljona, na katerem je ob nedeljah igral pihalni orkester, ni bil odstranjen samo objekt, ampak tudi zvočno in družabno središče trga.

Izsledki se ujemajo z navedbo Nathalie Heinich (2012, navedeno v Ungan, 2014), da je dediščina manjše vrednosti, čeprav jo institucije redko ustrezno ovrednotijo, poglavitni element žive dediščine, katere vrednost izhaja iz nenehnega obnavljanja spominskih praks. V tem primeru se vzdušje območij kulturne dediščine ne kaže prek meril, ki določajo monumentalno dediščino, ampak v navadnih prostorih, ki nosijo nevidne, a globoke kolektivne spomine.

4.2 Objekti z dediščinsko vrednostjo med institucionalnim simbolizmom in afektivno distanco

V nasprotju s prostori, ki imajo z vidika kulturne dediščine manjšo vrednost, stavbe z veliko dediščinsko vrednostjo, kot je palača El Mechouar, pritegnejo razmeroma malo komentarjev. Neskladje med institucionalno prepoznavnostjo in afektivno angažiranostjo kaže, da tovrstni simbolični kraji, čeprav so osrednjega pomena za formalno dediščino, le stežka spodbujajo pristne stike in odnose v skupnosti.

Ugotovitev se ujema z ugotovitvami Nathalie Heinich (2012, navedeno v Ungan, 2014), ki razlikuje med monumentalno dediščino (povezano s konservatorsko politiko) in živeto dediščino (vpeto v vsakdanje prakse). Čeprav je monumentalna dediščina Tlemcena estetsko cenjena, se zdi delno ločena od čutnih izkušenj in pripovedi prebivalcev, kar poudarja paradoks pri zaznavanju vzdušja območij dediščine.

4.3 Pomen obrobnih območij in dvoumnost pomena kolonialne dediščine

S proučevanjem prostorov zunaj meja varstvenega območja kulturne dediščine so avtorji ugotovili, da se v njih navezanost na kraj ne zmanjšuje, temveč krepi na kognitivni in prostorski ravni (prim. Lewicka, 2011). Kot družbenogospodarska vozlišča in zbiralniki obrtniških znanj ti prostori delujejo kot ključni označevalci identitete in s tem razširjajo razumevaje pojma dediščine prek formalnih meja. V skladu s to ugotovitvijo bi bilo treba ponovno razmisliti o okvirih ohranjanja dediščine in o tem, kako se lahko ta živa območja vključijo v celostno politiko kulturne dediščine.

Kolonialne stavbe poleg tega ponazarjajo inherentno kompleksnost navezanosti: njihova hibridna estetika vzbuja mnemotehnično ambivalenco, ki izvira tako iz zgodovinske vrednosti kot odstopanj, ki so jih povzročile posamezne razlastitve. Čeprav se zaradi njihove izključenosti iz uradnih okvirov drobi mestni kulturni ekosistem, bi se lahko z njihovo ponovno vključitvijo ustvaril urbani palimpsest, v katerem bi kolonialna preteklost in sedanjost sobivali v večplastni kontinuiteti.

4.4 Netnografija kot orodje za dostop do kolektivnega spomina in zaznav vzdušja

Netnografska analiza je omogočila poglobljeno proučevanje spletnih zaznav lokalnih skupnosti, pri čemer je pokazala zlasti veliko in raznovrstno množino mikropripovedi, povezanih s prostori manjše dediščinske vrednosti, kot so ozke ulice, skupne peči in javna kopališča, ki so v klasičnih raziskavah pogosto zapostavljeni. Sistematična analiza objav in komentarjev omogoča rekonstrukcijo spominov, čustev in vsakdanjih praks, ki jih niti vprašalniki niti formalni intervjuji ne morejo v celoti zajeti. Tovrstni nefiltrirani vpogled v živete izkušnje potrjuje osrednjo vlogo teh prostorov v kolektivnem spominu in poudarja pomen čutnih in afektivnih razsežnosti pri oblikovanju duha kraja.

Spletni diskurzi hkrati razkrivajo precejšnje razlike v pogledih glede dediščinjenja kolonialnih objektov, ki se dojemajo bodisi kot vsiljeni arhitekturni vložki bodisi kot nosilci skupnega spomina. Ta paradoks, ki ostaja spregledan v institucionalnih arhivih, se jasno pokaže v digitalnih pripovedih ter ponazarja postkolonialne ambivalence in semantična nasprotja, ki oblikujejo urbano krajino. Z osredotočanjem na mnenja prebivalcev netnografija razkriva tovrstna neskladja pri razumevanju dediščine in raziskovalcem nudi orodja za ugotavljanje razlik v pogledih, ki jih s formalnimi metodologijami ni mogoče odkriti.

Vključevanje takih podatkov v delo na področju ohranjanja dediščine znanstvenikom in izvajalcem omogoča, da sooblikujejo konservatorske strategije, ki so usklajene z dejanskim vzdušjem prostorov. Poleg kulturnih spomenikov lahko zdaj upoštevajo tudi vsakdanje prakse in kolektivna čustva ter s tem razumevanje dediščine razširijo v smeri paradigme žive dediščine, ki se osredotoča na izkušnje uporabnikov. Tak vključujoči pristop, ki temelji na neposrednem sodelovanju skupnosti, spodbuja projekte, ki spoštujejo duh kraja ter krepijo vez med preteklostjo in sedanjostjo.

Za izboljšanje navedenega pristopa je nazadnje ključno upoštevati tudi medgeneracijski vidik. Pričakovanja mlajših generacij glede dediščine in načini njihove interakcije, na katere vplivajo digitalne in kulturne prakse, se lahko močno razlikujejo od pričakovanj in načinov interakcije starejših. Z vključevanjem raziskovalcev, umetnikov in prebivalcev v oblikovanje pripovedi o dediščini se lahko razkrijejo novi vidiki navezanosti na kraj in nenehno bogati pripovedovanje urbanih zgodb.

5 Sklep

Avtorji so v raziskavi predstavili potencial netnografije kot ključne metode za proučevanje nematerialne dinamike urbane dediščine. Čeprav je omejena na en kvalitativni pristop, razkriva, kako spletne interakcije kot odraz vsakdanjih praks in kolektivnih spominov prispevajo k oblikovanju žive dediščine. Čeprav se je raziskava osredotočala na medino v Tlemcenu, je izpostavila prenosljive mehanizme, ki jih je mogoče uporabiti tudi v drugih zgodovinskih mestih, kjer obrobni prostori in ambivalentna dediščina (npr. kolonializma) ostajajo slabo raziskani, čeprav imajo pomembno vlogo pri oblikovanju lokalne identitete.

V prihodnjih raziskavah bi bilo treba te izsledke združiti z računalniško podprtimi metodami (npr. avtomatizirano analizo ikonografskih korpusov), s katerimi bi lahko sistematično analizirali čutne razsežnosti. Poleg tega bi lahko s pristopom mešanih metod (kombinacijo terenskih raziskav in analizo družbenih omrežij) triangulirali podatke, s čimer bi povečali zanesljivost razlag in upoštevali tudi mnenja posameznikov, ki so pogosto izključena (npr. starejših brez dostopa do spleta, predstavnikov manjšin ali mladih, ki ne kažejo navezanosti na kraj).

Na konceptualni ravni avtorji raziskave pozivajo k novemu zamišljanju dediščine kot živemu ekosistemu, ki se s preigravanjem med zgodovinskimi plastmi, prostorsko materialnostjo in sodobnimi prilagoditvami nenehno spreminja. Skupne krušne peči ali vzkliki uličnih prodajalcev niso samo lokalne zanimivosti, ampak ključni akterji dediščine, pri čemer povsem navadni, vsakdanji pojavi pridobivajo simbolni pomen s ponavljanjem in deljenjem.

Na podlagi navedenih izsledkov avtorji zagovarjajo prilagodljivo upravljanje, pri katerem načrtovalci in prebivalci skupaj oblikujejo konservatorska orodja, ki vključujejo tako (materialne) objekte kot (nematerialne) prakse. S takim pristopom, ki temelji na dialogu in eksperimentiranju, je mogoče uskladiti ukrepe s področja ohranjanja dediščine z živim mestnim utripom ter tako dediščino preoblikovati iz muzejskega eksponata v kolektivni, odporni proces.

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Špela KRYŽANOWSKI

ARCH-E projekt: Pogled na evropsko krajino arhitekturnih natečajev

Uvod

(ARCH-E, 2025)

ARCH-E je projekt o arhitekturnih natečajih, sofinancira pa ga Evropska unija v okviru programa Ustvarjalna Evropa (CREA). Začel se je februarja 2023 in bo trajal tri leta. V projekt je skupaj z Zbornico za arhitekturo in prostor Slovenije vključenih deset evropskih partnerskih organizacij (Avstrijska zvezna zbornica arhitektov in inženirjev (BKZT), Svet arhitektov Evrope (ACE), Hrvaška zbornica arhitektov (CCA), Zbornica za arhitekturo in prostor Slovenije (ZAPS), Združenje arhitektov Cipra (CAA), Zvezna zbornica nemških arhitektov (BAK), Tehniška univerza v Eindhovnu (TU/e), Politehnična univerza v Valencii (UPV), Sepa Engineering (SEPA) in Zbornica madžarskih arhitektov (MÉK)) in pet sodelujočih partnerjev (Češka zbornica arhitektov (ČKA), Francoska nacionalna zbornica arhitektov (CNOA), Zbornica arhitektov province Bolzano, Švicarsko združenje inženirjev in arhitektov (SIA) in Mednarodna zveza arhitektov (UIA)). ARCH-E prepoznava ključno vlogo arhitekturnih natečajev (angleško *Architectural Design Competitions*) pri ustvarjanju varnega, pravičnega, trajnostnega, vključujočega in estetsko dovršenega grajenega okolja. Glavni cilj je spodbujati visokokakovostne arhitekturne rešitve s povečevanjem uporabe arhitekturnih natečajev v Evropi.

Slika 1: Srečanje konzorcija ARCH-E na ZAPS v Ljubljani leta 2023 (fotografija: ZAPS)

Za dosego tega cilja so razvili več strategij. ARCH-E želi okrepiti čezmejno sodelovanje med strokovnjaki s področja arhitekture z uporabo platforme in mreže ARCH-E, storitev in digitalnih rešitev. Cilj je povečati ozaveščenost in omogočiti izmenjavo znanja in izkušenj med deležniki, arhitekti, odločevalci in naročniki natečajev, s čimer bi spodbudili nove načine razmišljanja in dolgoročne strategije inovacij ter ustvarili transnacionalno kulturo natečajev s kroženjem in izmenjavo idej.

Natečajni postopki so določeni z nacionalnimi zakonodajami in tradicijami, zaradi česar je mednarodna udeležba natečajnikov zelo majhna. Pomanjkanje informacij izključuje številne arhitekte s čezmejnega trga in krni konkurenco. Posebej prizadeta so mikro in mala podjetja, v katerih je nadpovprečen delež žensk in mladih, kar negativno vpliva na njihove kariere. S spodbujanjem natečajev bo mogoče bolje uresničevati Davoško deklaracijo za kulturo grajenega prostora (Baukultur) in pobudo Novi evropski Bauhaus v vsakdanji evropski praksi načrtovanja in gradnje ter prispevati k podnebnim ciljem in boljši kakovosti grajenega okolja.

Nova spletna platforma ARCH-E (https://arch-e.eu) zagotavlja širok nabor informacij o natečajnih sistemih (s posebnim poudarkom na načelih

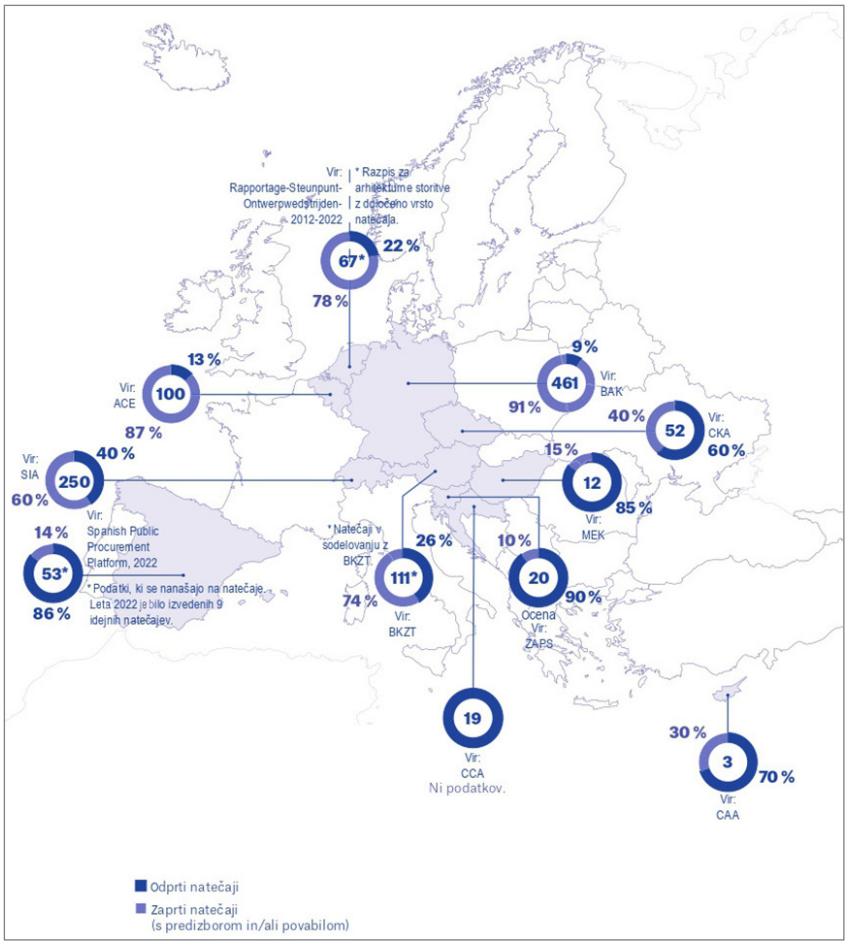
Baukultur in New Bauhaus) in olajšuje čezmejno sodelovanje. Ključni element je mreža več kot 500 arhitektov iz več kot 20 držav, iz katere se lahko hitro oblikujejo mednarodne delovne skupine – kar je še posebej pomembno za ženske in mlade strokovnjake in strokovnjakinje z manj mednarodnimi stiki. Konzorcij ARCH-E doseže več kot 560.000 arhitektov po Evropi, ki imajo koristi od rezultatov projekta.

Glavni rezultati projekta so: zemljevid ARCH-E, ki predstavlja primerjalni opis nacionalnih natečajnih sistemov, glosar ARCH-E, večjezični slovar strokovnih izrazov in Poročilo o potrebah arhitektov ARCH-E. Spletna stran vključuje tudi orodje za SWOT analizo. Končni rezultat bo tudi bela knjiga, namenjena obveščanju odločevalcev in podajanju priporočil za internacionalizacijo arhitekturne stroke, enako obravnavo in doseganje ciljev iz evropskega zelenega dogovora.

Zemljevid ARCH-E

(Bekkering idr., 2025)

Zemljevid ARCH-E daje arhitektom in drugim strokovnjakom smernice, kje najti portale za oddajo javnih naročil, informacije o nacionalnih predpisih, arhitekturnih zbornicah in drugih virih, ki pomagajo pri orientaciji v mednarodnem natečajnem okolju. Projekt ARCH-E še vedno poteka in vključuje partnerje in sorodne projekte po vsej Evropi. Zato se zemljevid ARCH-E širi in sčasoma bo vključeval še več informacij. Zdaj je že na voljo v formatu PDF in tiskani obliki v angleščini (https://www.arch-e.eu/maps-on-adcs) in v jezikih partnerjev (slovenska različica je dostopna na spletnem naslovu: https://www.arch-e.eu/files/maps-on-adcs/ARCH-E_MapOnADCs_SL_web_v1.pdf). Vsebuje štiri poglavja: Zemljevidi evropskih natečajev, Pet parametrov za evropsko razpravo o natečajih, Dobre prakse v evropskih natečajih in Zaključek.



Slika 2: Zemljevid povprečnega števila in vrst natečajev na leto v izbranih državah članicah EU (slika: ARCH-E)

Prvo poglavje predstavlja pregled evropskega okolja natečajev. Obsega dva glavna dela: 1) grafični prikaz nacionalnih podatkov o natečajih in arhitekturnem poklicu v primerjalnih zemljevidih in 2) enajst profilov držav z opisom in infografičnim prikazom njihovih nacionalnih natečajnih sistemov. Drugo poglavje se osredotoča na evropsko razsežnost natečajev. Strukturirano je na podlagi petih parametrov (predpisi, dostopnost, kakovost, preglednost in koristi zainteresiranih strani) ter izpostavlja izzive in priložnosti za trg arhitekturnih storitev EU. Na podlagi izkušenj in izjav udeležencev intervjujev to poglavje spodbuja razmišljanje in razpravo, pri čemer poudarja subjektivno kakovost udeležbe, izvajanja in rezultatov natečajev. Tretje poglavje je zbirka izbranih nacionalnih primerov, ki predstavljajo uspešno prakso pri organizaciji in izvajanju natečajev. Pomembno je poudariti, da se uspešna praksa vedno nanaša na specifične pogoje in jo je treba razumeti relativno. Iz tega razloga so primeri v tem poglavju predlagani kot »dobre« prakse, namesto »najboljših« praks v absolutnem smislu. Poudarek primerov, predstavljenih v tretjem poglavju, je, kako izbrani natečajni postopek obravnava dani izziv in je pozitivno povezan z enim ali več izmed navedenih petih parametrov (predpisi, dostopnost, kakovost, preglednost in koristi za zainteresirane strani). Kakovost izbranih primerov se ne kaže v arhitekturnem rezultatu, temveč v natečajnem procesu. Zaključek pa povzema spoznanja, pridobljena iz prvega leta izkušenj in raziskovalnih dejavnosti projekta ARCH-E, v njem so tudi navedeni predlogi za prihodnje izvajanje in širitev študije o natečajih.

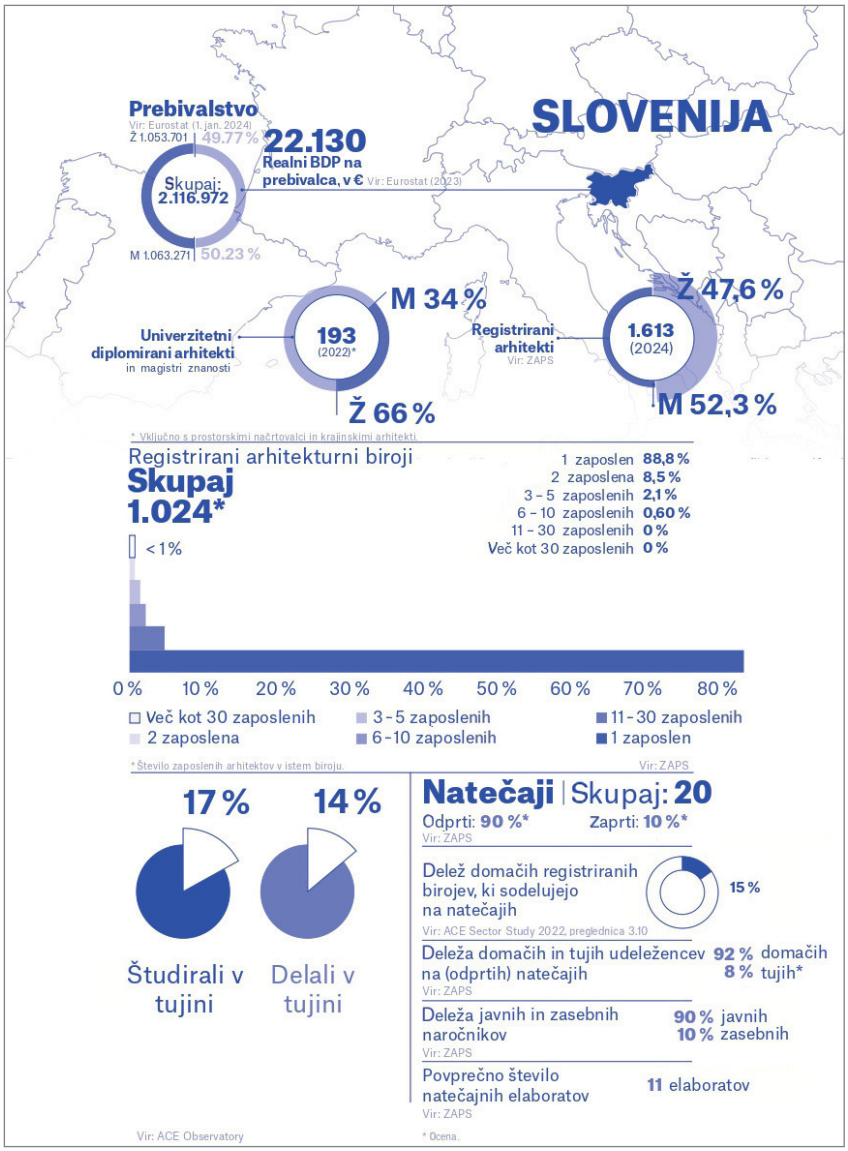
Natečajni zemljevid ARCH-E uči, da so lokalni natečajni sistemi specifični za posamezne države, kar izraža raznovrstnost evropske arhitekturne dediščine. V prizadevanju za izmenjavo znanja in izkušenj je pomembno, da se te razlike prevedejo v priložnosti za učenje. Manjka tudi dolgoročna strategija za zbiranje in izmenjavo podatkov o natečajih. Projekt ARCH-E s svojimi raziskovalnimi pobudami obravnava težave, povezane z izmenjavo znanja in izkušenj, s katerimi se srečujejo evropski arhitekti, njihove zbornice in strokovna združenja.

Glosar ARCH-E
(ARCH-E, 2025)

Slovar vsebuje 190 strokovnih izrazov, ki so jih prispevali strokovnjaki iz 11 držav, s poudarkom na izvirnih opredelitvah lokalne prakse – ne le prevodih. Izrazi pojasnjujejo regionalne značilnosti natečajne kulture. Ker jezikovne mutacije niso zgolj prevodi, temveč izvirni opisi lokalne prakse na obravnavanih področjih, je mogoče izraze primerjati med seboj ter proučiti podobnosti in razlike. Ta kompendij trenutno vsebuje približno 1.000 definicij. Funkcija za komentarje uporabnike vabi, da predlagajo spremembe definicij in praktičnih poročil, kar omogoča nenehno rast slovarja ARCH-E. ARCH-E je večplasten projekt, končal pa se bo leta 2026. Ker se projekt - njegove študije, sodelovanje med vključenimi partnerji, prenos znanja s partnerskimi organizacijami za sodelovanje in projekti - razvija, se spletna orodja nenehno izpopolnjujejo. Iz tega razloga je slovar ARCH-E delo v teku.

Poročilo o potrebah arhitektov ARCH-E
(Alvarez Isidro idr., 2025)

Poročilo o potrebah arhitektov se osredotoča na strukturirano analizo vključenosti arhitektov v mednarodne natečaje in opredelitev izzivov, motivov in potencialnih področij za izboljšave



Slika 3: Slovenski natečaji v številkah (slika: ARCH-E)

zdajšnjega okvira. Za dosego cilja je bila izvedena obsežna večjezična anketa med arhitekti in drugimi zainteresiranimi stranmi. Anketa je dosegla 1.290 anketirancev iz več kot 20 držav. Glavna vprašanja, obravnavana v anketi, so bila: interes arhitektov za mednarodne natečaje, vrzeli v znanju in spretnostih ter ovire, s katerimi se srečujejo, raven mednarodnega mreženja natečajnikov in kako lahko projekt ARCH-E podpira njihovo poklicno rast in razvoj. Primarni cilj ankete je bil izpostaviti izzive, s katerimi se arhitekti srečujejo pri sodelovanju na natečajih v tujih državah. Ugotovitve se bodo uporabile kot podlaga za razvoj ciljno usmerjenih priporočil za zbornice in združenja arhitektov, ki bodo arhitektom pomagala zagotoviti boljšo podporo v čezmejnem sodelovanju. Spoznanja prispevajo k širšemu razumevanju arhitekturnih natečajev po vsej Evropi, pri čemer izpostavljajo ključne trende, izzive in priložnosti za izboljšave.

Rezultati kažejo, da regulativni izzivi, kot so zapletene birokratske zahteve in po državah specifični predpisi, ovirajo mednarodno udeležbo na natečajih. 10 % anketirancev je kot oviro navedlo nepoznavanje tuje zakonodaje, 6,6 % pa

jih je poročalo, da ne morejo izpolniti zahtev glede finančnega prometa. Kar zadeva dostopnost, je na mednarodnih natečajih sodelovalo le 25 % anketirancev, v primerjavi z 69 % na domačih natečajih. Finančne omejitve (12,5 %), jezikovne ovire (11,3 %) in zaznana nizka stopnja uspešnosti (9,8 %) so bili glavni dejavniki, ki so morebitne zainteresirane odvračali od sodelovanja na natečaju. Čeprav anketiranci menijo, da to ni razlog za skrb, je realnost, da je na mednarodnih natečajih sodelovalo le 18 % arhitektk, v primerjavi s 27 % moških. Moški so tudi dvakrat pogosteje prejeli neposredna povabila za sodelovanje na natečajih (22 % v primerjavi z 11 %). Gospodarske koristi od natečajev so bile omejene. 71 % podjetij je poročalo, da od mednarodnih natečajev niso ustvarila nobenega prihodka, le 2 % podjetij pa sta iz takih natečajev ustvarila več kot 60 % svojih prihodkov. Mnogi arhitekti so menili, da natečajni postopki izbire dajejo prednost uveljavljenim podjetjem. Ključno vlogo pri zagotavljanju informacij o natečajih so imele nacionalne zbornice arhitektov, vendar je bil Svet arhitektov Evrope (ACE) zaznan kot manj vpliven. Natečaji, ki jih izvajajo zasebniki, so bili zaznani kot bolj prilagodljivi in inovativni, vendar so vzbujali pomisleke glede preglednosti in zanesljivosti. Natečaji javnih naročnikov so bili, čeprav strukturirani, pogosto birokratsko togi. Zmaga na natečaju ni vedno zagotavljala pogodbe za izdelavo projektne dokumentacije. Le 35 % zmagovalk (od 18 %, ki so sodelovale v mednarodnem natečaju) in 34 % zmagovalcev (od 17 %, ki so sodelovali v mednarodnem natečaju) je prejelo naročilo, kar poudarja potrebo po reformah. Pri tem ko je 40 % (od približno 35 % udeležencev v mednarodnih natečajih) sodelovalo z lokalnimi biroji v fazi priprave natečajne rešitve, jih je med gradnjo sodelovalo le 31 %, kar kaže na izzive pri ohranjanju partnerstev. 31,1 % anketirancev ni videlo potrebe po nadaljnjem izobraževanju, 30 % jih je menilo, da je usposabljanje zelo koristno, 10,2 % pa jih je menilo, da je absolutno nujno. Jezikovne kompetence in poznavanje prava so bili med najpomembnejšimi vrzelmi. Švicarski in avstrijski natečaji so bili pohvaljeni zaradi svoje preglednosti in učinkovitosti.

Zaključek

(Bekkering idr., 2025)

Raziskovalna dejavnost, izvedena v okviru projekta ARCH-E o natečajih, naj se razume kot projekt, ki še poteka, ne kot zaključen projekt. Trenutno zajema države članice partnerjev in pridruženih partnerjev projekta ARCH-E. Vendar je za to, da se ustvari celovita podoba evropskih natečajev, ključno razširiti raziskavo na širši nabor držav in njihovih natečajnih sistemov. To bi omogočilo tudi, da se razkrijejo nove priložnosti za čezmejno sodelovanje in udeležbo. Poleg tega sta razširitev vrst zbranih podatkov in vključitev širšega kroga zainteresiranih deležnikov v proces zagotavljanja podatkov ključni področji za nadaljnje raziskovanje. Ta pregled trenutnih rezultatov projekta je zgolj predhoden pogled na evropske natečaje, pri čemer poudarja priložnosti in izzive arhitektov na trgu EU. Vendar bi se morale prihodnje raziskave osredotočiti predvsem na vlogo akterjev s praktičnega vidika, s poudarkom na izvajanju konkretnih ukrepov na podlagi pilotnih projektov in skupnih dejavnosti. V zvezi s tem so platforma ARCH-E in njena digitalna orodja (glosar, spletni zemljevid natečajev in mreža) dragoceni viri za lažjo širitev raziskav.

Skratka, pobude in rezultati raziskav projekta ARCH-E poudarjajo prednosti čezmejnega sodelovanja pri obravnavi kompleksnosti arhitekturnih natečajev v Evropi. Vključevanje zainteresiranih strani in strokovnjakov iz arhitekturne stroke (vključno s predstavniki zbornic, strokovnjaki za politiko, oblikovalci, vodji projektov, naročniki in akademiki) poudarja, da celovito razumevanje večplastne narave natečajev zahteva trajno sodelovanje, izmenjavo in dialog. Zato je ključno razširiti mrežo zainteresiranih strani in spodbujati eksperimentalne metode sodelovanja, da bi izzvali tradicionalne modele natečajev in spodbujali inovacije. S priznanjem ključne vloge natečajev pri doseganju arhitekturne odličnosti projekt ARCH-E odpira prostor za predano razpravo o natečajih in vabi nove udeležence v stalni dialog o proaktivnem izboljšanju evropskega življenjskega okolja.

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Architecture as a determinant in shaping the identity of a city: A case study of Almaty

This article identifies the determinants contributing to the configuration of a city's identity. It presents the outcomes of a study on modes of expressing identity, exemplified through the case of Almaty, Kazakhstan's largest urban conurbation. Based on a public opinion analysis, a set of factors is identified that contributes to shaping Almaty's city identity. The findings indicate that modern architecture is important for preserving and expressing the identity of the city and region, which, in turn, is a source of investment and tourism interest in a particular area. Globalization, more than ever before, accentuates the challenge of searching for and preserving the identity of cities and regions. The importance of studying identity problems lies in the fact that the findings can be used to develop strategies for sociocultural and economic transformations of a city.

Keywords: modern architecture, city identity, factors shaping identity, regional architecture, Almaty

1 Introduction

Architecture serves as a powerful lens that facilitates understanding the identity and essence of a city. Beyond its practical functions, architecture encompasses the historical, cultural, and social narratives of a place, often becoming a visual reflection of its evolution (Sardak et al., 2021). Cities are defined not only by their inhabitants and geographical boundaries, but also by their architectural forms, which reflect collective values, aspirations, and memory. This connection is especially noticeable in cities such as Almaty, where the architectural landscape has been transformed under the influence of various cultural eras, sociopolitical changes, and urban development strategies (Nocca, 2017).

In today's globalized world, the formation of city identities has gained significant relevance (Bell & De-Shalit, 2011). The identity of a city is a specific form of territorial identity associated with the dominance of certain factors that give rise to associations with a particular territory for city residents or tourists. These factors include nature and landscape (e.g., Venice as "the city of canals", Ulan-Bator as "the world's coldest capital"); architecture and cultural symbols (e.g., Paris and the Eiffel Tower, New York and Manhattan's skyscrapers, Barcelona and Sagrada Família Church); and functional specialization (e.g., Milan as "the fashion capital", Cambridge as "the university").

The issue of identity is an unchanging companion to pivotal moments in history, particularly during periods of shifting social structures. In such complex periods, a need for self-identification arises among individuals and communities, encompassing various forms of identity such as ethnic, social, professional, religious, and territorial (Beyers, 2016). Interest in the study of territorial identity, which includes the identity of a city, is driven by historical processes of state integration into global networks.

In the early 1990s, as a result of the disintegration of the Soviet Union, the post-Soviet republics, including Kazakhstan, underwent a challenging process of forging their own identities (Bahga & Raheja, 2018). These identities, distinct from the overarching Soviet identity, began to reflect the features of local history and culture in these newly independent states. This process involved a re-evaluation of the cultural and value dominants within society, and it left its mark not only in architecture but also in the urban environment (Sarttarova et al., 2014). This transformation was not a complete break from the Soviet past. It drew upon the rich experience of Soviet architecture and engaged in a dialogue with other cultures to construct new elements of regional architecture (Jahn Kassim et al., 2018). Over the past three decades of independence, through the construction of a new capital city in Astana and the revitalization of other urban areas, a fresh identity has taken shape for Kazakhstan.

As the largest city in Kazakhstan, Almaty embodies a rich tapestry of architectural styles, combining Soviet-era buildings, modern high-rise buildings, and buildings that celebrate local traditions. This eclectic architectural character distinguishes Almaty from other Central Asian cities and serves as a prominent marker of its identity. Studying the architecture of Almaty opens a unique look at how the historical changes of the city from a Silk Road outlet and a Soviet centre and to a bright modern metropolis are reflected in its physical space. The contemporary international image of Kazakhstan is primarily visualized through the perception of its architecture, which embodies a synthesis of artistic representations from both local and global cultures. It is this balance between the universal principles of architecture and local characteristics that have become the foundation of modern regional architecture in Kazakhstan. Regional architecture is a comprehensive concept that pertains to the formation and development of the material and spatial environment of a specific territory. It encompasses not only the design and construction of buildings, structures, and urban environments, but also considers local traditions, culture, and historical context.

The notion of city identity is a crucial element in creating the uniqueness of a city and its place in the world. It can serve as a unifying factor for the urban community around shared values, customs, and traditions. To achieve this, addressing the city's common issues requires the involvement of a wide range of stakeholders, including citizens, urban planners, and authorities (Alzemeneva & Mamaeva, 2021). One form of expression of this identity is architecture, which not only shapes the living environment of people but also transmits the material aspects of regional culture to future generations. This study examines the role of architecture as a determining factor in shaping Almaty's identity by analysing how architectural styles, urban planning decisions, and symbolic structures influence the perception of place. Considering the complex relationship between Almaty's architecture and its evolving urban identity, it emphasizes the importance of thoughtful architectural and urban planning to preserve the city's unique character while adapting to modern urbanization processes. The research comprises the following stages: defining the conditions for the formation of city identity, taking into account the influence of natural-climatic, historical, anthropogenic, functional, cultural-symbolic, and sociocultural factors; exploring public opinion regarding the perception of the city's identity; and identifying the role of modern architecture as a factor in shaping city identity (using Almaty as an example).

2 Literature review

The architectural identity of Almaty was formed by a unique combination of historical influences, sociopolitical changes, and manifestations of culture, as stated in various academic works. Thus, Glaudinov (2016) offers a comprehensive overview of the evolution of Kazakh architecture, highlighting how changes in design reflect a broader sociopolitical landscape. His work lays the foundation for understanding how Kazakh architecture has transformed over time, moving from traditional forms to more modern ones, while maintaining a clear national identity. Moreover, Truspekova (2019) examines the specific architectural characteristics of Almaty, defining how the city's buildings reflect its urban identity and resonate with regional culture. Her analysis identifies key elements that contribute to Almaty's identity, especially post-Soviet influences that are blended with Kazakhstan's historical styles. Truspekova and Sharipova (2022) expand on these ideas and analyse stylistic choices in public institutions across Kazakhstan, identifying architectural trends that combine past Soviet influence with contemporary markers of Kazakh identity. Their study focuses on the stylistic continuity and transformation in Almaty's public architecture after 1991. Galimzhanova et al. (2020) consider Kazakh identity in the architecture of mosques, paying special attention to the application of the principle of *ijtihad*; that is, the Islamic concept of interpretation and creativity. They investigate how religious architecture interprets modern but culturally rooted Kazakh identity through design and symbolic elements.

Furthermore, Tatygulov et al. (2009) provide an in-depth look at the life and contributions of Toleu Basenov, an innovative architect whose work laid a foundation for Almaty's urban landscape. Their study of Basenov's heritage emphasizes the importance of individual architects in shaping the architectural character of the region. They highlight its influence as a tool on creating projects that harmonize local traditions with modern architectural needs. In their work on urban planning and the history of the architecture of Almaty, Qapanov and Baimagambetov (1998) trace the development of planning and zoning of the city. In particular, they discuss the city's adaptive response to changing urban needs. In this regard, it is worth noticing that Frampton (2020) developed the concept of critical regionalism, which can be applied to the context of Almaty. The researcher advocates architectural practices that respect and adapt to local culture and geography while avoiding superficial regionalism. This theoretical position supports the analysis of Almaty's architecture. This particularly concerns the contemporary attempts to balance global trends with Kazakh cultural motifs, reflecting the unique duality of Kazakhstan's post-Soviet identity. Comparative studies of the architectural evolution of cities with Soviet and European influences, such as Tallinn and Helsinki (Berger et al., 2019), highlight how former Soviet cities navigate post-Soviet identity through architectural adaptations. These studies help put Almaty in a broader framework, in which cities seek to balance the legacy of the Soviet era with the desire for modernization and local identity.

In a broader geographical context, Gehl (2010) emphasizes the importance of designing human-centred cities where architecture fosters social interaction and local identity. His ideas about collaboration between public spaces and architectural forms to stimulate social life echo Almaty's efforts to create attractive public spaces that reflect culture, aligning them with the goals of preserving local identity in urban design. This integration of regional and international perspectives demonstrates that the formation of Almaty's architectural identity is influenced not only by local and historical factors but also by global trends. Accordingly, cities seek to preserve a unique identity under globalization pressures. These international studies and theoretical foundations help determine how Almaty's architecture reflects its regional roots and aspirations within the globalized urban landscape.

Finally, Mendikulov's (1948) early work on the national architecture of Almaty addresses the problems of integrating traditional Kazakh elements into urban design. His ideas are fundamental to understanding the historical struggle for the balance of national identity and modernity that continues to influence the architectural narrative of Almaty.

These studies reveal the complex interaction of historical, cultural, and environmental factors in the formation of Almaty's architectural identity. They also provide a basis for analysing the architectural landscape of Almaty as a determinant that shapes the city's identity through the built environment.

3 Materials and methods

To achieve a multifaceted understanding of the role of architecture in urban identity formation, a range of empirical, theoretical, and qualitative methods were used for a comprehensive analysis of the architectural identity of Almaty. Thus, the deduction was applied to analyse Almaty in its regional context, narrowing it to specific areas, streets, and individual buildings. Accordingly, the inhabitants of the city were considered to be subjects of sociohistorical development that affect regional identity. An analysis of academic sources, related to urban identity, architecture, and regional features, was carried out to establish theoretical frameworks and identify factors affecting the city's identity. Apart from that, project documentation and

urban development strategies of Almaty were analysed to contextualize the architectural evolution of the city and assess the purposefulness of its design.

Furthermore, to assess the spatial configurations and structural characteristics of Almaty, a graphoanalytical method was applied. It involved mapping and visual analysis of key architectural features, land-use models, and urban plans that create the city's identity. Geographic information systems (GISs) were used to illustrate architectural models of the city and identify natural, anthropogenic, and cultural-symbolic elements that embody the identity of Almaty. Field studies were conducted to document and analyse the spatial environment of Almaty, focusing on structures and monuments that demonstrate the properties of identity. Moreover, observation allowed researchers to gain firsthand insight into the interaction between architecture and its social and cultural context, including the public perception of the city's identity.

A sociological survey called Citizen Survey was carried out from September 2022 to December 2023 by the Almatygenplan Research Institute and the Institute of Applied Urbanism, supported by the Administrative Office (*Akimat*) of Almaty. The resulting dataset is integral in shaping the discourse for project seminars fostering collaboration among residents and businesses across diverse city districts. A total of 801 participants from various cities in Kazakhstan, seventeen to sixty years old, took part in the survey, comprising 471 women (58.8%) and 330 men (41.2%). In terms of occupation, those surveyed included 55.8% employed, 36.9% students, and 7.3% unemployed. The intermediate survey data were published in an article (Aukhadiyeva & Karatseyeva, 2022). The survey was used to determine respondents' perception of the city's architecture. The online survey was conducted using the Survio app. It included questions on how architectural features contribute to residents' sense of place and identity. Focusing on both macro and micro levels, the survey collected data about neighbourhoods, residential clusters, streets, and prominent buildings in Almaty. Participants were asked to rank the factors contributing to the city identity of Almaty, categorized into natural (climate and landscape) and anthropogenic (encompassing architecture, urban environment, cultural symbols, and city images). They were also requested to assess the impact of socioeconomic factors on the city's image formation. Respondents also had the option to identify more than one factor associated with the city's uniqueness.

The collected data were analysed to determine the recurring themes and determinants of Almaty's identity. Qualitative data from the literature review and field observations were coded thematically, and quantitative data from the sociological survey were statistically analysed to reveal patterns of public perception of the city. Through a comparative analysis, these findings were summarized to offer a comprehensive view of the architectural factors shaping Almaty's identity. Consequently, this multilevel methodological framework made possible a thorough study of architecture as a determinant in shaping Almaty's unique urban identity. Gained results also shaped discussions about preserving identity during globalization.

4 Results and discussion

4.1 Key aspects of contemporary city identity

Inhabiting a specific country, individuals perceive territorial identity, aligning themselves with natural features, architecture, and culture that act as transmitters of place symbols (Krupskyi et al., 2019). These symbols arise through meanings that are significant to the individual at a territorial level and become more specific within the context of a city or settlement. Fedotova (2016) defines urban identity as "the totality of urban meanings that enable residents to identify themselves with the city through meaningful symbolic means (images, concepts, codes, and more)". The urban environment, encompassing architectural structures, public spaces, streets, and parks, plays a distinctive role in shaping city identity when collective and individual memory creates symbolic images, associations, and myths linked to specific elements of a given city. Within the framework of his "genius loci" concept, Iskhojanova et al. (2022) emphasized that the "genius (spirit) of a place" "enables individuals to identify themselves with the environment".

What is the role of architecture in the identification of a city? Previous research has revealed that regional architecture is shaped by various local factors and has a significant impact on residents' self-identification. Regional architecture plays a crucial role in preserving cultural heritage and fostering the sustainable development of a region (Amit, 2004). One key aspect of contemporary city identity is its image. Lynch (1960) emphasized that a city's image must be clear and well defined. According to him, mental images of a city are associated with three fundamental aspects: paths, edges, and districts. These aspects shape the perception of the city as a whole and define its functional structure. The city's image should reflect the values and identity of its residents. If the city's image does not mirror the cultural identity of its inhabitants, it can lead to disorientation and dissatisfaction. On the other hand, cities that have been able to express their cultural identity often become attractive to tourists and investors.

As noted by Gehl (2011), the cultural identity of a city is shaped through the interaction of its residents with the environment, social institutions, and historical heritage of the

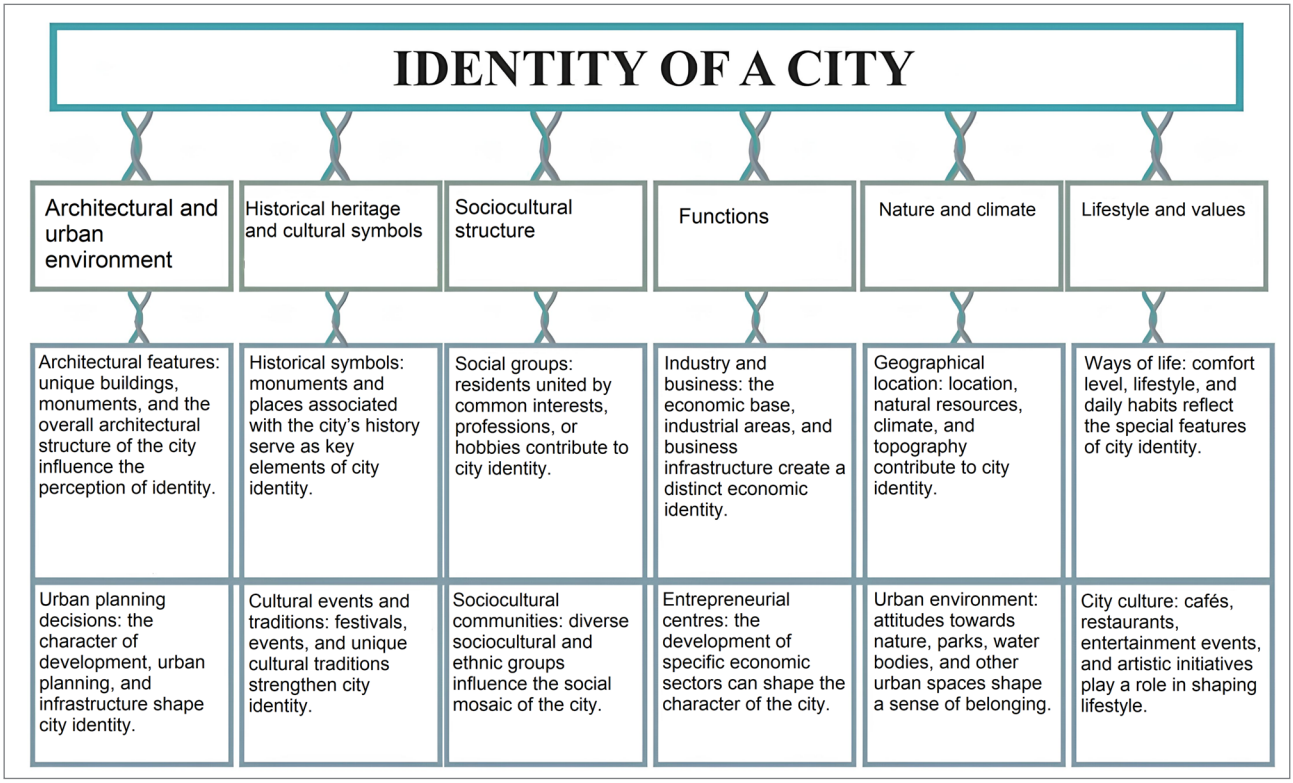

Figure 1: Identity of a city (source: Fedotova, 2016).

region. Gehl's theory of the regional image of a city provides the foundation for understanding the identity of Almaty. According to Gehl (2010) and his "city for people" concept, physical, social, and cultural characteristics have contributed to the formation of Almaty's image (Figure 1). Preserving and popularizing these attributes can aid in maintaining and strengthening the cultural distinctiveness of the city and the regional image.

Factors shaping city identity are categorized by researchers into natural features, which are primarily related to stable or persistent factors (geographical location of the city, climate, landscape, flora, etc.), and artificial features, which are created through human influence on the urban environment and are typically stable or changeable (symbols, brands, buildings, bridges, etc.; Korotseyeva & Akhmedova, 2022). In this study, the following factors are identified in the formation of urban identity: natural factors (climate, landscape, flora, fauna) and anthropogenic factors. The latter are further divided into two groups: material-spatial factors (architecture and spatial environment) and cultural-symbolic factors (images, myths, and historical associations).

4.2 Natural factors in shaping identity

Natural factors encompass a wide array of aspects that can exert influence on both architecture and human life. Residents and visitors characterize Almaty as a green city, nestled at the foothills of mountains. The climate of Almaty is moderately continental, with low humidity during the summer months and high humidity during winter. The average temperature in January is −6 °C, and in July it reaches 24 °C. Most precipitation falls in the spring and autumn. The city stands at an elevation of approximately 800 m, creating conditions for the mountain breezes that cool the city and supply cleaner air from the mountains.

For Almaty, one pivotal determinant pertains to its natural position within a valley nestled between mountain ranges, located at the intersection of two tectonic plates. Consequently, seismic activity in the city is sustained at a notably high level, often reaching up to 9 or 10 on the Richter scale. Furthermore, a pronounced temperature inversion phenomenon and inadequate air circulation within the city's basin, particularly during the winter season, are observed. The deficient air quality is exacerbated by factors such as vehicular emissions, industrial discharges, waste incineration, and smog caused by winter heating. Regrettably, seismic vulnerability and environmental issues constitute intrinsic facets of Almaty's image. In recent years, Almaty has witnessed a surge in initiatives aimed at ameliorating its environmental circumstances. These endeavours encompass the modernization of industrial enterprises and the establishment of a network of bicycle lanes and pedestrian zones, contributing to a reduction in air pollution levels.

Landscape serves as the foundation of city identity. The key elements shaping the development of the contemporary urban structure of Almaty are the mountain rivers, which historically attracted people to settle and inhabit the region. In the nineteenth century, the orientation of streets in north–south and east–west directions was adopted due to the topographic conditions. The layout of the blocks, with their shorter sides facing the mountains, facilitated optimal city ventilation. This planning principle persisted as the city expanded to the southwest in the mid-twentieth century. Distinctive public spaces within the city, contributing to its unique character, are the promenades running alongside the mountain rivers that flow through the city.

The geographical location of Almaty, the diversity of unique natural landscapes, and the presence of natural reserves in the suburban area, along with the rich cultural heritage of nomadic traditions, play a significant role in shaping the city's identity. These conditions attract a considerable number of both domestic and international tourists. One promising direction for the development of tourism in Kazakhstan is ecotourism. The number of tourists interested in protected areas of Almaty and the surrounding region is on the rise, and new forms of organized tourism are emerging, including historical and educational tourism, agrotourism, cycling, equestrianism, and water-based activities.

A unique natural feature of Almaty is its apple orchards. The apple tree originating in Kazakhstan, specifically *Malus sieversii*, is considered the ancestor of all apples worldwide. This fruit had its beginnings on the foothills of the Zhongar and Trans-Ili Alatau in the northern Tian Shan Mountains, where forty varieties of *Malus sieversii* grow. The genetic purity of the *Malus sieversii* apple tree has garnered significant interest among international tourists. The preserved and newly revitalized apple orchards form the basis for tourist "apple tours" and "apple routes" in the Almaty region (Shadmanova et al., 2019).

Another endemic, the golden treasury of the region's flora, is the wild tulip. In terms of the diversity of wild tulips, Kazakhstan holds a leading position globally, with 120 species of wild tulips found on the planet, forty-two of which thrive in Kazakhstan. These facts are elaborated upon in an article published in *The Astana Times* (Akhmetkali, 2023). The images of mountains, apples, and tulips are actively incorporated into the symbolism of urban events and are conveyed through ornamental and decorative architectural elements.

4.3 Almaty's anthropogenic factors in city identity formation

A city's uniqueness is most vividly exemplified within its physical environment, shaped by various factors: natural and historical conditions, architectural and cultural traditions of its inhabitants, and economic resources. In characterizing a city, terms like "sense of place" and "cultural identity" are frequently invoked, serving the purpose of comprehending, contemporaneously utilizing, preserving, and transmitting information about the city's history and culture to future generations. These concepts are imperative for sustaining a city's uniqueness because it cannot develop in isolation but is subject to external influences. All these factors are characteristic of modern cities in Kazakhstan, a country that ranks ninth in the world in terms of territory (2.72 million km^2). Located at the heart of Eurasia, Kazakhstan occupies a pivotal position at the crossroads of numerous trade routes, including the ancient Silk Road. The historical heritage of Kazakhstan is exemplified by a series of significant archaeological discoveries, showcasing the achievements of ancient inhabitants, both nomadic and settled populations. Experts have identified ancient cities of great historical and cultural significance within the country's borders (Baitenov et al., 2019).

The climate of Kazakhstan is distinctly continental, characterized by cold winters and hot summers. Due to the vast expanse of its territory, there is substantial climatic variation in different regions of the country. The northern areas experience severe and cold climates with prolonged winters, and the southern regions have a milder and warmer climate with hot summers and short winters. The country's topography consists of 63% steppes, 25% deserts and semi-deserts, 10% mountains, and 2% forest-steppes, predominantly in the north (Ministry et al., 2022).

Following the dissolution of the USSR and its attainment of independence in 1991, Kazakhstan actively engaged in global economic, cultural, and environmental processes. In Kazakhstan, there are eighty-nine cities and 6,859 rural settlements. The largest cities are Almaty (population 2,191,314), Astana (1,383,291), and Shymkent (1,205,889; Qazstat, 2023a; Qazstat, 2023b). Most modern cities in Kazakhstan developed in the twentieth century. Many of them have traditional urban planning, characterized by a grid of streets and blocks, which was inherited from the Soviet era. Typically, the central parts of these cities contain critical infrastructure, such as government institutions, banks, shopping centres, educational, cultural, and sports facilities, as well as housing. Residential areas and industrial facilities are often located in the peripheral regions of the cities.

Figure 2: Panorama of Almaty (photo: Deonisy Mit).

One well-developed area of settlement in Kazakhstan is the Almaty agglomeration, with its central city, Almaty, which was the country's capital from 1929 to 1997. Following the relocation of the capital to Astana in 1997, Almaty retained its status as the financial, research, educational, and cultural hub of the nation. The geographical location of Almaty has contributed to the formation of a distinctive spatial environment and a pronounced architectural identity. The city's uniqueness is defined by its position at the foothills of the Trans-Ili Alatau Mountains, ranging from 600 to 1,650 meters above sea level. A majestic panorama of snow-capped peaks encircles the city, creating its unparalleled character (Figure 2). Several mountain rivers intersect the city. Its suburban areas are used for recreation, tourism, and various sports activities.

The city's historical roots extend over two millennia, a legacy prominently etched into its architectural fabric. It experienced accelerated development during the twentieth century, particularly during the Soviet era. Subsequent to the dissolution of the Soviet Union in 1991, the city embarked on a fresh socioeconomic trajectory. This transformation was marked by an upsurge in the city's population due to internal migration, expansion of urban territory through the incorporation of suburban areas, and heightened construction activities encompassing residential, commercial, athletic, office, and educational edifices. The urban landscape also witnessed the establishment of a metro system, contemporary transport interchanges, an extensive network of cycling routes, and pedestrian precincts. Simultaneously, efforts were made to enhance accessibility for individuals with limited mobility, promoting an inclusive urban environment.

The architecture of Almaty has inherited elements from various historical periods of its development. Forms and elements of buildings in styles such as Baroque, Modernism, Soviet Classicism, and others have been adapted and enriched with motifs from national art (Abdrasilova & Aukhadiyeva, 2022; Truspekova & Sharipova, 2022). This amalgamation has given rise to an eclecticism that has become an integral part of the city's architectural character and cultural identity. The modern architecture of the city is influenced by international trends and can be compared to the architecture of European countries. It is of paramount importance to identify and systematize the aspects that shape the city's identity in the context of globalization when considering the processes of development.

4.4 Material and spatial elements (architecture and urban environment) in Almaty

Urban planning aspects, including planning principles, functional zoning, and building types, have shaped the spatial

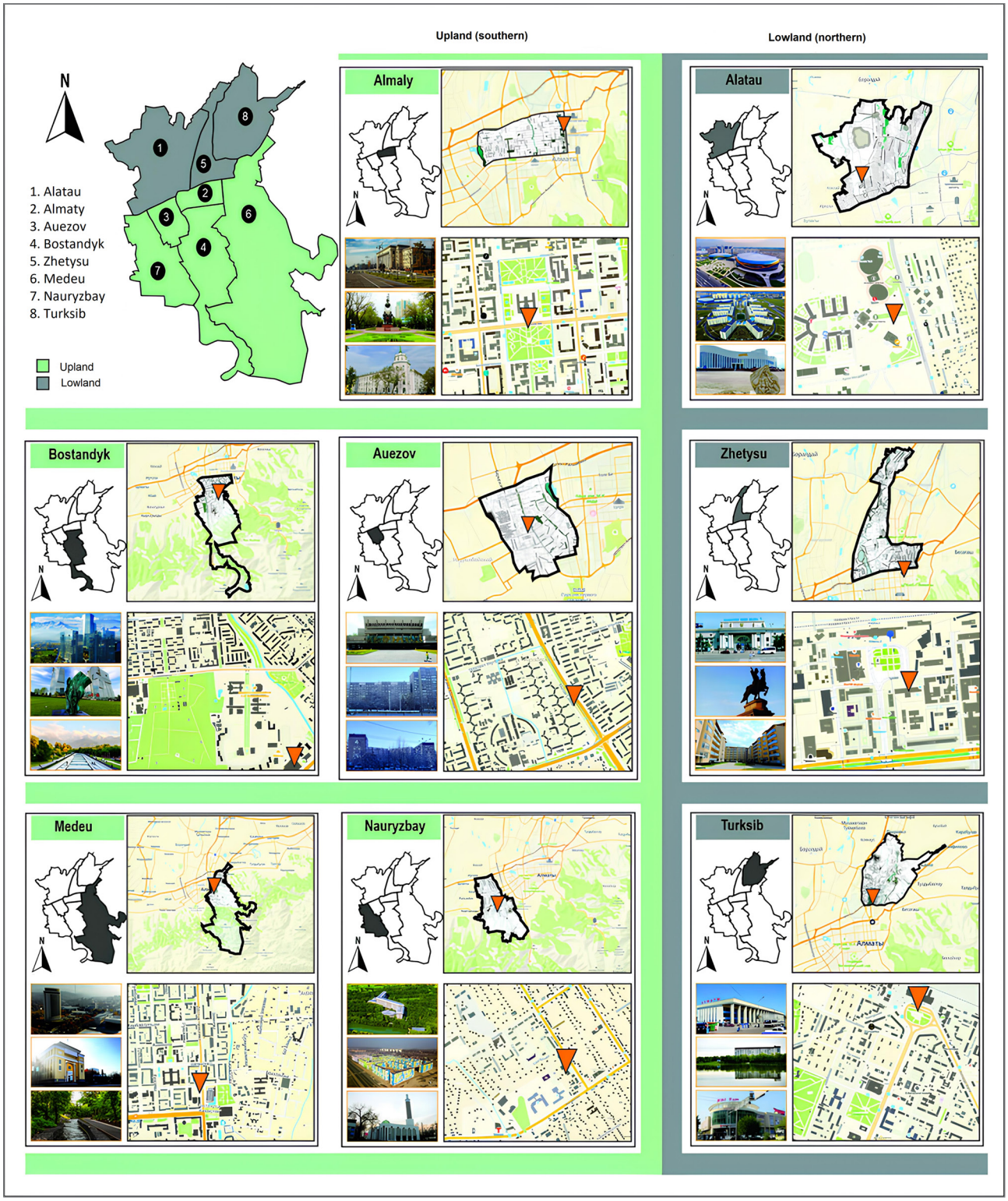

Figure 3: Almaty's administrative districts (source: authors).

structure of the city (UIA Architects, 2021). The master plans for Almaty, implemented during different periods in its history, reflect the special features of these historical epochs. Modern Almaty comprises eight administrative districts. In terms of topography, they can be categorized into two types: the southern foothill districts (Almaty, Auezov, Medeu, Bostandyk, and Naurizbay) and the northern plain districts (Alatauskiiy, Zhetysu, and Turksib; Figure 3).

For the expression of identity, significant importance is attributed to the conveyors of a city's unique qualities. Architecture (buildings, memorial structures, parks, squares, and streets)

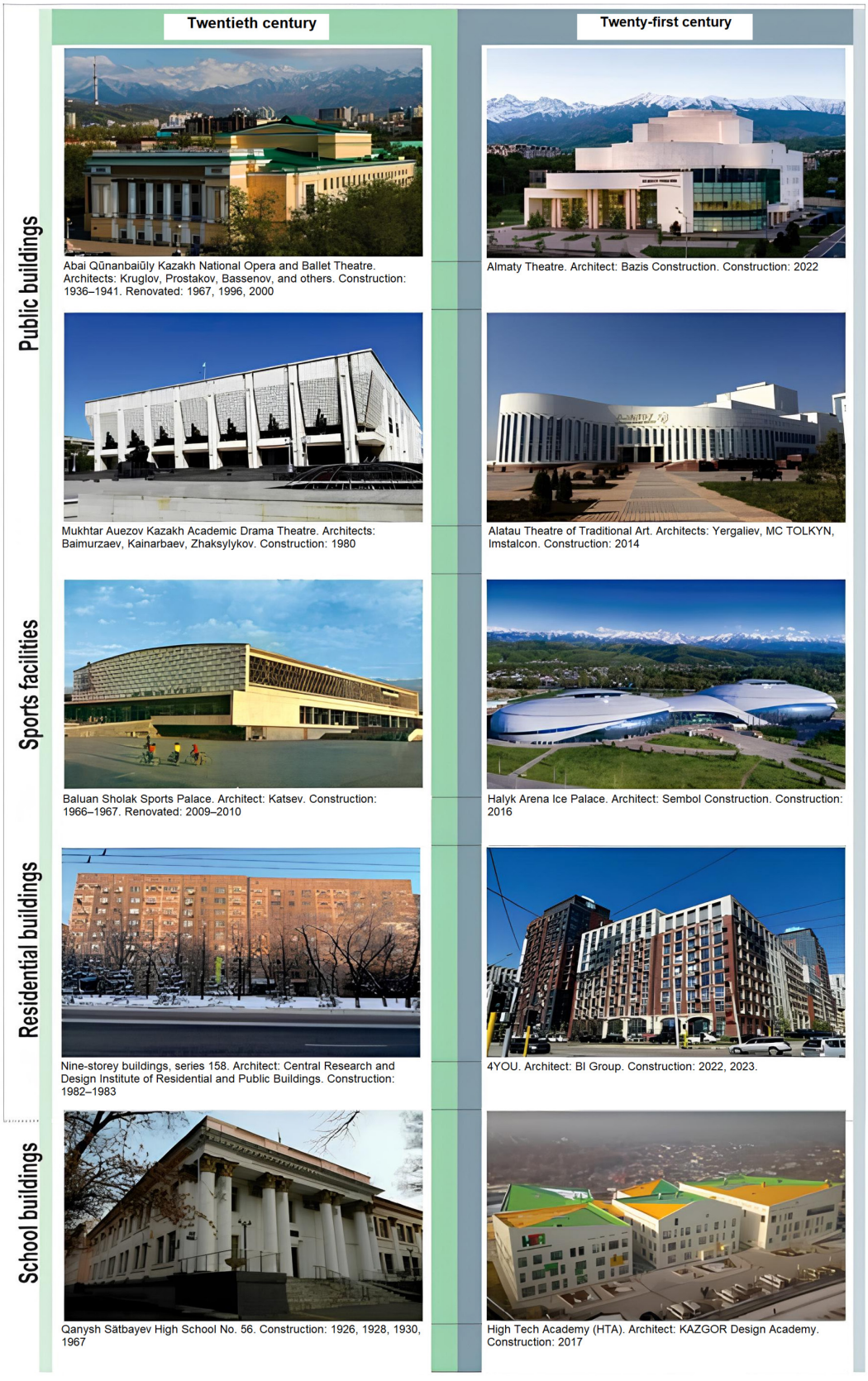

Figure 4: Almaty's architecture in the twentieth and twenty-first centuries (source: authors).

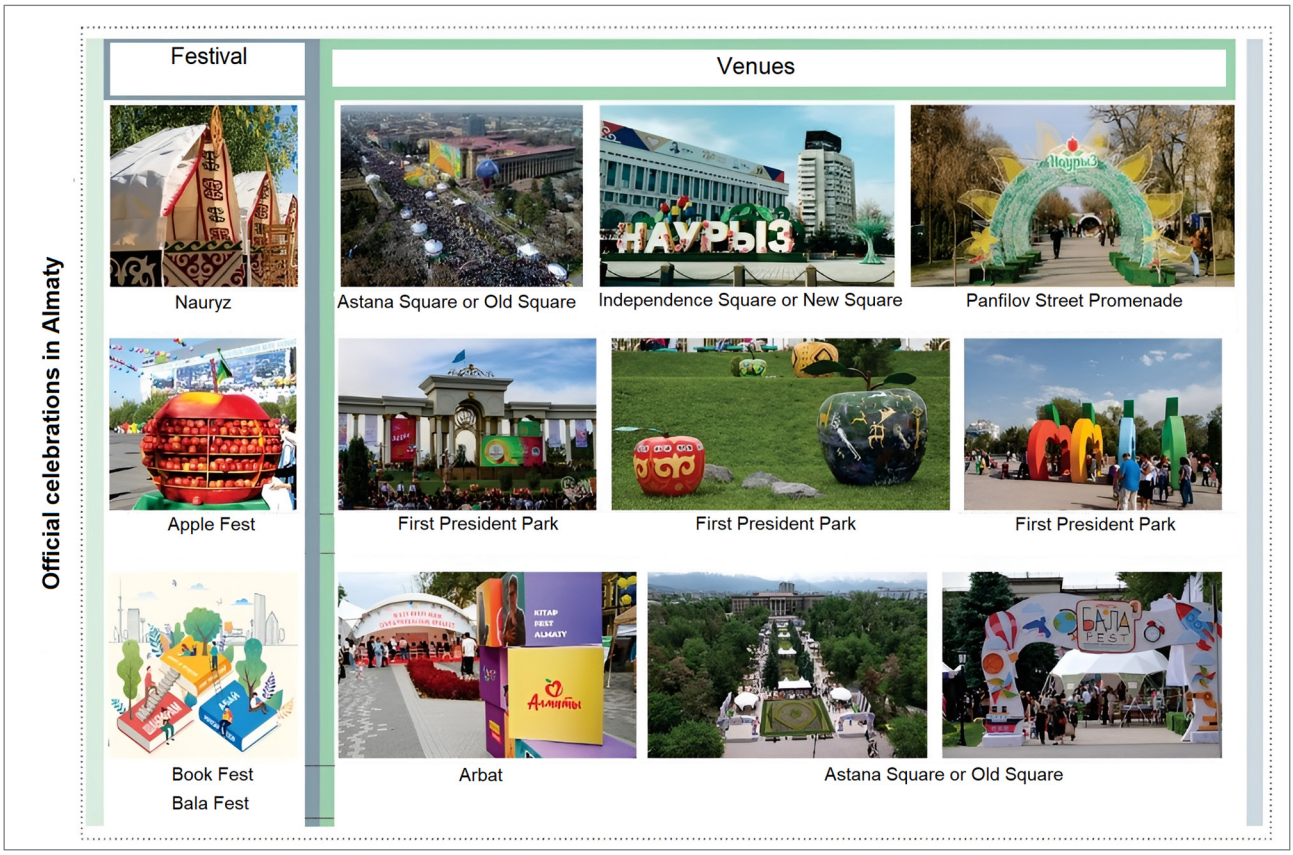

Figure 5: Scenes from public life (source: authors).

stands out as the most prominent source for disseminating information about the history, culture, and natural environment of the region. The interpretation of motifs from traditional art and architecture is a paramount characteristic of regional architecture in Kazakhstan. It allows the determination of a city's identity and establishes a connection between architecture and the culture of the people residing in the given territory. Based on the study of art and architectural heritage, analyzing various elements such as national symbolism, decorative and applied arts, and traditions of folk architecture (form creation and local building materials), methods for transforming the urban environment can be developed. The study of the morphological context of the city has revealed distinctive features of Almaty's planning and development:

- The extensive northern part of the city mainly consists of private residential areas and industrial territories (representing the post-initial stage of the city's development);
- The block development of the historical central part of the city features two- to five-storey buildings along streets with a north–south or east–west orientation, and monumental public structures (created in the first half of the twentieth century);
- Residential districts in the peripheral areas of the southern and western parts of the city are characterized by multi-storey panel buildings in the style of Soviet modernism, which incorporate service structures such as retail outlets, schools, preschools, and clinics (built in the second half of the twentieth century).

High-rise residential complexes are currently being built across the city, and commercial, entertainment, and business centres are being developed (Abdrassilova & Danibekova, 2021). The functional and spatial structure of Almaty is a consequence of the historically evolved city model and contemporary society's demands for a comfortable lifestyle and economic advancement. The central part of the city is replete with distinctive architectural structures characterized by a pronounced identity, built at the end of the nineteenth century and throughout the twentieth century (Cheshmehzangi, 2020). These structures reflect a regional architectural character, encompassing motifs of Kazakh national decor (in the design of residential and public buildings) and associations with traditional memorial craftsmanship (in the elements and forms of public buildings). In the twenty-first century, the city's architecture is evolving within the framework of global trends and is being shaped through the synthesis of modern principles of form generation, new construction materials, and building technologies (Figure 4).

Table 1: Survey results.

City size, population	Responses	Percentage
Megalopolis of national significance (> 1,000,000)	629	77.7
Large city of regional significance (250,000–1,000,000)	66	8.1
Small city of regional significance (100,000–250,000)	41	5.0
Large town of local significance (50,000–100,000)	25	3.1
Small town of local significance (10,000–50,000)	24	3.0
Rural settlement	25	3.1

Source: authors.

4.5 Cultural and symbolic elements of identity formation (decorative elements, images, myths, and historical associations)

The urban environment of Almaty is replete with symbolic elements, including monuments that allude to ancient Scythian art (e.g., the Golden Warrior Monument) and memorials dedicated to historical events. It features designs inspired by Kazakh decorative and applied arts, characterized by intricate carvings and geometric patterns on building facades, murals, wrought-iron fences, and various artistic elements in parks and squares. These elements reflect the city's history and culture, actively contributing to the representation of its identity. In addition to the visual aspects of local traditions, the city's social life incorporates numerous cultural events such as Nauryz, City Day, the Apple Festival, Fountain Day, the Book Festival, cinema and music festivals, traditional marathons through the city streets, competitions at high-elevation ski resorts, and more (UN General Assembly, 2022). Large urban gatherings reenact local history and the urban myths of Almaty, encompassing themes such as the "city of apples", "city of fountains", "green city", and so on (Figure 5).

4.6 Sociological survey results

The examination of regional identity issues is of contemporary relevance in architecture studies in Kazakhstan. The outcomes derived from the synthesis of theoretical research serve as the foundation for establishing normative documentation and practical recommendations during project development (UNESCO, 2015; UNFCCC, 2022). One effective means of design involves the participation of the population in the discussion, refinement, and formulation of new projects. Citizen involvement is facilitated through various avenues, including sociological surveys, interactions between designers and residents, and collaborations with volunteer organizations, among others. The employment of survey questionnaires as a means to gauge public opinion gained widespread traction, allowing for the identification of citizens' preferences on pertinent urban life matters. The survey outcomes have yielded significant contributions, establishing a robust foundation for systematic study and nuanced consideration of public opinion. The insights derived from the Citizen Survey conducted are not only academically enriching but also serve as a critical foundation for steering the sustainable development trajectory of the city. Most participants were residents of major cities with a population exceeding 1 million, accounting for 78.7%, and the fewest (3.1%) were respondents from rural areas (Table 1).

Based on the responses gathered during the survey, conclusions can be drawn regarding the preferences of Almaty residents and visitors. It is noteworthy that the study of Almaty's identity involved not only city residents but also inhabitants of other locations in Kazakhstan. In essence, we obtained both internal and external evaluations of the city's image. Respondents ranked the priority of factors shaping urban identity as follows: 62.9% of respondents primarily associate Almaty with its natural context (mountains, nature reserves, and unique landscapes). Anthropogenic material factors (buildings and structures of historical value, historical and cultural landscapes, and memorial structures) are considered important by 51.8% of those surveyed, whereas for 39.1% of individuals the city is primarily characterized by its anthropogenic nonmaterial factors (traditions, folklore, and symbols). Meanwhile, 36.5% of respondents emphasized the role of functional factors (businesses and infrastructure), and 23.4% of participants considered social conditions (migration, education, and healthcare) in characterizing Almaty's image (Figure 6).

Based on the survey results, it can be concluded that urban residents identify their city based on their perceptions of the features of the surrounding environment, architecture, and symbolic representations characteristic of Almaty. Architecture, which takes into account the landscape and reflects history, serves as an active actor in urban identity. Architectural

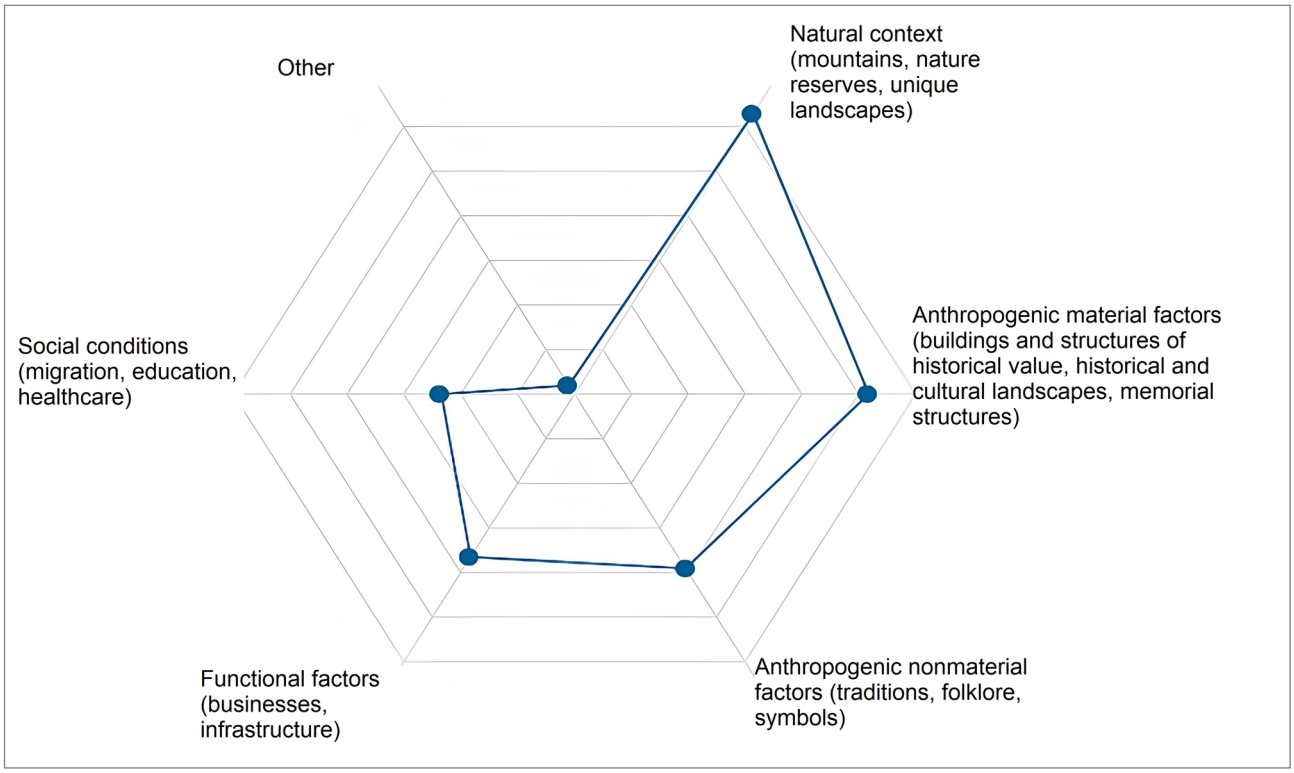

Figure 6: Factors shaping city identity (source: authors).

Figure 7: City symbols (source: authors).

forms and styles demonstrate the unique material and symbolic characteristics of the region, as well as the socioeconomic and political context of the time. These findings have wielded direct influence over the ongoing developments within the General Plan of Almaty City until 2040.

The active integration of countries and cities into the global economy and culture carries the risk of eroding local identities (Figure 7). However, it is important not to view globalization as a negative factor leading to the loss of city and regional identity. The involvement of international architects in the design of buildings and structures in Astana and Almaty shows that globalization can stimulate the development and preservation of cultural traditions as they become objects of creativity for the international community (Abdrassilova & Aukhadiyeva, 2021).

It is essential to emphasize that identity is dynamic and can change depending on historical, social, and political changes in society. Architecture is one way to express the cultural characteristics and identity of a people. Currently, Kazakhstan's architecture continues to evolve and adapt to reflect modern trends and global challenges facing contemporary society. It strives to become increasingly innovative and unique, incorporating modern design and the latest construction technologies.

4.7 Factors contributing to the formation of Almaty's identity

The analysis of factors specific to Almaty shows that city identity is formed based on various components reflecting both its unique natural features and the cultural heritage of the nation. Research has shown that three main groups of factors play a leading role in shaping the city identity of Almaty.

Natural factors, such as the steppe and mountains, play a key role in shaping the city's image, reflecting its unique landscape. Landscape features, such as changes in terrain elevation, are crucial for the identity of Almaty, creating a special atmosphere of fluidity and dynamism.

Anthropogenic factors epitomize a dynamic interplay with the natural environment: the distinctive climate and topography have profoundly shaped the material and spatial fabric, characterized by architectural manifestations reflecting historical legacies, prevailing economic dynamics, and the level of technological advancement, thereby encapsulating urban identity. The study of anthropogenic impact in Almaty has revealed the following factors: increased emissions originating from industries and residential buildings reliant on coal, risks associated with compromised air quality, and the use of transportation that adversely affects air quality (AQLI, 2024). In addition, recent observations in urban centres underscore a significant increase in traffic congestion, which has emerged as a prominent concern. Furthermore, deficiencies in the waste management infrastructure exacerbate environmental challenges.

Sociocultural factors transmit the ideas of urban identity through public events, forming and supporting the city's community. Conducting such events in various administrative districts of the city contributes to the activation of citizens, their involvement in studying the city's history and their participation in public hearings and reconstructive activities.

The prioritization of factors shaping urban identity, as identified by respondents, underscores the importance of both natural context and anthropogenic and sociocultural aspects in perceiving the image of Almaty. This analysis highlights the complex interaction of various elements that define the city's identity and shape its unique and culturally rich atmosphere. The research findings suggest that architecture and the physical environment play a significant role in shaping Almaty's urban identity.

The cultural identity of the city is a multifaceted phenomenon reflecting a long-term process of shaping individual and collective self-awareness within the context of cultural and social influences. It encompasses interconnected aspects such as interaction with cultural traditions, construction of cultural identities, and participation in intercultural and interreligious dialogue. The results also emphasize the role of national virtues and cultural symbols in shaping society's collective identity. National virtues such as hospitality and unity are closely linked to the region's historical and cultural traditions and play an important role in shaping national unity.

National symbols, encompassing both unofficial representations such as the snow leopard, golden man, dombra (a lute), yurt, samruk (a mythological bird), and shanyrak (yurt crown), as well as official ones like the coat of arms, flag, and anthem, function as vital components of national identity. They serve to fortify the connection between the city and its inhabitants. In the contemporary world, where sociocultural and political dynamics are constantly shifting, the meanings of identity symbols can undergo change and reinterpretation. However, both traditional symbols deeply rooted in history and new ones influenced by modern trends play a significant role in shaping what renders the city of Almaty unique and distinctive.

5 Conclusion

City identity is a symbolic resource that shapes the perception of the urban environment for a population based on meaningful symbolic elements associated with the natural environment, history, and culture of a territory. Our research has shown that the identity of Almaty, in essence, is primarily constructed under the influence of natural factors (landscape and climate) and anthropogenic factors (material: architecture and material-spatial environment, and nonmaterial: symbols, images, and myths).

Natural factors significantly influence territorial identity (including the city's identity) through landscape features and climate, including building orientation, the choice of construction materials, and structures. Anthropogenic factors (architecture, infrastructure, and the urban spatial environment), taking into account special geographical features and topography, establish the foundations of the city's architectural style, which holds crucial significance for city identity. Cultural-symbolic factors draw on traditions, customs, and cultural values, which can

construct symbols and images of urban identity. The study has shown that the city's identity is a collection of perceptions about the city, which in Almaty is shaped by a complex interplay of geographical and cultural-historical features. Architecture in Almaty is perceived by residents and visitors as one of the principal sources of urban identity.

The model of urban identity is formed within a geographical context, in which the ritual of reproducing local identity is carried out through the material-spatial environment (foothill terrain, morphology of historical quarters, architectural designs, parks, and fountains) and is expressed in enduring images ("the city at the foot of the mountains", "the apple city", "the garden city", "the city of fountains", "the cultural capital", etc.). Transmitters of city identity in architecture encompass decorative elements in building design (brise-soleils, balcony railings, façade ornamentation, and murals).

The significance of studying the identity of Almaty lies in the fact that this city embodies characteristics that, when examined, can determine the direction for exploring the identity model of other cities in Kazakhstan. Undoubtedly, this will be reflected in the transformation of the urban environment, attracting investors and tourists.

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The effect of urban landmarks on urban safety perception: The case of Balat, Istanbul

Cities that have strong landmarks offer users effective orientation, comfortable experiences, and a heightened sense of safety. This study examines the impact of urban landmarks on pedestrian movements and orientations, and explores their relationship with perceptions of urban safety. The study area of Balat, Istanbul, was selected due to its abundance of urban landmarks as well as the presence of structures and spaces that create a negative perception of safety. Based on a review of literature on urban landmarks and spatial safety theories, complemented by field observations, a study involving 110 participants was conducted to analyse their route selections based on landmarks and their sense of safety along these routes. The findings revealed that streets with a high number of urban landmarks and those with higher attraction values play a significant role in shaping users' orientation preferences. In addition, a positive correlation was observed between the presence of urban landmarks and the perception of spatial safety, indicating that areas with more prominent landmarks are perceived as safer by users.

Keywords: landmarks, spatial orientation, spatial perception, urban safety, Balat, Istanbul

1 Introduction

Urban spaces convey various environmental stimuli to users, either directly or indirectly, through the artificial and natural elements they contain. Users perceive these stimuli through individual cognitive processes, transform them into mental images, and subsequently make decisions within urban space (Lynch, 1960; Göregenli, 2018; Cüceloğlu, 2019). Urban elements that encompass one or more social, historical, symbolic, economic, and aesthetic characteristics within urban space serve as urban landmarks. They draw the attention of users of space and, as a result, influence their perception and spatial orientation (Gibson, 1950; Gifford, 2002; Raubal & Winter, 2002; Santos-Delgado, 2005). Depending on the perception, landmarks may also function as elements of the urban image. Urban spaces with strong images facilitate navigation, provide comfortable user experiences, and foster a sense of safety (Lang, 1987; Lynch, 1960; Steck & Mallot, 2000; Köseoğlu & Önder, 2011). Several theories, including the broken windows theory, defensible space theory, rational choice theory, and environmental stress theory, have been developed to explain the sense of spatial safety, which refers to the feeling of peace and safety in the social lives of individuals residing in urban areas. According to these theories, spaces that are neglected, abandoned, or contain derelict buildings and elements are perceived as unsafe by users because they increase the likelihood of criminal activities.

Spatial perception and issues of safety are well-established areas of study within both urban planning and psychology. However, the relationship between urban images and the perception of urban safety has not been extensively explored. Based on Lynch's (1960) assertion that strong urban landmarks within a space enhance the sense of spatial safety, this study investigates the impact of urban landmarks, explores their influence on pedestrian movements and orientations, and examines their potential impact on the perception of urban safety. It addresses three fundamental research questions: 1) Is there a relationship between urban landmarks and pedestrian movement or orientation? 2) Which urban landmarks have a greater impact on perception and orientation processes? 3) Is there a relationship between urban landmarks and the perception of urban safety? The hypothesis of the study is that the presence of urban landmarks and their attraction power are directly proportional to user movements and contribute to an increased perception of safety in the city.

2 Spatial perception, behaviour, and perception of urban safety

Individuals continuously engage in interactions with their surrounding environment. They interpret the environment they inhabit through its physical features, organize it in their minds, or, in other words, perceive it. According to Lewin (1951), human behaviour is a function of the relationship between the individual and the environment. In other words, the way individuals perceive their environment, influenced by both personal and environmental characteristics, impacts their spatial behaviour. In addition, urban environments and the elements they encompass have a profound impact on the perception of urban safety. A positive perception of urban safety is crucial for enhancing the overall quality of life (Barker, 1968; Koca & Erkan, 2019).

2.1 Spatial perception and behaviour

Perception is the process of receiving information from the environment through the senses and organizing and interpreting it by categorizing it in the mind (Norberg-Schulz, 1966; Rapoport, 1977). There are numerous factors, stemming from either the individual or the environment, that influence perception. Factors such as age, sex, education level, occupation, knowledge, socioeconomic status, lifestyle, value judgments, needs, personality traits, and past experiences are among the individual-based elements that influence perception. These factors affect perception because they shape an individual's sensory attributes, cognitive processes, values, and priorities, which in turn influence how they interpret their environment (Broadbent, 1958; Lynch, 1960; Kaplan, 1973; Sayar-Avcıoğlu & Akın, 2017; Göregenli, 2018).

Environmental factors that influence perception include features such as colour, size, density, movement, orientation of other pedestrians, light and shadow, shape, proximity, depth, continuity, repetition, proportion, similarity, variety, topography, slope, weather conditions, sound, and smell (Broadbent, 1958; Lim, 2000; Kürkçüoğlu & Ocakçı, 2015; Diker & Erkan, 2017). Landmarks (Lynch, 1960; Santos-Delgado, 2005) are significant environmental factors that influence perception. The most important characteristic of these is that they are physically, functionally, or semantically different from other elements in the surrounding environment. Some landmarks are known by everyone and others are not. They do not have to be known or recognized by all. At the neighbourhood scale, coffeehouses, local leaders' offices, grocery stores, tombs, fountains, and structures with distinct differences in colour, shape, or material can also serve as landmarks (Abu-Obeid, 1998; Erkan-Biçer, 2002; Köseoğlu & Önder, 2011;

Zacharias, 2001). Santos-Delgado (2005) classified urban landmarks into five groups: social, historical, symbolic, economic, and aesthetic landmarks. Social landmarks are places that bring people together and facilitate interaction, such as places of worship, parks, and schools. Historical landmarks are locations with historical significance, having hosted important historical events. Monuments, graves, homes of significant individuals, historic buildings, and squares are examples of historical landmarks. Symbolic landmarks are elements that help people establish a connection with space when they see them. Economic landmarks are places with economic value, such as factories, ports, hotels, and shopping or office units of various scales. Aesthetic landmarks are locations that hold aesthetic value, distinguished by their architectural and landscape features (Lim, 2000; Santos-Delgado, 2005; Köseoğlu & Önder, 2011; Bratina Jurkovič, 2014).

In addition, environmental factors that influence perception can be classified into the following categories: physical, functional, and mobile sources. Physical stimulating sources refer to the form, material, colour, texture characteristics, fullness versus emptiness ratios of the built environment components that constitute space, and their interrelationships. Functional stimulating sources are those that create an image for the user based on the function of space. Mobile sources are primarily related to the crowd and the direction of its movement, which influence the psychology and preferences of the individual (Zacharias, 2001). Spatial behaviour is closely linked to spatial perception, with the latter serving as the foundation for the former. People move through space according to their perceptions. Therefore, factors that influence perception also impact spatial movement (Gibson, 1950). According to Kitazawa and Batty (2004), pedestrian movements in urban spaces and route selection are subject to change and sudden decisions. The time factor, physical elements within urban space, natural and artificial obstacles, and individuals' aesthetic and value judgments all play a role in these decision changes. In addition to individual-based factors and environmental factors that influence people's perception and behaviour, another factor affecting pedestrian movement and behaviour is the time factor, including season, month, week, day, and hour. Differences in time zones can alter stimuli and their intensity, influencing perceptions and behaviours accordingly (Banerjee & Southworth, 1990; Bradshaw, 1993; Carmona et al., 2003; Correa, 1983; Marshall, 2005; Massey, 1994; Moughtin & Mertens, 2003; Mumford, 1937; Özer, 2006; Relph, 1976; Rykwert, 1982).

2.2 Urban safety and spatial safety perception

Safety refers to both material and spiritual safety, as well as the absence of danger. It is a feeling and a perception. Moreover, safety is a fundamental right for everyone. Similarly, urban safety refers to the ability of individuals living in the city to feel secure both in fulfilling their needs and in their interpersonal relations, while being able to continue their lives in a peaceful and secure environment. Spatial safety theories have been proposed to explain the feelings of safety or insecurity in urban spaces (Akers, 2000; Anselin et al., 2000; Aksoy, 2007; Clarke, 1997; Elliott, 1952; Farrington, 2004; Ritts, 2024).

The broken windows theory focuses on how the presence of neglected, irregular, and broken structures and elements in an area evokes a sense of dereliction, which, in turn, leads to further deterioration over time. In this context, neglected or damaged buildings, dysfunctional landscape elements, uncollected garbage, and semantically or visually problematic graffiti and drawings cause a perception of neglect and insecurity (Welsh et al., 2015; Bilen & Büyüklü, 2018; Koca & Erkan, 2019). According to the defensible space theory, spaces lacking a clear distinction between public, semi-public, semi-private, and private areas, as well as crowded high-rise apartment buildings, dysfunctional and unused ground floors, blind walls, secluded spaces, and deserted areas resulting from planning errors and the improper positioning of buildings create a perception of insecurity. These conditions reduce the sense of belonging, spatial observability, and control, making such areas vulnerable to criminal activity (Koca & Erkan, 2019). According to the rational choice theory, crowded areas such as city centres, commercial streets that enable criminals to remain anonymous, poorly organized public spaces, abandoned areas occupied by gangs, and poorly lit, deserted urban spaces all cause an increased sense of insecurity (Cullen & Agnew, 1999). According to the environmental stress theory, environmental stressors such as poor quality of the environment and buildings can induce stress, tension, anxiety, restlessness, and fear in individuals. All of these cause an increased sense of insecurity. Factors such as building quality, noise, crowds, pollution, aging, and neglect are critical parameters that affect the quality of urban environment. Poor building quality is specifically associated with the aging and deterioration of structures (Clarke, 1997; Elliott, 1952; Farrington, 2004; Steg et al., 2015).

In summary, individuals perceive the elements of the urban environment in which they live and develop various behaviours and spatial orientations as a result of these perceptions. In this context, landmarks – points of attraction with social, historical, symbolic, economic, and aesthetic qualities – serve as powerful images of urban space and influence spatial behaviours and orientations through perception processes (Lynch, 1960; Santos-Delgado, 2005). Furthermore, spaces with strong images contribute to a heightened sense of safety for users. Based on this information, the relationship between landmarks, orientation preferences, and the perception of urban safety was examined through a field study.

3 Method

Based on Lynch's (1960) claim that urban landmarks increase the sense of spatial safety, the authors examined the impact of urban landmarks on pedestrian movement patterns and urban safety perception, structuring their study into five stages (Figure 1).

In the first stage, Balat was chosen as the study area due to its numerous and diverse urban landmarks, as well as its inclusion of spaces and elements that may create a negative perception of safety (Erbey & Erbaş, 2017; Özbilge, 2018).

In the second stage, a detailed built environment analysis of the selected study area was conducted, including factors such as building condition, number of floors, building type, registration status, topography, open space, transportation, and land use.

In the third stage, an analysis of landmarks and spatial safety perceptions was conducted, grounded in literature. The structures and elements in the study area were analysed separately based on their economic, aesthetic, social, historical, and symbolic characteristics (Stage 3a; Santos-Delgado, 2005). Structures and elements with multiple characteristics were assigned numbers corresponding to the number of characteristics they exhibited, thereby determining their level of attraction. Subsequently, the attraction value/power of each street in the study area was calculated by summing the attraction of the structures and elements located on that street or visible from it, even if they were not directly situated on the street. The attraction value/power of the streets in the study area was mapped accordingly. Balat's spatial characteristics were categorized in terms of their economic, aesthetic, social, historical, and symbolic features. Cafés, restaurants, vintage shops, craft workshops, banks, grocery stores/markets/pharmacies, boutiques, street vendors, hostels, and bazaars possess economic value. Building colour and form, building materials, historic buildings, ruined buildings, and architectural elements such as fountains, as well as natural landscapes, artificial landscapes, topography, curvilinearity, openness, street width, views, shadows, and light, may have aesthetic value. Museums, churches, mosques, synagogues, baths, schools, hospitals, police stations, research centres, sports clubs, graffiti, hanging laundry, and film sets possess social value. Historic residential, commercial, or religious buildings hold historical value, and structures generally associated with Balat are considered to have symbolic value (Erbey & Erbaş, 2017; Lim, 2000; Santos-Delgado, 2005; Köseoğlu & Önder, 2011; Özbilge, 2018). In addition, areas that could contribute to a negative perception of safety were examined based on the four theories presented above, and the locations in which these areas are concentrated were identified (Stage 3b; Cullen & Agnew, 1999; Koca & Erkan, 2019; Steg et al., 2015; Welsh et al., 2015).

In the fourth stage, a field study was conducted with a group of 110 participants that had not previously experienced the space, focusing on the relationship between identifying landmarks, selecting routes, and defining urban safety. Each participant walked around the study area with a map for one hour. To avoid any preconceived orientation, only individuals that had never visited Balat before were selected. Participants were free to choose their walking routes at each intersection, but the spatial configuration of the area naturally led them to traverse both highly attractive and less attractive streets in order to navigate the area. Therefore, even though route choice was voluntary, the continuity of the street network meant that a variety of spatial qualities were inevitably experienced. Because it was essential for the participants to be able to see and perceive landmarks and spatial safety parameters, fieldwork was conducted during daylight hours. In addition, to ensure comfortable pedestrian movements, the study was conducted on days with clear, rain-free weather. The study was conducted from August to October 2020, taking into account the general suitability of weather and the COVID-19 pandemic. These months were selected because they corresponded to periods with the lowest case numbers, no curfews or closures, and only a mandatory medical mask requirement. Because the study was conducted outdoors and the participants were required to wear masks, it is assumed that the effects of COVID-19 were minimized. Considering that the participants in the field study were required to have sufficient map-reading and marking skills, they included individuals age twenty or older. In addition, in light of the risk factors associated with the pandemic, the participants selected were younger than sixty. The participants were recruited on a voluntary basis through public announcements made via social media platforms and university mailing lists targeting individuals residing in Istanbul. Among the applicants, those that met the age criteria, had never visited Balat before, and were available during the study period were selected to participate.

As part of the study (Stage 4b), participants marked the route they chose on the provided map and identified the attraction factors influencing their orientation preferences at each intersection. They also rated their sense of urban safety at the intersection points they passed through using a Likert scale from −3 (most insecure) to +3 (most secure). In addition, a general pedestrian count was conducted for each street in the study area on Saturday afternoon for one hour (Stage 4b) and subsequently mapped. Saturday afternoon was chosen due to the high pedestrian density, as seen in various studies (Erbey & Erbaş, 2017; Özbilge, 2018).

In the fifth stage, the maps of all participants were overlapped to determine and map the number of participants passing through each street in the study area (Stage 5a). The attraction factors identified by participants at each intersection were categorized (5b). To avoid any influence, participants were not provided with any keywords, and the grouping was based on the keywords they wrote themselves. Because an element can possess more than one characteristic (economic, aesthetic, social, historical, or symbolic), participants' keywords were first categorized into five groups: architectural elements, physical environment, landscape and topography features, social and cultural characteristics, and commercial aspects. Architectural elements, physical environment, and landscape and topography features were associated with aesthetic value, social and cultural characteristics with social value, and commercial aspects with economic value. Historic buildings possess historical value, and the Fener Greek School, Naftalin Café, and houses on Merdivenli Yokuş Street hold symbolic value. In this context, a statistical analysis was conducted based on the keywords provided by the participants regarding the landmarks. Thus, the landmarks that had the greatest influence on route selection were identified.

The sense of safety was established (Stage 5c) by calculating and mapping the mean and median values of the safety scores provided by participants on each street, ranging from −3 to +3. These values were then overlapped, and streets with a score of 2 or higher were mapped. Because the sense of safety can vary from person to person and is thus a subjective assessment, the use of the median in addition to the mean helps mitigate exceptional cases. All spatial maps obtained (general pedestrian count, participant count, participant safety perception, attraction value/power of streets) were overlaid and compared. The results of the analysis and mapping conducted based on urban safety theories in Stage 3b were used to verify the participants' urban safety perception scores. In addition, the relationships between the general pedestrian count and the number of participants on individual streets (5a), as well as those between the participant number (5a), participant safety perception (5c), and street attraction value, along with the urban landmarks identified by the participants, were statistically analysed using Python (Figure 1).

4 Results

The Balat neighbourhood is located in the Fatih district, between the Fener and Ayvansaray neighbourhoods, on the European side of Istanbul. In the course of history, Balat has been home to Jews, Greeks, Armenians, and Turks. It houses numerous Byzantine and Ottoman-era structures and carries traces of three major religions (Ülke, 1957; Deleon, 1991; Türkoğlu, 2002; Önem & Kılınçarslan, 2005; Şenyapılı, 2009; Özbilge, 2018). The boundaries of the study area were determined based on the presence of landmarks and spatial elements such as old and dilapidated buildings, poor lighting, and narrow or dead-end streets, which create a negative perception of safety (Figure 2).

4.1 Physical structure analysis

The area features a hybrid street layout, dominated by a grid pattern. A large portion of the buildings in the area are in average condition. Most buildings in good condition are restored structures. Buildings in poor condition generally feature aging, dilapidated, and damaged walls and structural elements, with most of them still inhabited. Ruined buildings, on the other hand, have walls or portions of walls collapsed, lack structural elements, and are uninhabitable. Three- and four-story buildings predominate. Most structures are masonry buildings, with some wooden and other types of buildings present as well. Buildings of historical and cultural significance in the area are protected, with approximately one-third of them being registered. Among these registered buildings, a significant number are examples of residential architecture. The slope follows the shoreline of the Golden Horn, with areas near the Golden Horn being relatively flat and gradually increasing in incline toward the inner parts of the study area. There is no large green space within the study area, except for the Cantemir Palace garden, which is enclosed by high walls. The area features numerous trees and ivy, and stairways, reflecting the slope, can be found in various locations throughout the area. The main pedestrian street of Balat and the study area is Vodina Street, which hosts food, beverage, and shopping establishments. Other key pedestrian corridors include Kürkçü Çeşmesi Street, Yıldırım Street, Ayan Street, and Lavanta Street. According to the ground floor use distribution, the area consists of three main categories: housing (79.3%), commercial areas (18.4%), and social infrastructure (2.3%; Table 1, Figure 3).

4.1.1 Analysis of urban landmarks

Landmarks in the study area were analysed based on their economic, aesthetic, social, historical, and symbolic characteristics, and their concentrations were determined and mapped. In this context, eight mosques, five churches, three synagogues, two baths, and two schools were categorized as historical landmarks. A total of 241 cafés and restaurants; eight antique shops; four workshops; four post offices and bank branches; thirty-six grocery stores, markets, and pharmacies; four boutiques; two gyms and yoga studios; and six accommodation facilities were identified as economic landmarks. Furthermore, four museums, five churches, nine mosques, three synagogues, two Turkish baths, two primary schools, two middle schools,

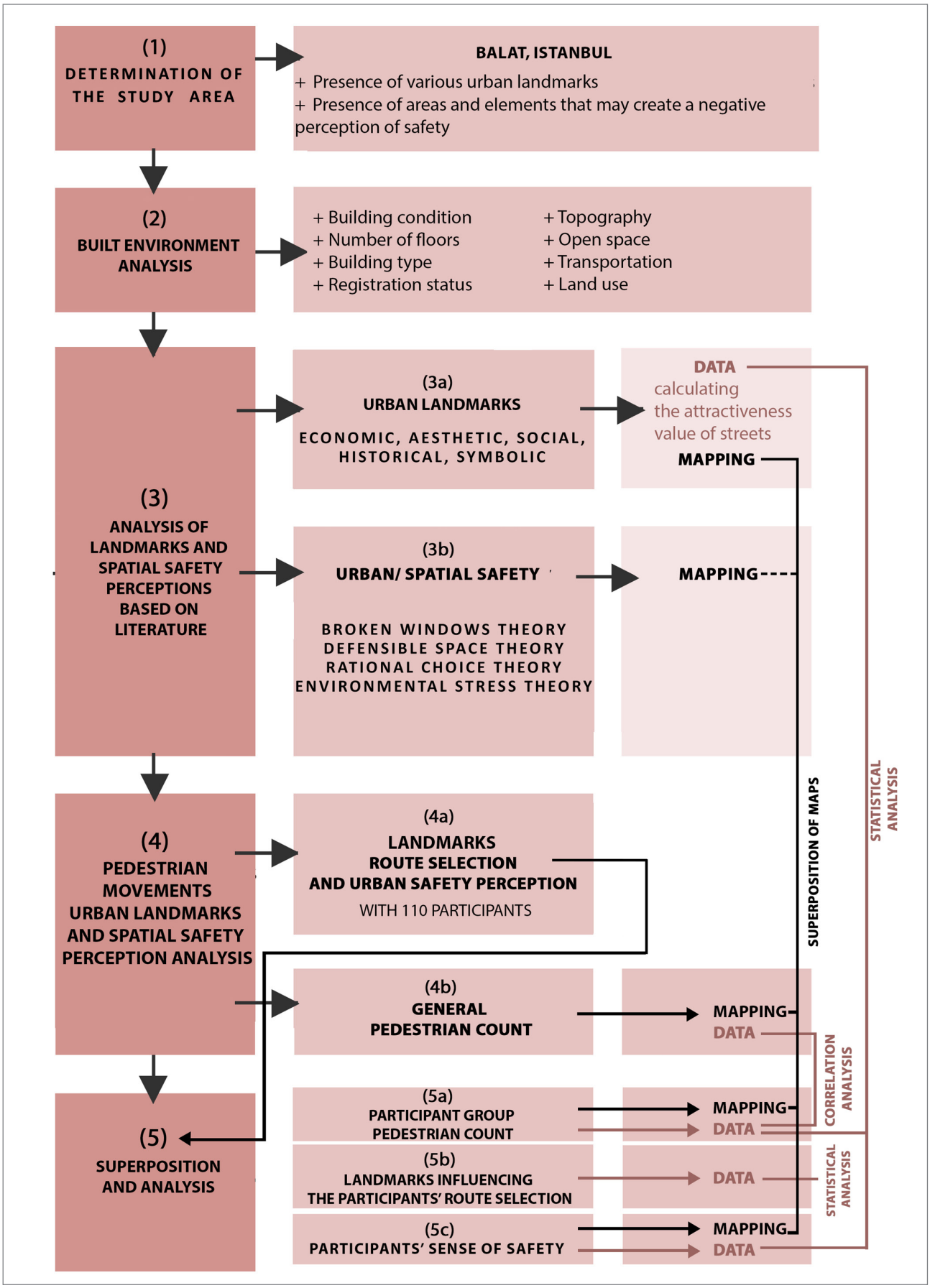

Figure 1: Method of the study (illustration: authors).

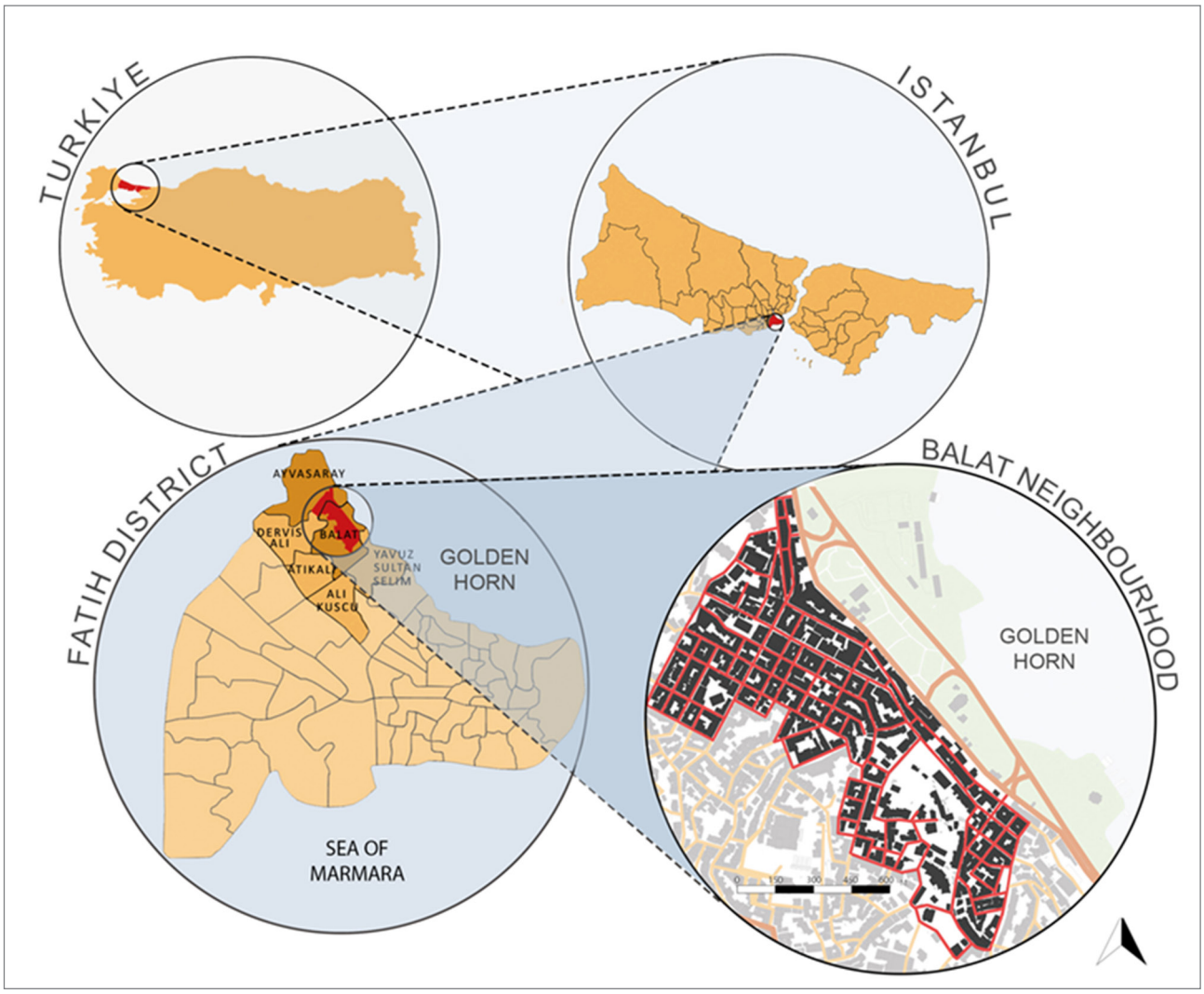

Figure 2: Location and boundaries of the study area (illustration: authors; base map: courtesy of the Istanbul Metropolitan Municipality Department of Zoning).

two high schools, one police station, one research centre, and six accommodation facilities were recognized as social landmarks. The Fener Greek School, some residential architecture structures, and Naftalin Café were categorized as symbolic landmarks. Buildings with aesthetic value, such as those with distinctive architectural and landscaping features – stone walls, plane trees, vines, lighting, colourful lights from cafés and restaurants spilling onto the street, furniture, coloured stairs, a variety of artificial landscape elements, and fountains – were considered aesthetic landmarks.

A structure or element can embody multiple values. For example, the Fener Greek School stands out as the strongest landmark due to its historical, social, symbolic, and aesthetic values. Religious buildings with historical, social, and aesthetic value follow the Fener Greek School in terms of attraction. There are numerous registered buildings with aesthetic value scattered throughout the study area, some of which also serve commercial purposes and thus possess commercial value as well, contributing to their higher attraction power. Streets with attraction power values greater than average (plus standard deviation) were classified as high-attraction streets and mapped. The streets and avenues with high attraction value are generally the commercially dense (economically valuable) axes parallel to the Golden Horn at the entrance to the study area, and, at certain points, the lines that cut across these axes perpendicularly and extend inward, highlighting historical, aesthetic, or social values (Figure 4).

4.1.2 Urban safety analysis

The spaces and structures that contribute to a sense of insecurity are concentrated in the western, southern, southwestern, and southeastern parts of the study area (Figure 5). In the southwestern part, there is a noticeable concentration of poor-quality buildings and poor-quality environments, which are the key criteria under the environmental stress theory.

Table 1: Analysis of buildings and ground floor use in the study area.

Category	Unit count	Percentage
Condition of buildings		
Good	35	2.2
Average	1,328	85.2
Poor	181	11.2
Ruined	23	1.4
Number of stories		
One	92	6.0
Two	215	14.0
Three	462	30.2
Four	481	31.4
Five	225	14.7
Six	51	3.3
Seven	4	0.3
Eight	2	0.1
Type of construction		
Masonry	1,375	84.8
Wooden	17	1.0
Reinforced concrete	191	11.8
Other	38	2.3
Registration status		
Registered official building	2	0.2
Registered monument	33	2.0
Registered residential building	459	28.3
Unregistered building	1,127	69.5
Ground floor use		
Housing	1,288	79.3
Café or restaurant	241	80.6
Vintage or antique shop	8	2.7
Workshop	4	1.3
Post office or bank	4	1.3
Boutique store	4	1.3
Gym or yoga studio	2	0.7
Museum	4	10.9
Church	5	13.5
Mosque	9	24.3
Synagogue	3	8.1
Baths	2	5.4
Primary school	2	5.4
Middle school	2	5.4
High school	2	5.4
Police station	1	2.7
Research centre	1	2.7
Accommodation	6	16.2

Source: authors, data courtesy of the Istanbul Metropolitan Municipality Department of Zoning.

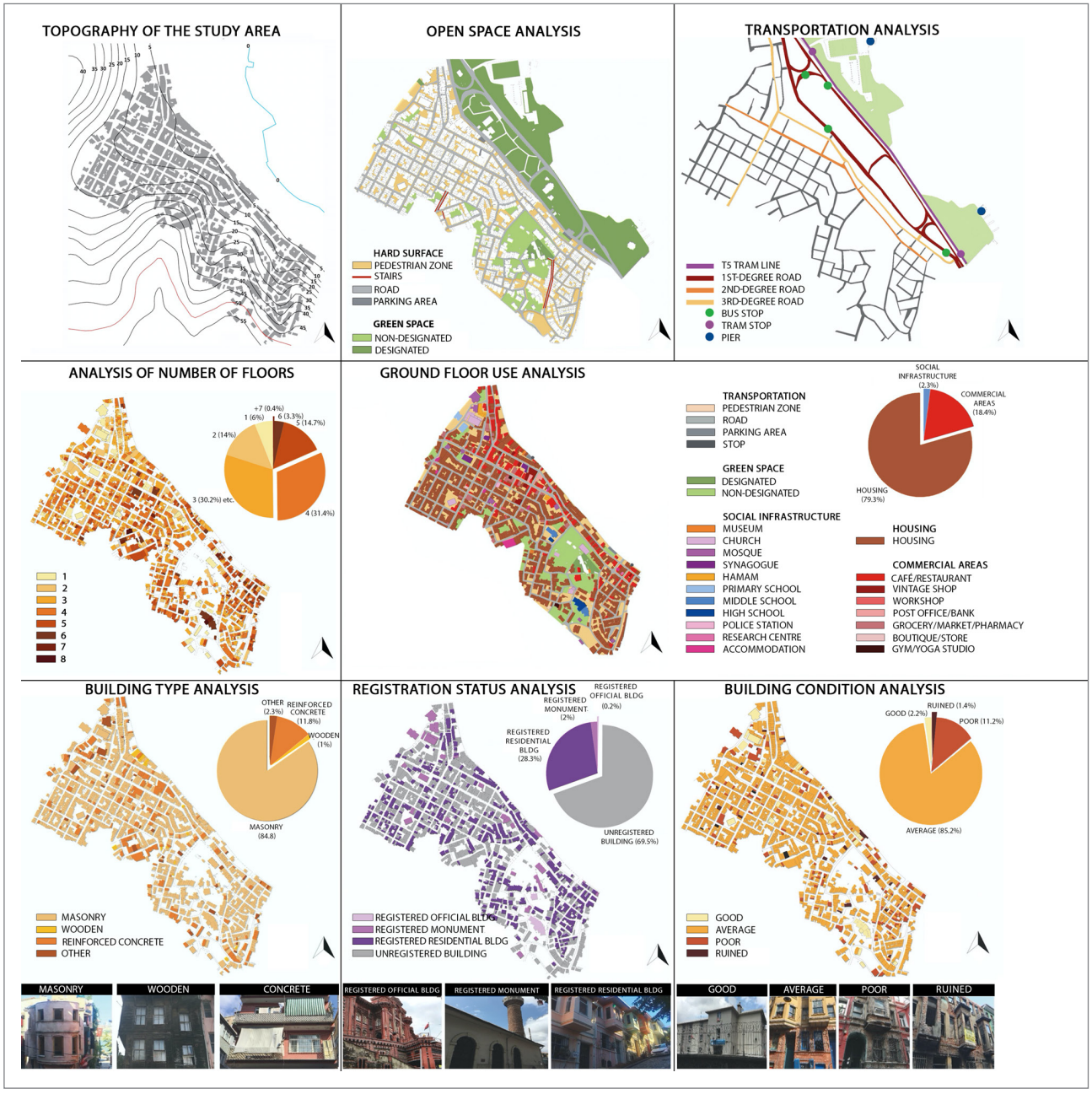

Figure 3: Physical structure analysis of the study area (illustration: authors; base map: courtesy of the Istanbul Metropolitan Municipality Department of Zoning).

4.2 Analysis of pedestrian movements, urban landmarks, and safety perception

Table 2 provides information on the participants' sex, age, and education. They entered the study area through one of three entrances accessible from the shoreline. These entrances are the gates of the historical walls that largely disappeared over time (Özbilge, 2018). Participants selected the gate (G1, G2, or G3; Figure 6) based entirely on their preferences. Participants were then given a base map of the study area, on which they could mark their path. The base map displayed all roads, stairs, and connection elements in a partially abstract and linear format, with intersection points marked as circles. Participants stopped at each intersection and selected the street they wished to proceed on, thus forming their routes. Along the route, participants identified the landmarks influencing their preferences at each intersection and rated their sense of urban safety on a Likert scale. The study lasted one hour for each participant.

Figure 4: Superposition of landmarks and streets with high attraction value (illustration; authors; base map: courtesy of the Istanbul Metropolitan Municipality Department of Zoning).

Table 2: Participants' demographic characteristics.

Characteristic	*n*	Percentage
Sex		
Women	52	47.0
Men	58	53.0
Education level		
Primary school	17	15.5
High school	35	31.8
Bachelor's	46	41.8
Master's or doctorate	12	10.9
Age (years)		
20–29	35	31.8
30–39	22	20.0
40–49	30	27.3
50–59	23	20.9

Source: authors.

4.2.1 General pedestrian and participant counts

The base maps provided by the participants were superimposed, and the number of participants passing through each street was calculated. Bidirectional crossings were counted separately. A maximum of forty-nine participants passed through a single street, and some streets were not passed through by any participant. Vodina Street, which runs parallel to the Golden Horn and serves as the main street of both the study area and Balat, was the most crowded street. In addition to calculating the number of participants, general pedestrian counts were also conducted in the study area. They were conducted concurrently with the participants' field studies between August and October 2020, on Saturdays between 2 pm and 5 pm to ensure comparability. Pedestrian flows in both directions were manually recorded by observers stationed at key points throughout the study area. Each street segment was continuously observed for one hour. During the general pedestrian counts, pedestrian flows of between 1,000 and 1,200 individuals were recorded on certain street segments. Based on the counts, it can be concluded that the number of pedestrians is high on the bazaar (Vodina Street) and Fener sides (east-southeast), and that it

Figure 5: Spaces inducing a feeling of insecurity according to spatial safety theories (illustration: authors; base map: courtesy of the Istanbul Metropolitan Municipality Department of Zoning).

is significantly lower in the western and southern parts. Both counts showed that the number of pedestrians was high on streets with a high concentration of commercial units and places of worship. Furthermore, Pearson's correlation coefficient between the general pedestrian count and the participant count was 0.92 (Figure 6).

4.2.2 Urban landmarks and orientation preferences

According to the data obtained from the field study, the factors most influencing participants' orientation preferences were primarily architectural landmarks. These were followed by commercial landmarks, the physical environment, landscape and topography, and, finally, social and cultural landmarks.

When evaluating landmarks based on architectural features, the historical buildings were the most influential architectural elements affecting orientation preferences. Building colour and form were also important factors, whereas building height and fountains were among the architectural elements least affecting orientation preferences in the study area. When evaluating landmarks related to the physical environment, landscape, and

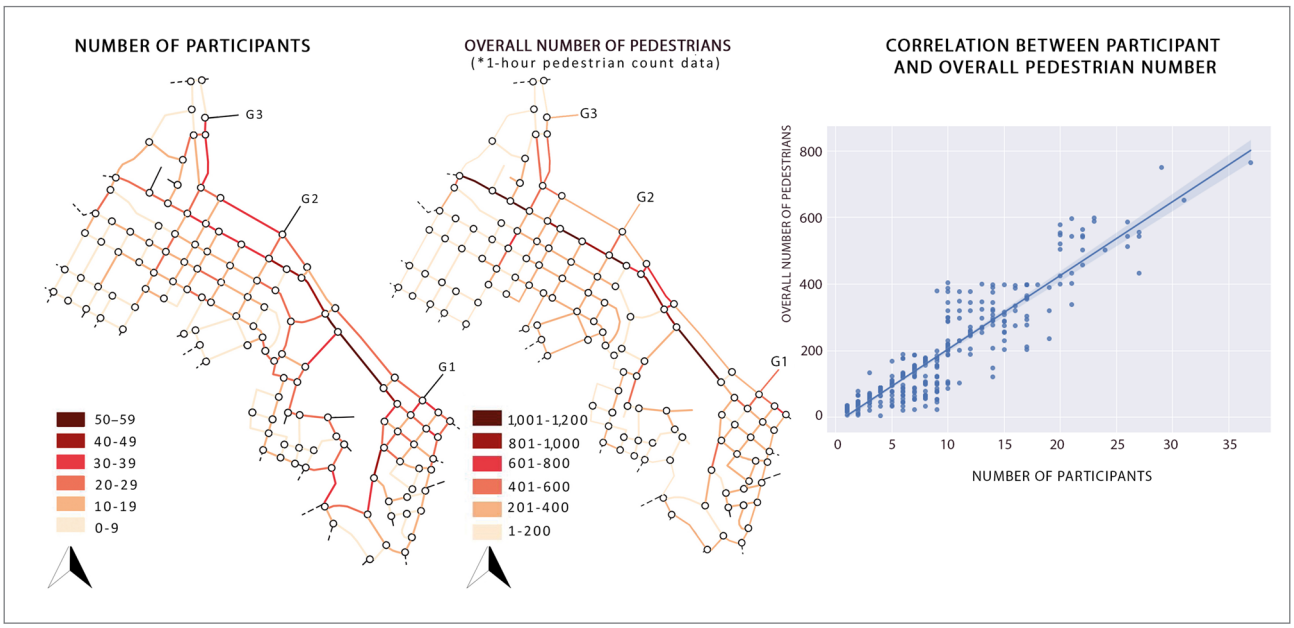

Figure 6: Participant count, general pedestrian count, and their Pearson's correlation coefficient (illustration: authors; base map: courtesy of the Istanbul Metropolitan Municipality Department of Zoning).

topography, the most influential factor was natural landscape. Artificial landscapes and topography were also significant factors within this category that notably affected orientation preferences. Street width and scenery had a lesser impact on determining orientation preferences, and factors such as curvilinearity, openness, shadow, and light had minimal influence.

In terms of landmarks related to social and cultural elements, the Fener Greek School, which stands out as one of the most magnificent and prominent structures of the Golden Horn due to its colour, size, and architectural style, had the greatest impact on orientation preferences. This was followed by graffiti, mosques, and churches within the study area. The school, police station, research centre, and sports club had a minimal effect on orientation preferences. Although there is no large hospital in the study area, outpatient clinics and dental offices were also included in this category. However, these did not significantly influence the participants' orientation preferences.

In terms of landmarks related to commercial activities, cafés and restaurants were preferred by participants, with a significant difference compared to other commercial activities. This can be attributed to the number of cafés and restaurants in the study area, their locations (density and cohesion), concepts, colourful tables and chairs, awnings, lighting, stairs, and graffiti. In addition, the participants' orientation preferences were also influenced by grocery stores, markets, pharmacies, vintage or antique shops, workshops, and boutiques in the area. However, the small-scale market in the Ayvansaray area in the west, where food and clothing are sold, had no effect on orientation preferences at all (Figure 7).

4.2.3 Perception of safety

After calculating and mapping the mean and median of the safety perception scores obtained from participants, both were overlapped, and streets with a score of 2 or more in both were identified and mapped. To prevent exceptional situations that might arise during the study, both the mean and median were used together to eliminate outliers in the dataset, and streets with a low number of participants were excluded from the evaluation. The streets with high urban safety perception scores (marked green in Figure 8) according to participants were compared with areas in which negative safety perceptions may arise according to urban safety theories due to the concentration of certain structures and elements (red circles). This comparison is important for evaluating the accuracy of subjective safety perception (Figure 8).

The streets with a high perception of safety according to participants were largely located outside the red circles in Figure 8. Most of the streets within the circles have a mean and median value below 2. In this regard, the analysis of the study area based on the urban safety theories aligns with the participants' safety perceptions, with participants feeling insecure in areas that could lead to a negative safety perception. Even though most streets with a high safety perception score are located outside the circles, some streets remain inside. This situation can be explained by the influence of individual factors and certain landmarks (Figure 8).

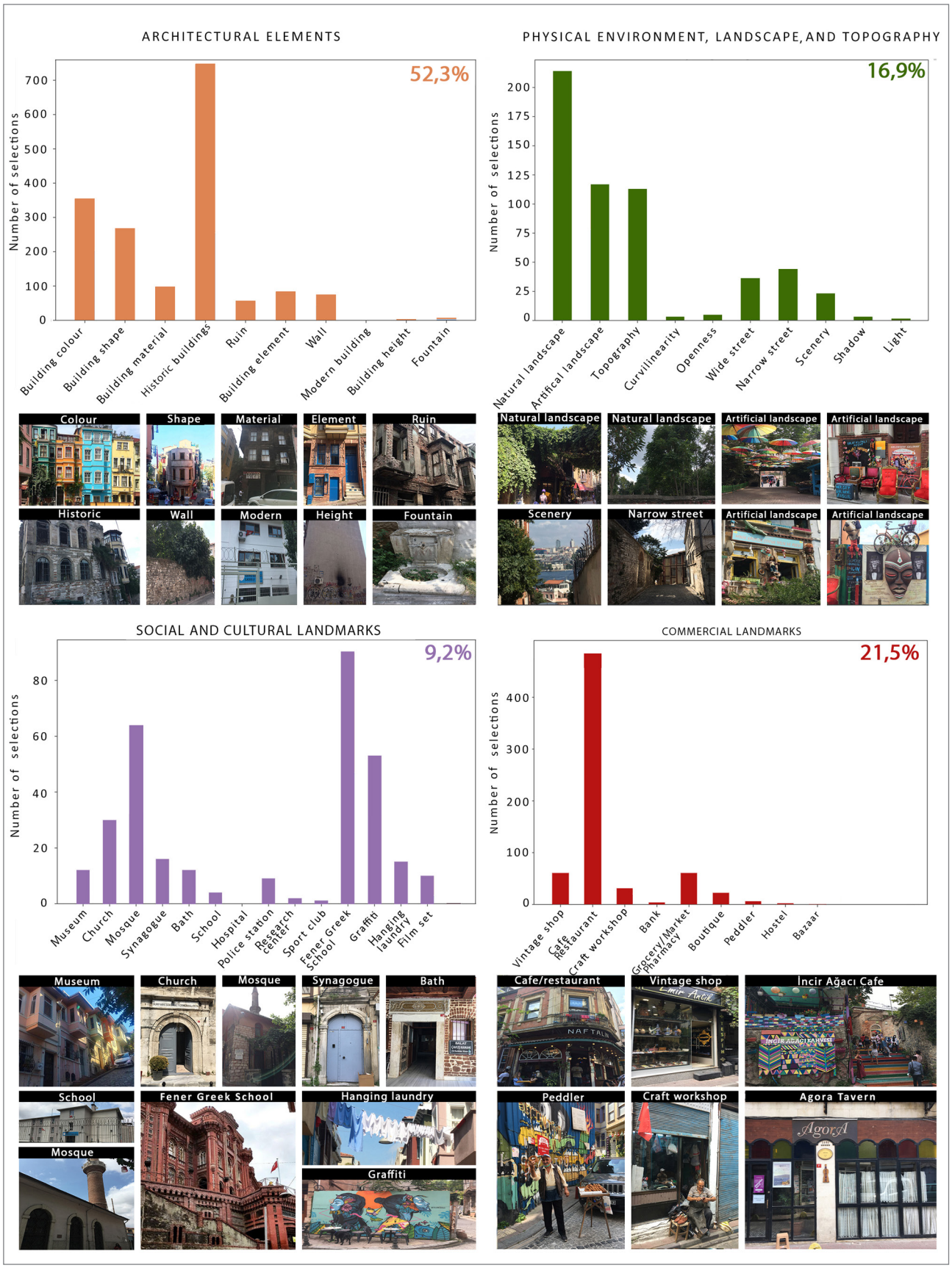

Figure 7: Number of landmarks selected (illustration and photo: authors).

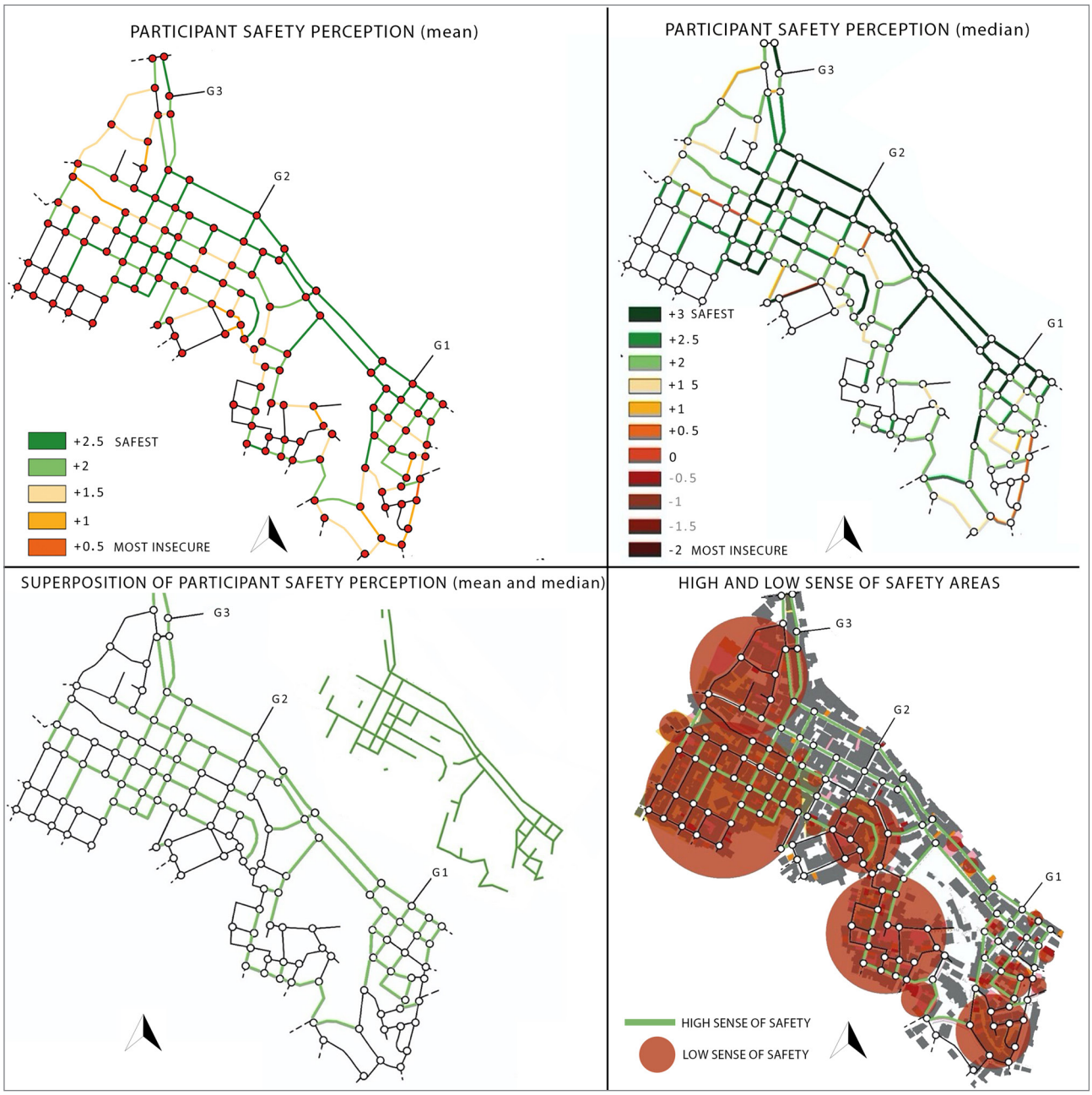

Figure 8: Areas with a high and low perception of safety (illustration: authors; base map: courtesy of the Istanbul Metropolitan Municipality Department of Zoning).

4.2.4 Evaluation of participant numbers, perceived safety, and landmarks

Streets with a high concentration of participants, high number of pedestrians, high perceptions of safety, and a strong attraction power largely overlap. These include Vodina Street, Yıldırım Street, Ayan Street, Leblebiciler Street, Lavanta Street, Kürkçü Çeşmesi Street, Hızır Çavuş Köprübaşı Street, Akgül Street, Çimen Street, Sancaktar Hill, and Mesnevihane Street. Therefore, pedestrian numbers and movement preferences are correlated with the presence, strength, and density of urban landmarks that determine the street's attraction power and contribute to a strong sense of safety (Figure 9).

The findings of the study were analysed statistically. When examining the relationship between the attraction power and the number of participants passing through a street, the average attraction power across all streets was 8.22, with a standard deviation of 6.39. The distribution of attraction power approximately follows a symmetric normal distribution. Streets with attraction power values ranging from 0 to average minus standard deviation were classified as low-attraction streets.

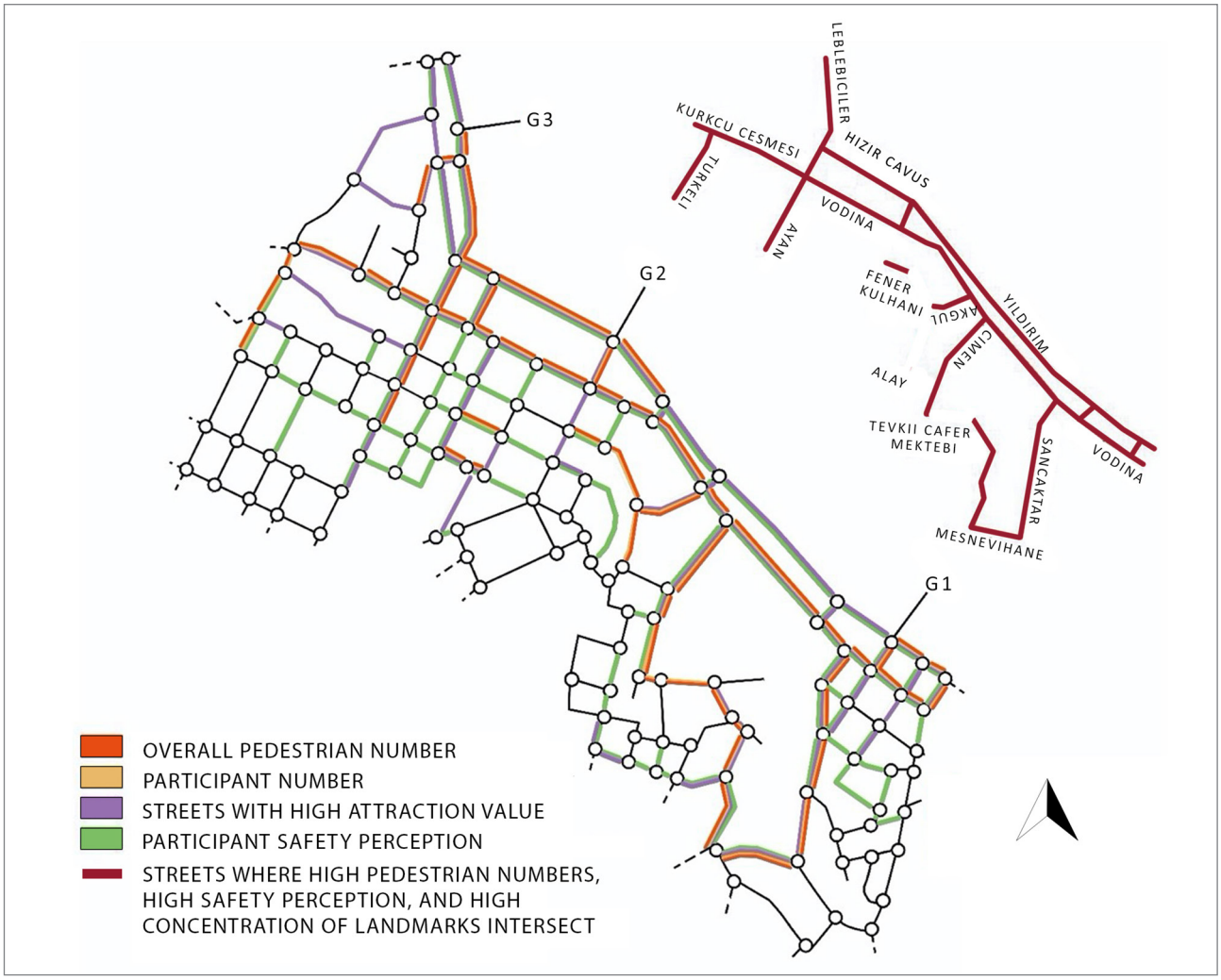

Figure 9: Superposition of streets with a high pedestrian number, high safety perceptions, and a high concentration of landmarks (illustration: authors, base map: courtesy of the Istanbul Metropolitan Municipality Department of Zoning).

Table 3: Classification of streets based on their attraction power and the corresponding average number of participants passing through them.

Attraction power range	Street attraction	Percentage	Average participants
0 to mean minus SD	Low	16	7
Mean minus SD to mean	Low to moderate	34	8
Mean to mean plus SD	Moderate to high	34	11
> Mean plus SD	High	16	13

Source: authors.

These streets constituted approximately 16% of all streets. Streets with values ranging from average minus standard deviation to average were classified as low-to-moderate–attraction streets. These streets constituted approximately 34% of all streets. Streets with attraction power values ranging from average to average plus standard deviation were classified as moderate-to-high–attraction streets. These streets accounted for approximately 34% of all streets. Streets with attraction power values greater than average plus standard deviation were classified as high-attraction streets. There were approximately 16% of such streets. The average number of participants in each class is displayed in a bar chart in Figure 10a. The average number of participants is approximately seven for low-attraction streets, eight for low-to-moderate–attraction streets, eleven for moderate-to-high–attraction streets, and thirteen for high-attraction streets. Therefore, as the street's attraction power increases, the average number of participants on it also increases (Figure 10a and Table 3).

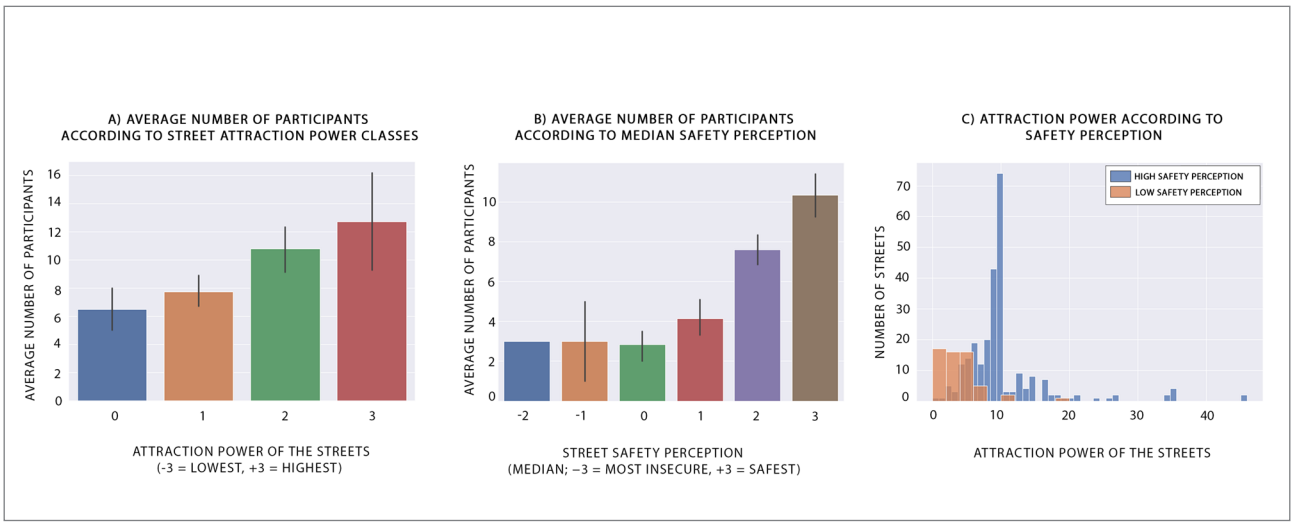

Figure 10: Relationships between street attraction power, perceived safety, and participant number: a) participant number according to attraction power classification; b) participant number according to perceived safety levels; c) attraction power according to perceived safety levels (source: authors).

When examining the relationship between perceived safety and the number of participants passing through a street, the median value of safety perception, scored between −3 and +3, was calculated for all streets, with decimal values rounded up. The average number of participants on streets in relation to their safety perception is displayed in a bar chart in Figure 10b, which shows that, as the street's safety perception value increases, the average number of participants also increases. When examining the relationship between perceived safety and attraction power, the average attraction power of streets with a high sense of safety was 10.28, and the average attraction power of streets with a low sense of safety was 3.33. This indicates that streets with high attraction power, on which urban landmarks are dense and strong, tend to have a higher sense of safety (Figure 10c).

5 Discussion

In relation to the first research question, the findings of the field study conducted indicate that streets with higher levels of attraction power tend to exhibit higher pedestrian density. Streets with high pedestrian density largely overlap with streets that have high attraction power (Figure 9). Moreover, statistical analyses revealed a meaningful increase in the average number of pedestrians as the attraction power of the street increases. For instance, whereas streets with low attraction power hosted an average of seven pedestrians, this number rose to thirteen on streets with high attraction power. These results confirm the influence of spatial attraction power on pedestrian movement and demonstrate that user behaviour is shaped by spatial variability (Figure 10a).

These findings are consistent with the theory of urban image proposed by Lynch (1960), who argued that individuals develop orientation based on the relationship they form with environmental elements. Similarly, Zacharias (2001) emphasized that pedestrian behaviour in urban areas is shaped by interactions with the physical environment and that certain spatial focal points play a determining role in directional choices. In addition, the pedestrian behaviour model developed by Kitazawa and Batty (2004) highlights a strong correlation between environmental stimuli and user preferences. In this context, the strong correlation values and orientation data obtained in this study show significant alignment with both theoretical and empirical findings in the literature. Overall, these results confirm the critical importance of high-attraction urban areas in influencing user mobility, reinforcing their relevance in urban planning and design practices.

With regard to the second research question, the study showed that architectural features are the most influential landmarks affecting users' spatial perception and orientation preferences. These are followed by commercial landmarks and those related to the physical environment, landscape, and topography. Social and cultural landmarks, on the other hand, appear to have the least impact on users' spatial perception and orientation preferences. Key elements influencing participants' orientation decisions included historic buildings, cafés and restaurants, building colours and forms, natural and artificial landscape elements, topographical features, and religious buildings.

These findings support Lynch's (1960) theory of urban image, which emphasizes that visually distinctive and functionally meaningful urban elements guide users in their wayfinding

processes. The Fener Greek School, due to its historical, symbolic, aesthetic, and social qualities, emerges as a particularly significant focal point and spatial reference. Similarly, the classification of landmarks developed by Santos-Delgado (2005) also emphasizes the role of aesthetic, economic, social, historical, and symbolic values in shaping spatial perception. Norberg-Schulz (1966) argued that spatial identity, shaped by symbolic and aesthetic environmental elements, enhances the legibility of urban spaces – an approach that directly aligns with our study, in which the Fener Greek School emerges as a prominent orientation reference. Furthermore, Bratina Jurkovič (2014) demonstrated that aesthetically rich public spaces enhance user interaction and positively influence orientation tendencies. This finding agrees with our study, in which building colour, form, and landscaping characteristics were found to have a strong impact on users' spatial orientation. In this regard, its findings are consistent with earlier findings in the literature (Köseoğlu & Önder, 2011; Zacharias, 2001). In conclusion, landmarks with high aesthetic and economic value play a critical role in directing users' spatial decision-making processes. This effect is closely related to orientation behaviours based on perception and environmental cues (Figure 7).

In reference to the third research question, the study revealed a significant and statistically strong correlation between urban landmarks and the perception of urban safety. Streets with high attraction values largely coincide with those that received high safety perception scores from participants. The maps produced by combining the mean and median values of the safety ratings assigned by participants clearly show that streets perceived as safer overlap considerably with those with a high attraction value (Figure 9). Statistical data further support this correlation. The average attraction score for streets perceived as safe by participants was 10.28, whereas it was only 3.33 for those perceived as unsafe. This difference – over threefold – demonstrates that, as the intensity and quality of landmarks increase, the perception of safety significantly rises as well (Figure 10c). Accordingly, it can be concluded that landmarks not only influence orientation and pedestrian movement but also have a direct effect on the perception of safety within the urban environment.

These findings are also highly consistent with theoretical approaches. Lynch (1960) stated that distinct and functional urban elements help users with orientation while simultaneously enhancing their sense of safety. Similarly, Santos-Delgado (2005) argued that landmarks carry social, symbolic, and aesthetic values, which help reduce spatial ambiguity and thereby foster a greater sense of safety among users. In the same vein, theories such as the broken windows theory (Wilson & Kelling, 1982), defensible space theory (Newman, 1972), and environmental stress theory (Steg et al., 2015) emphasize that environmental qualities such as aesthetic appearance, legibility, clarity, and order directly influence the perception of safety. Within this framework, landmarks contribute to a stronger sense of safety by creating an environment that is aesthetically appealing, orderly, well defined, and of high quality. In conclusion, the findings of the study confirm a strong and direct relationship between the presence and quality of urban landmarks and individuals' perception of safety in urban spaces. This underlines the importance of landmarks not only for visual appeal or wayfinding but also for fostering a psychological sense of safety in the context of urban design and planning processes.

Based on all the above, the hypothesis of the study can be confirmed. This means there is an interconnected and directly proportional relationship between landmarks within the urban space, pedestrian movements/orientations, and the sense of urban safety.

An important methodological limitation of this study is that the participant group consisted solely of individuals that had never visited the study area before. Although this approach helped eliminate prior knowledge bias and allowed a clearer focus on the impact of visual and spatial cues, it also limits the interpretation of the findings to first-time users. Individuals that are familiar with the area may perceive, navigate, and evaluate landmarks and safety differently based on prior experiences, cognitive maps, or habitual routes. Therefore, the results should be interpreted with caution, particularly in terms of their generalizability to frequent users or residents of the area. Furthermore, it should be acknowledged that participants' map-reading and marking skills, as well as their perceptions of landmarks and safety, are shaped by individual characteristics such as spatial cognition, attention levels, and environmental sensitivity. Therefore, a different group of participants may yield different outcomes. In addition, temporal and environmental conditions during data collection can influence pedestrian density and spatial perception. Variations such as weekdays versus weekends, morning versus evening hours, seasonal differences (e.g., winter months), or weather conditions (e.g., rainy or foggy days) may significantly affect how landmarks and safety are perceived. Although the study was conducted during a relatively relaxed phase of COVID-19 restrictions, residual social distancing behaviour may have influenced participants' movement patterns and route preferences. Consequently, the findings of this study should be interpreted within the context of these limitations, and future research is encouraged to include a wider range of participant profiles and environmental conditions to further validate and expand upon the current results.

6 Conclusion

This study contributes significantly to the interdisciplinary dialogue between urban planning, urban design, and environmental psychology by emphasizing the pivotal role of urban landmarks in shaping users' spatial behaviour and perception of safety. One of the primary objectives of urban planning and design is to create inclusive, high-quality public spaces, in which users can feel safe, oriented, and engaged. According to the data obtained, landmarks serve not only as visual and functional cues that guide spatial behaviour but also as elements that reinforce the psychological perception of safety. Therefore, the presence, intensity, and quality of urban landmarks should be considered a critical design parameter in planning safer, more legible, and user-oriented urban environments. Given the growing complexity of urban spaces and the rising importance of human-centred design, the integration of safety-enhancing attraction elements is a suitable direction for future spatial interventions and policy-making processes.

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Redefining pedestrian accessibility through inclusive design and community engagement

In many developing regions, inclusive pedestrian infrastructure remains insufficient to support the mobility and autonomy of individuals with disabilities. This study focuses on Jember Regency, Indonesia, where accessibility barriers such as narrow pavements, broken surfaces, and the absence of multisensory navigation tools persist. Employing a qualitative exploratory approach, the study integrates online questionnaires, focus groups, site inspections, and a literature-based benchmarking process. These mixed tools were used to identify real-world user challenges and validate local design preferences against global accessibility standards. The findings reveal two major categories of accessibility barriers: physical and structural, as well as emotional and psychosocial barriers. The results emphasize the need for context-sensitive, multisensory infrastructure features, including braille signage, audible indicators, and tactile paving. The study presents design recommendations that align global best practices with local anthropometric and cultural contexts through a glocalized framework. By embedding user voices in the design process and adapting international principles to regional realities, this research contributes both methodologically and conceptually to discourse on inclusive urban design, particularly within underrepresented contexts of the Global South.

Keywords: disability, mobility, glocalization, participatory planning, qualitative exploratory approach, urban planning, Jember Regency, Indonesia

1 Introduction

Inclusive pedestrian infrastructure is fundamental to ensuring mobility, safety, and dignity for all urban residents, particularly individuals with disabilities. In many developing countries, including Indonesia, footpaths often fail to meet inclusive standards, limiting equitable access to public spaces, education, healthcare, and employment (Kapsalis et al., 2024; Rebecchi et al., 2019). These issues are directly linked to global development priorities, especially Sustainable Development Goal 11, which emphasizes inclusive, safe, and resilient cities (Zainol et al., 2019).

The distinction between universal and inclusive design is central to this study. Universal design aims to create environments usable by all people, to the greatest extent possible, without the need for adaptation. It emphasizes standardized technical dimensions such as pathway width, tactile indicators, and visual cues (Tawfeeq, 2020; Yegulla & Sravana, 2023). In contrast, inclusive design prioritizes user participation and recognizes the diversity of experiences and capabilities, especially among marginalized groups. It emphasizes context-sensitive adaptations shaped by lived experiences (Dalton et al., 2019; Lawson et al., 2022). Universal design sets the foundational technical requirements, whereas inclusive design ensures equity, justice, and cultural responsiveness in implementation.

Despite their proven benefits, these principles have not been widely adopted, including in many parts of Indonesia. Jember Regency, ranked as the third largest regency in the province of East Java, is no exception, exhibiting inadequate pedestrian accessibility despite an estimated disability population of 10,000 to 20,000 (Marthsa & Fauziah, 2024). Issues include narrow pavements, uneven and broken surfaces, obstructions from street vendors and vehicles, and the lack of tactile or auditory guidance features, all of which severely limit safe navigation (Axelson et al., 1999). These challenges are exacerbated by the lack of community-informed design practices and limited integration of accessibility standards into local planning frameworks.

To investigate such conditions within a context underscored by limited planning data and spatial heterogeneity, this study employs a qualitative exploratory approach. Such an approach is particularly useful for uncovering complex realities in under-documented regions (Shabbir et al., 2024), though it is often critiqued for its limited generalizability and potential researcher bias (Lim, 2024). To address these concerns, the study incorporates online questionnaires, focus groups, visual site inspections, and a literature-based benchmarking process to validate localized needs against global principles and ensure that the resulting design proposals are both actionable and contextually grounded.

Among these tools, focus groups play a pivotal role by embedding user voices, specifically those of people with disabilities, into the design narrative. Rather than treating end users as passive recipients of planning outcomes, this study engages them as co-creators in identifying accessibility gaps and proposing practical improvements. Such participatory engagement enhances the relevance and usability of the findings and reflects a growing recognition of inclusive governance in urban development (Haghighi et al., 2020; Mackie et al., 2018; Ramli et al., 2023). These discussions help bridge the gap between standardized international guidelines and lived realities, revealing mismatches in physical dimensions, cultural practices, and infrastructure conditions. By treating global benchmarks as adaptable frameworks rather than rigid templates, the study offers a "glocalized" perspective that merges universal accessibility principles with the socio-anthropometric realities of the Jember Regency and similar regions in the Global South (Aghaabbasi et al., 2019; Dalton et al., 2019; Mahapatra et al., 2023; Evans, 2015; Henderson, 2018).

This study formulates inclusive pedestrian infrastructure strategies for Jember by integrating participatory user insights with international accessibility benchmarks. It demonstrates how global frameworks can be adapted to local contexts through user-centred, context-sensitive planning, strengthening the foundations of inclusive urban design, especially in settings where glocalized practices are underexplored.

2 Methodology

This study adopts a qualitative exploratory approach, supported by descriptive statistics and literature-based design reflections. It was conducted in Jember Regency, East Java, Indonesia, with the aim of exploring pedestrian accessibility issues through participatory engagement with people with disabilities and relevant stakeholders. No observation points were predetermined, instead, areas of interest were identified based on the lived experiences shared by participants during the focus groups, as shown in Figure 1.

2.1 Data collection

The research used purposive sampling. The design of the questionnaire and focus groups in this study was informed by the participatory framework introduced in the RISE programme (Francis et al., 2023), which emphasizes inclusive community engagement, representation of marginalized voices, and context-responsive sequencing. Although the thematic focus

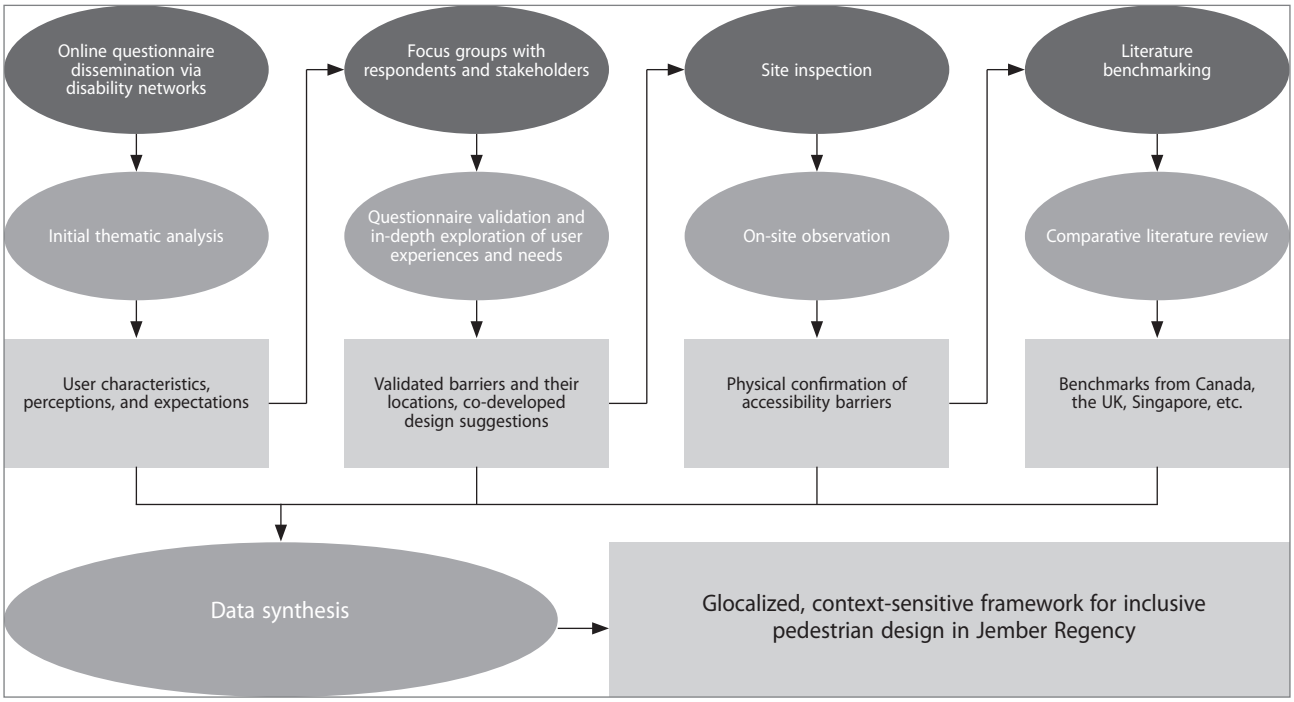

Figure 1: Study's methodological framework (illustration: authors).

differs, the core principles of engaging local disability communities through structured yet flexible methods were adopted throughout the data collection process.

Data collection began with the distribution of an online questionnaire targeted at individuals with physical, visual, or auditory disabilities residing in Jember Regency. The questionnaire was made publicly accessible through disability networks and community platforms, without a predetermined sample size. It consists of twenty-nine items divided into seventeen closed-ended and twelve open-ended questions. The instrument covered the identity (including name and phone number), socio-demographic information (including type of disability group, sex, age group, education level, monthly household expenditure range, number of household members, village/subdistrict of residence, district of residence, ethnicity, primary language used daily, occupation, and home address), functional profile (including reading ability, writing ability, and visual comprehension ability), mobility-related information (including frequency of travel within Jember regency, the mode of transportation used for travel, destination address, travel route, purpose of travel, reason for choosing transportation mode, and the use of public transportation), and user-reported perceptions of the infrastructure including open-ended questions like "How would you describe the condition of pavements in your neighbourhood?", "Have you ever avoided walking or going out due to poor pavement conditions?", "What specific difficulties do you face when using pavements (e.g., surface, signage, obstructions)?", "How safe do you feel when using pavements in your area, especially during different times of the day?", and "If pavements were to be redesigned for better inclusivity, what key features would be essential for your needs?" for gaining inclusive pedestrian design information (Distefano & Leonardi, 2023). A total of fifty responses were collected from individuals that self-identified as regular users of pedestrian infrastructure in the region. The findings from this preliminary stage were used to guide the subsequent focus groups.

Following the questionnaire, participants were invited to participate in a focus group. A total of sixty-seven individuals took part, comprising the original fifty respondents, along with additional representation from key stakeholder groups which included six participants from inclusive and special needs schools, nine affiliated with local disability associations, and two academic professionals. The focus groups were conducted three times throughout August 2024, each session lasting approximately five hours. Invitations were distributed evenly (twenty-two invitees in the first two sessions and twenty-one in the third session), with the two academic professionals participating consistently in all three sessions. Demographically, participants represented diverse profiles in terms of sex, occupation (e.g., students, teachers, informal workers), and functional abilities, including individuals with physical, visual, and cognitive impairments, and ranging in age from under seventeen to over fifty.

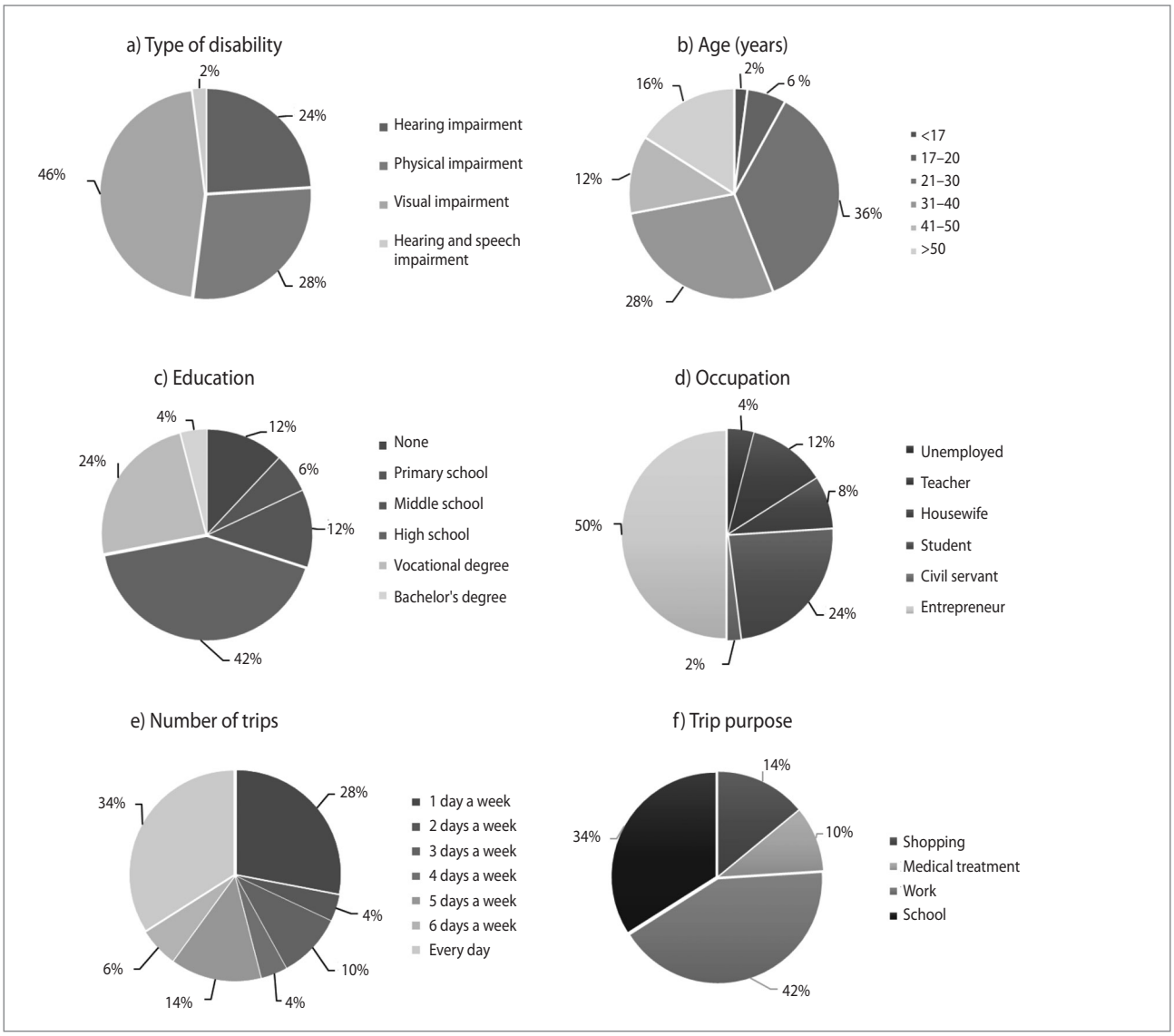

Figure 2: Sociodemographic and mobility characteristics of disability participants (n = 50; illustration: authors).

The focus groups were designed to validate the patterns identified in the questionnaires and to allow for deeper exploration of participants' lived experiences, emotional responses, and specific design suggestions (Aghaabbasi et al., 2019). Conducted in a semi-structured format, the discussion encouraged participants to share practical feedback and co-develop design-oriented ideas tailored to Jember's urban context. Each session was guided by five key open-ended prompts focusing on participants' perceptions and daily challenges regarding the existing footpaths. To support diverse modes of expression, facilitators provided both spoken explanations and, where relevant, supplementary visual materials such as figures or sketches, which were always accompanied by detailed verbal descriptions to ensure accessibility for participants with visual impairments. When appropriate, participants were encouraged to describe or sketch design ideas verbally, enabling inclusive co-creation regardless of sensory ability. All discussions were recorded and subjected to thematic analysis to extract insights that directly informed the inclusive design framework proposed in this study.

After the focus groups, the research team conducted visual site inspections at the pedestrian locations mentioned during the discussions, particularly in the Kaliwates District, a central urban area characterized by high pedestrian mobility. These follow-up observations served to confirm the physical existence of accessibility barriers such as obstructed pavements, broken paving, inadequate tactile indicators, and excessive slope gradients as previously reported during the focus groups. The visits were exploratory and observational in nature and were not intended to produce structured or measurable datasets. Their purpose was to strengthen the contextual validity of

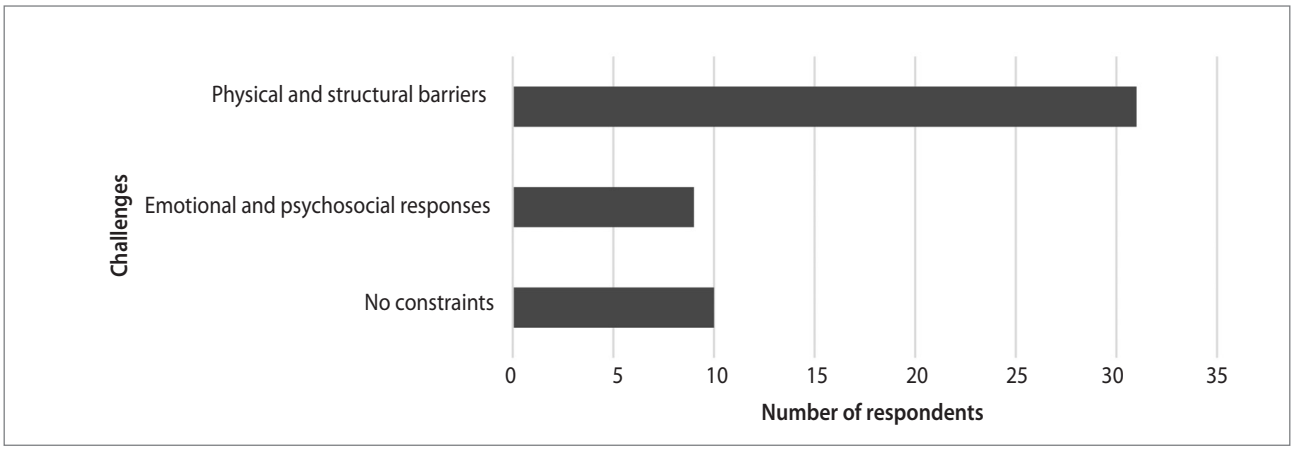

Figure 3: Self-reported pedestrian challenges among participants (illustration: authors).

participant accounts. Such qualitative field studies represent a standard approach in pedestrian infrastructure research to identify barriers and physical constraints (Atkin et al., 2015).

2.2 Data analysis and literature review

The questionnaire data, consisting of both closed and open-ended responses, were tabulated using Microsoft Excel. Descriptive statistics were used to summarize participant demographics (e.g., sex, age, type of disability) and frequencies of commonly mentioned pedestrian barriers and expectations. Figure 2 illustrates the socio-demographic and travel characteristics of the respondents. Most of participants had visual impairments, followed by physical and hearing impairments (Figure 2a). Although the questionnaire was distributed openly across diverse disability communities, a notably high response rate was observed from individuals with visual impairments. This may reflect stronger engagement from local blindness advocacy networks or a higher perceived relevance of pedestrian accessibility issues among this group. No specific targeting was applied during recruitment. Most participants were in the age group of 21–40 years (Figure 2b), indicating high engagement in work and social activities. Education-wise, many were high school graduates, with some attaining a bachelor's degree or graduate degree (Figure 2c). A notable portion worked as entrepreneurs, musicians, therapists, traders, and artisans (Figure 2d), suggesting a reliance on informal or self-directed employment structures. Regarding mobility, most participants travelled daily (Figure 2e), primarily for work or educational purposes (Figure 2f), highlighting frequent pavement use in their routines.

For open-ended questions, although the questionnaire did not provide predefined answer choices, all respondents gave brief written descriptions of the challenges they experienced or the features they desired in pedestrian infrastructure. This practice follows the principles of qualitative exploratory studies in urban disability planning, where open responses serve as a valuable entry point to understanding user perspectives (Shahraki, 2021). A formal coding process was applied. The categories were developed inductively by reviewing and organizing participant expressions during qualitative analysis of open-ended questionnaire responses, and they were subsequently presented and validated during the focus groups. In line with Stewart and Shamdasani (2015), this validation process enabled deeper insight into participants' reasoning, emotions, and contextual experiences beyond surface-level descriptions. These responses were categorized into three broad themes: physical and structural barriers (e.g., broken paving, inaccessible crosswalks), emotional and psychosocial responses (e.g., anxiety, insecurity), and no constraints.

In parallel, a comparative literature review was conducted to reflect on best practices and international accessibility standards from countries including Singapore, the United Kingdom, Canada, the United States, and Australia. The selected countries were chosen due to the availability of open-access documents and their established international reputation in inclusive pedestrian infrastructure. Rather than conducting a metric-based comparison, the study identified commonly emphasized principles such as sufficient path width, the use of tactile cues, and safe crossings, which were then used as benchmarks to evaluate the situation in Jember. This literature-informed benchmarking approach is consistent with the framework proposed by S. Liu et al. (2022), who advocate for the use of open data and consistent indicators to support accessibility assessment and urban policy development across cities.

2.3 Design recommendations

The final stage of this study involved translating user insights from the focus groups into practical, inclusive pedestrian in-

a) Narrow, broken, and uneven pavements

b) Inaccessible crossing point near a major facility

c) Obstructed footpaths due to street-level activities

Figure 4: State of pedestrian infrastructure in selected locations as observed during site inspections (photo: authors).

frastructure proposals. Conceptual sketches and design recommendations were developed based on participant preferences and validated through a comparative review of global accessibility guidelines (Atkin et al., 2015). This step bridges the lived experiences of people with disabilities in Jember, with established design principles to ensure the feasibility, safety, and sustainability of proposed interventions.

Design features prioritized in the focus groups were aligned with global best practices. This integrative design approach reflects advocated principles (Aghaabbasi et al., 2019) for achieving inclusive design by merging community inputs with globally recognized frameworks. This method is particularly relevant in contexts like Jember, where local accessibility standards are still evolving. By combining stakeholder perspectives with technical best practices, the resulting infrastructure pro-

Table 1: Preferred accessibility features expressed during the focus groups.

Accessibility feature	Number of mentions	Description
Braille	16	Used for labelling pavements, crossings, or transit stops.
Audible	11	For safe crossings; critical for the visually impaired.
Tactile	12	Directional/hazard cues on walkways and intersections.
Braille + audible	8	Combines visual-tactile labelling with auditory cues to improve wayfinding, particularly in complex or crowded environments.
Braille + tactile	4	Combines surface cues with written information to support users with both mobility and visual impairments.
Audible + tactile	2	Focused on walkways with directional sound and surface guidance.
Braille + audible + tactile	16	A multisensory solution preferred for comprehensive guidance.
Other (crossings, ramps, street furniture)	~	Generally mentioned by participants.

Source: authors.

posals are not only regulation-compliant, but also grounded in the cultural and spatial realities of their users.

3 Results

3.1 Challenges in accessing footpaths

The accessibility challenges experienced by people with disabilities in Jember Regency are primarily categorized into physical and structural barriers, emotional and psychosocial responses, and the absence of reported constraints. As shown in Figure 3, most participants identified physical and structural barriers as the most dominant issue, while a smaller group reported emotional and psychosocial responses such as anxiety or insecurity when navigating public spaces. A minority of respondents reported no constraints, typically due to the use of private transportation or the unavailability of pavements along their common routes.

Among the physical and structural barriers, respondents emphasized narrow pavements, many less than one meter wide, as well as broken, uneven, or entirely absent footpaths. These issues were further validated through site inspections after the focus groups. For example, Figure 4a shows a pavement that is both narrow and poorly maintained, posing significant safety risks, particularly for individuals with mobility or visual impairments. Another commonly reported concern was the lack of accessible design elements such as tactile paving, ramps, or properly marked crossings. In Figure 4b, a crossing near a hospital lacks tactile indicators and accessible signage, making it especially challenging for visually impaired users. Such design deficiencies were consistently highlighted in the focus groups as key contributors to unsafe pedestrian environments.

Obstructions along pavements such as street vendors, parked vehicles, electricity poles, and informal stalls were also mentioned as significant challenges. These were documented in several locations, including those in Figure 4c, where pedestrians are forced to walk on the street due to pavement encroachment. Similar patterns have been observed in other urban contexts where informal usage of pedestrian spaces limits accessibility (Owusu-Ansah et al., 2019). These barriers not only restrict physical movement, but also compromise the safety and dignity of people with disabilities.

In terms of emotional and psychosocial responses, some participants shared feelings of discomfort, fear, or a lack of confidence when navigating poorly lit or crowded pedestrian areas. Others reported avoiding pavements altogether due to their reliance on assistance or the lack of pavements in their neighbourhoods. A small number of participants reported no significant barriers to their mobility. Most either travelled with a companion or used motorized transport, eliminating the need to rely on the pedestrian infrastructure. Their responses nevertheless underscore the disparity in pavement availability and the need for inclusive infrastructure development that reaches all neighbourhoods.

3.2 Features required for accessibility

The focus groups revealed the essential types of accessibility features required to improve pedestrian mobility for people with disabilities in Jember. While the responses were not collected using a structured quantitative scale, thematic preferences were noted based on the frequency of participant mentions. These findings are presented in Table 1 and illustrate the most cited features across the different disability groups involved.

Braille facilities were frequently discussed as critical for enabling independent travel among visually impaired individuals. Participants described the need for clear braille signage at crossings, pavements, and transit stops to support spatial orientation and wayfinding. The demand for such features strongly reflects the demographic composition of the focus groups, which included a large proportion of visually impaired users. Audible facilities were highlighted for their importance at crossings and busy intersections. Participants expressed that the absence of audio cues such as crossing alarms or spoken directions often caused disorientation and increased risk when navigating traffic. These features were especially valued by participants with both visual and mobility impairments, as they provide non-visual confirmation of safe routes. Tactile paving was another frequently discussed feature, particularly for guiding movement along pavements and indicating changes in direction or hazards such as curbs and junctions. Many participants noted that tactile paths were either absent or inconsistent in Jember, contributing to the difficulty in independent navigation. Combinations of features, particularly braille paired with either audible or tactile cues, were also emphasized by participants as essential for ensuring redundancy and reliability. For example, a participant noted that when one cue fails due to noise or wear, the other can still serve its purpose, enhancing overall reliability and safety.

Even though some other needs related to accessibility were not specifically detailed by respondents, several other key elements were also mentioned, including pathways and walkways, crossings and intersections, ramps, steps, and street furniture (Dhingra, 2019; Lusk et al., 2020; Lawson et al., 2022).

3.3 Reflections and design implications

Drawing from global accessibility standards, the design of pedestrian pathways must integrate both physical and sensory features, such as tactile paving, adequate lighting, and high-contrast signage. For instance, tactile surfaces like blister paving at crossings and corduroy paving at hazard points help visually impaired individuals orient themselves and navigate safely (UK Department for Transport, 2021). Similarly, at-grade crossings require not only tactile indicators, but also appropriate lighting and visual cues to improve visibility (City of Sydney, 2019; City of Toronto, 2004). Signage designed with raised lettering, braille, and visual contrast further supports wayfinding for users with visual or cognitive impairments (Indian Roads Congress, 2012).

Beyond wayfinding tools, street furniture and landscape elements must also be carefully considered. Bollards, benches, and drainage systems should be placed to support usability without obstructing movement. For instance, bollards should be highly visible, between 1,000 to 1,400 mm in height, and spaced 1,200 mm apart to ensure accessibility for assistive devices (Irish Wheelchair Association, 2020). Rest areas should be provided every 25 to 50 meters to accommodate individuals with limited mobility. Meanwhile, plantings should be positioned to avoid hazards like low-hanging branches and root obstacles, while also enhancing the sensory and spatial experience of footpaths (Building and Construction Authority, 2007).

A comparative review of international guidelines highlights several dimensional standards that are particularly relevant to inclusive footpath design, as shown in Table 2. Minimum path widths typically range from 1,200 mm to 3,000 mm, depending on the residential density (e.g., low-density vs. high-density neighbourhoods) and location type (e.g., residential vs. commercial zones). Vertical clearance is generally set at a minimum of 2,200 mm, with some guidelines recommending up to 2,400 mm for shared footpaths to ensure safe overhead movement (City of Toronto, 2004; City of Vancouver, 2008). The width of pedestrian crossings may not be always explicitly defined, but it must be sufficient to accommodate all users. Curb ramps should follow a maximum gradient of 1:12, with some standards preferring 1:14, and a minimum ramp width of 1,200 mm. Handrails are typically recommended at 900–1,000 mm height for safety and support. Seating areas must include a clear space of up to 2,000 mm to allow wheelchair access, and bollard placements should balance protection and movement (Irish Wheelchair Association, 2020; Indian Roads Congress, 2012).

Thus, inclusive pedestrian design is not a static technical task but a dynamic process of ongoing evaluation and adaptation. The reviewed guidelines consistently emphasize attention to detail, from eliminating physical obstructions to maintaining tactile paths, and advocate for iterative improvement. Such an approach ensures that urban infrastructure evolves with user needs, promoting environments that are not only compliant, but also equitable, functional, and dignified for all (City of Vancouver, 2008; Indian Roads Congress, 2012).

3.4 Inclusive pedestrian infrastructure design

3.4.1 Footpaths

Inclusive footpaths must prioritize accessibility and comfort for all users, particularly individuals with disabilities. In accordance with the expressed needs of persons with disabilities in Jember, the use of braille, audible, and tactile facilities also requires integration on footpaths. Therefore, this design should also accommodate multisensory needs, which is especially crucial for visually impaired users. Tactile paving systems, including directional and warning blocks, guide pedestrians

Table 2: Comparative dimensions of pedestrian accessibility features based on global guidelines.

Feature	Key design guidelines						
	1*	2*	3*	4*	5*	6*	7*
Path width	Min. 1,675 mm	1,500 mm for low density, 1,800 mm for high density, min. 3,000 mm for commercial	Min. 2,000 mm	1,500 mm (acceptable), 2,000 mm (preferred)	Min. 1,800 mm	1,200 mm for footpaths, 1,800 mm for manoeuvring spaces	Min. 1,200 mm for shared pathways, min. 2,000 mm for accessible paths
Height clearance	Not specified	Not specified	Min. 2,200 mm	Min. 2,300 mm	Min. 2,200 mm	Min. 2,200 mm	Min. 2,400 mm for shared pathways
Pedestrian crossing width	Min. 3,000 mm	Not specified	Wide enough for all users	Not specified	Not specified	Not specified	Not specified
Curb ramp gradient	Max. 1:12	Max. 8%, 5%–7% preferred	1:20 to 1:12	Max. 1:12	Max. 1:12	Max. 1:12	Max. 1:14
Ramp width	1,015–1,100 mm.	Not specified	Not specified	Not specified	Not specified	1,200 mm min.	Not specified
Handrail height	900 mm (handrails on ramps and stairs)	Not specified	900–1,000 mm	900–1,000 mm	760–900 mm	800–900 mm	Min. 900 mm
Seating space	Not specified	Not specified	2,000 mm wide clear space for seating	Seating intervals no more than 50 m apart	Rest areas at regular intervals, at least 25 m apart	Not specified	Rest areas at regular intervals
Bollards	Not specified	1,000 mm min. height, 1,200 mm apart	1,000 mm min. height, 1,200 mm apart	1,000 mm min. height	1,000 mm min. height	Not specified	1,400 mm min. height, 1,200 mm apart

*Note: 1) City of Toronto (2004); 2) City of Vancouver (2008); 3) Irish Wheelchair Association (2020); 4) UK Department for Transport (2021); 5) Indian Roads Congress (2012); 6) Building and Construction Authority (2007); 7) City of Sydney (2019).

along paths and alert them to hazards like stairs or curbs. Moreover, the area of each tactile block is 300 mm × 300 mm. These paths must be continuous and consistent for safe navigation (Atkin et al., 2015). In addition to tactile paving, directions can also be given using braille signage that can be strategically installed at entrances, bus stops, and crossings. It can empower visually impaired individuals to navigate independently (Yang & Saniie, 2017). Audible facilities further enhance accessibility. Pushbuttons integrated with speaker systems can convey safety messages and navigation details (Guth et al., 2019). This multisensory approach is very useful to be applied to footpaths. A good example is inclusive bus stops, which combine tactile paving in boarding zones, braille information boards displaying bus details, and audible alerts that notify both passengers and nearby drivers, creating a secure and efficient boarding experience.

Furthermore, based on global standards, to accommodate diverse needs, footpaths should have a minimum width of 1,500 mm, sufficient for a wheelchair user and a walker to pass each other, with a recommended width of 1,800 mm to allow two wheelchair users to navigate side by side. Where there is an obstacle on the footpath (e.g., street lamps or sign posts), the absolute minimum width should be 1,000 mm, complemented by passing places 1,800 mm × 2,500 mm in size located at 30 m intervals. Objects such as chairs, stairs, lifts, and even bus stops should not be placed directly on the footpaths, but in other zones, as shown in Figure 5. In high-density areas, wider footpaths are necessary to manage pedestrian flow and minimize congestion (Jin et al., 2019). Footpaths should also have a vertical clearance of at least 2200 mm to avoid overhead obstructions. The walking surfaces should be firm, even, and slip-resistant in both wet and dry conditions. Recommended materials include porous concrete, compacted gravel, mastic asphalt, stone pavers, and reinforced lawn, all of which enhance durability, safety, and stormwater management (Moretti et al., 2019). Drainage elements, such as gully covers, should be carefully positioned to prevent tripping hazards, ensuring gaps

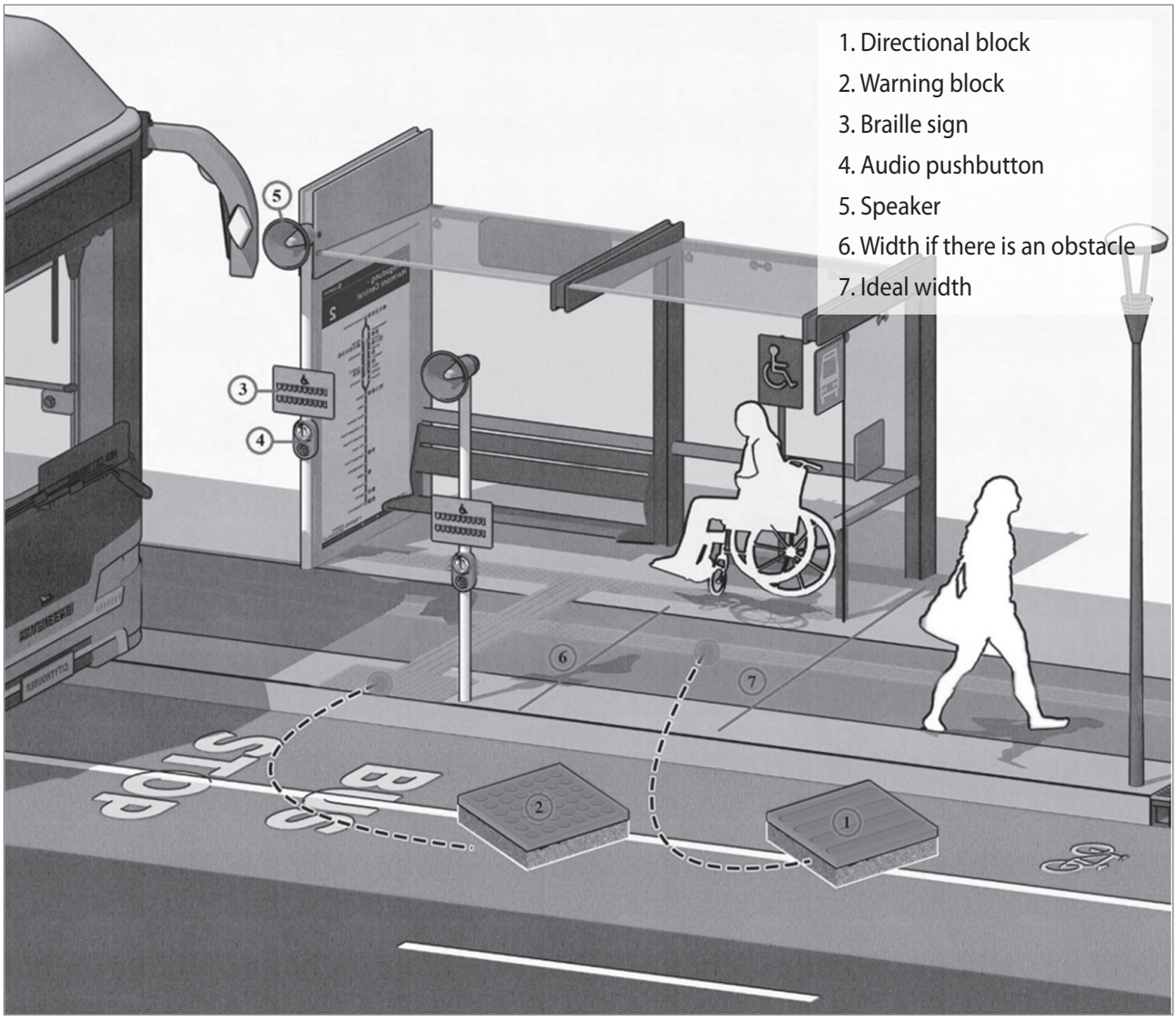

Figure 5: Inclusive bus stop design (source: City of Vancouver, 2008; UK Department for Transport, 2021; City of Sydney, 2019).

no wider than 13 mm. Temporary street works must include clear, accessible footpaths and barriers with tactile and visual markings to guarantee safe navigation for all pedestrians (M. Liu et al., 2022).

3.4.2 Crossings and intersections

Crossings and intersections are vital for pedestrian mobility and must prioritize accessibility, particularly for individuals with disabilities. To ensure inclusivity, crossings should have a minimum width of 3,000 mm, allowing safe passage for wheelchair users, individuals with mobility aids, and other pedestrians. High-contrast markings or painted white lines enhance visibility, while raised or embossed zebra crossings provide tactile feedback for visually impaired users (Lauria, 2017). Tactile paving, including blister paving at crossing entry and exit points, guides visually impaired pedestrians and warns of potential hazards.

Based on global standards, curb ramps play a critical role in ensuring smooth transitions between footpaths and pedestrian crossings. These ramps should have a preferred gradient of 1:20 and a minimum width of 1,500 mm, with tactile paving at the top and bottom and non-slip surfaces to enhance safety. Ramps on refuge islands must adhere to the same standards, ensuring seamless navigation for all users. On roads with heavy traffic, crossings should feature refuge or walkthrough islands, offering a safe waiting zone for pedestrians. These islands should have a minimum width of 1,200 mm (2,000 mm preferred) and include curb ramps or level areas to accommodate wheelchairs and prams.

Signalized intersections must incorporate multisensory features, such as accessible pedestrian signals (APS) and tactile paving (Guth et al., 2019). APS provide clear, sound-based instructions like "Walk now" or "Wait," or "Silahkan Jalan"

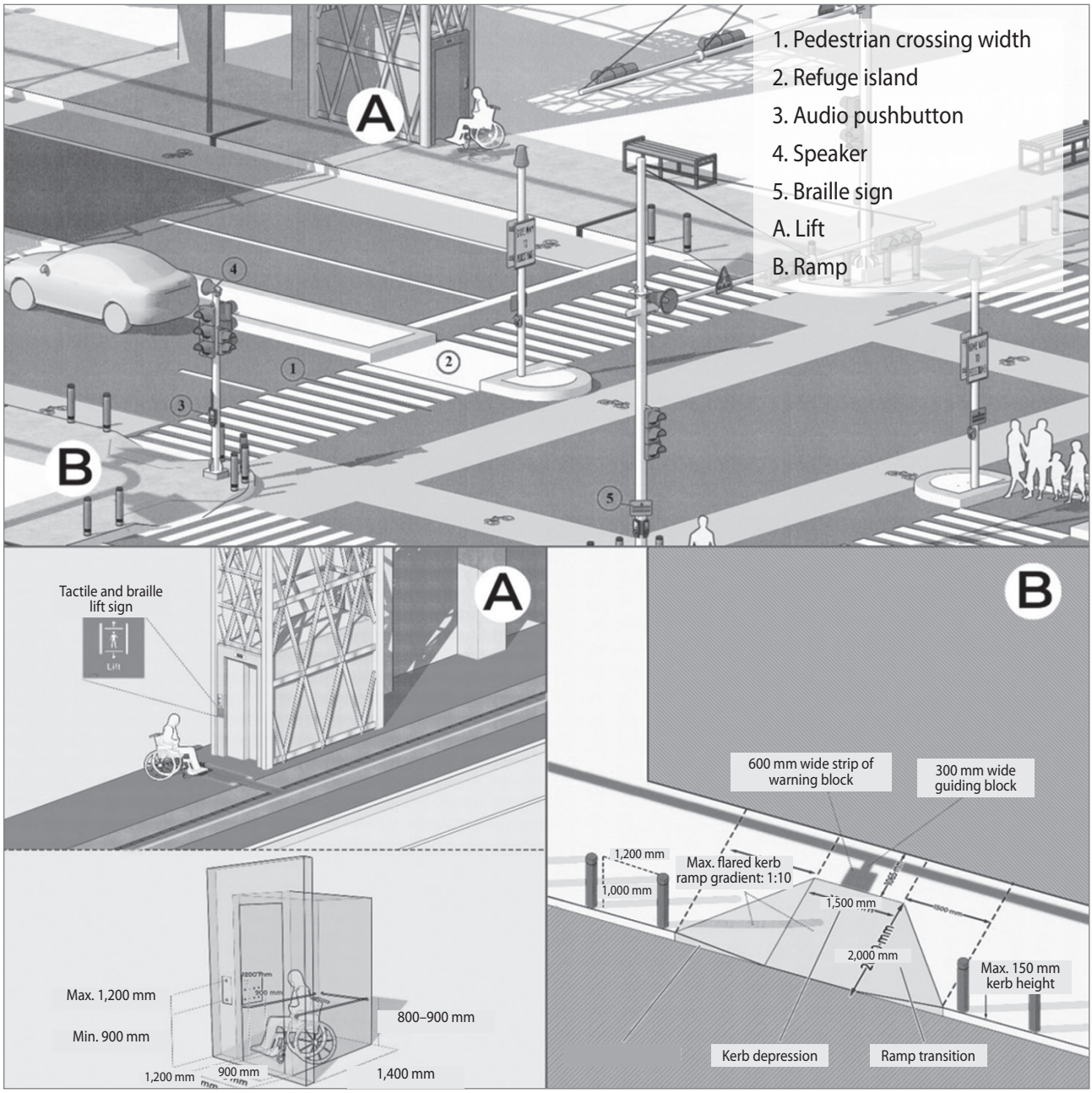

Figure 6: Inclusive crossing and intersection design with a lift (A) and ramps (B) (source: City of Toronto, 2004; Indian Roads Congress, 2012; Building and Construction Authority, 2007).

or "Mohon Tunggu" in Indonesian, with adjustable volume to suit ambient noise levels. Braille signage at crossings is equally important, providing essential navigation and safety information, such as crossing details and information on nearby landmarks to complement APS.

In areas where stairs are unavoidable, these should include consistent risers and treads, colour-contrasting nosing, and tactile warning surfaces at both ends (Pinheiro & da Silva, 2016). Handrails should be continuous on both sides, positioned at a height of 900–1,000 mm, with an additional handrail at 600 mm for added support. As an alternative to stairs, lifts should be provided, designed with internal dimensions of at least 1,200 mm × 1,400 mm to accommodate wheelchairs (Tatano & Revellini, 2023; Chocoteco et al., 2017; Kuligowski et al., 2015). These lifts must include braille buttons and accessible controls to cater to users with visual or physical impairments, as shown in Figure 5.

3.4.3 Landscape design and amenities

The landscape design of footpaths should seamlessly integrate elements that enhance functionality, safety, and inclusivity, creating an environment that serves all users, particularly individ-

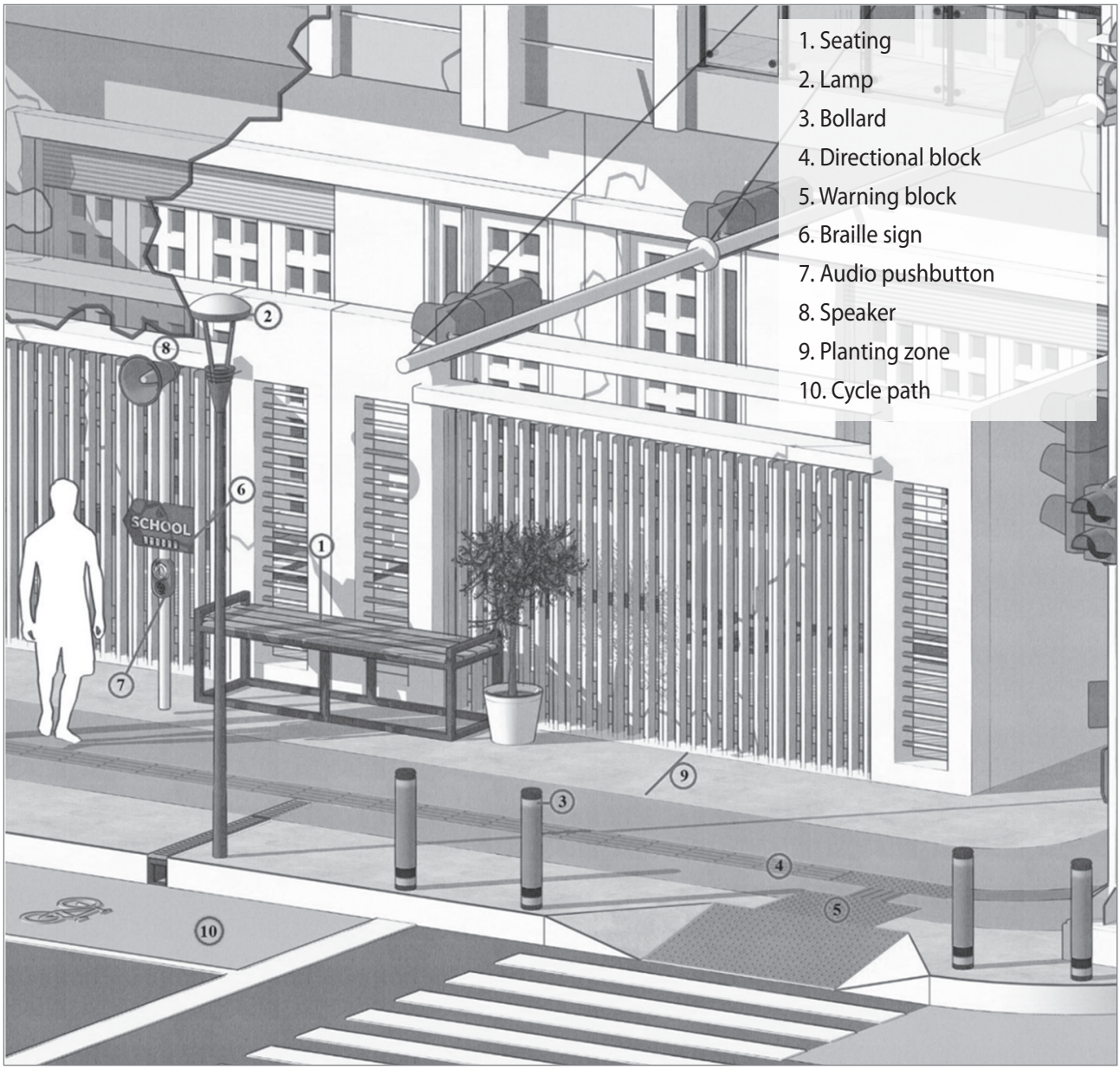

Figure 7: Inclusive landscape design and amenities concept (source: UK Department for Transport, 2021; Indian Roads Congress, 2012; City of Sydney, 2019).

uals with disabilities. Essential features, such as street furniture, planting zones, and cycle paths must be thoughtfully designed and harmonized to ensure accessibility while maintaining a visually cohesive and user-friendly space.

Street furniture, including seating, lighting, bollards, and signage, plays a pivotal role in enhancing comfort and safety. Seating should be positioned at regular intervals of 25–50 meters to provide rest points, particularly for individuals with mobility impairments (Bokolo, 2023). Seats must be placed at a height of 450 to 520 mm, backrests must be at least 455 mm high, and there must be surrounding spaces that allow for wheelchair access with a minimum clearance of 2,000 mm. Consistent and well-designed lighting ensures visibility, with a minimum intensity of 100 lux along pathways and 200 lux at critical points such as intersections, ramps, and seating areas (Rahm & Johansson, 2021), as shown in Figure 7.

To enhance pedestrian safety, bollards should be installed to restrict vehicular access while maintaining a clear walkway of at least 1,200 mm. These bollards, standing at 1,000–1,400 mm and spaced 1,200 mm apart, must be designed with high visibility and luminance contrast (Nakamura & Yoshioka, 2022). Tactile paving is an essential feature of inclusive pedestrian footpaths. However, to enhance its functionality, it can be complemented with strategically placed signage that

offers additional guidance and information. Signage should be mounted at accessible heights of 1,370–1,525 mm and designed with raised characters, high-contrast colours, braille, and even audible features to ensure accessibility for individuals with visual and other impairments (Lee, 2019).

Planting zones serve as functional and aesthetic buffers between footpaths, cycle paths, and roadways. Vegetation must be carefully selected and positioned to prevent hazards, such as low-hanging branches or protruding roots, which could endanger visually impaired users (Lusk et al., 2020). Moreover, cycling zones should complement the pedestrian environment by providing safe, dedicated paths for cyclists. These must be clearly separated from footpaths through barriers such as bollards or planting zones and should have a minimum width of 1,500 mm for one-way paths (Lawson et al., 2022).

4 Discussion

4.1 Glocalizing accessibility standards

The concept of *glocalization* in urban design stresses the need to blend universal accessibility standards with context-specific adaptations. This is particularly critical in environments such as Jember Regency, where infrastructural realities and anthropometric data differ significantly from those in high-income countries. For instance, global guidelines typically assume a minimum vertical clearance of 2,200 mm, but this figure is based on western anthropometric averages. The average male height in Indonesia is 166 cm, compared to 178–179 cm in countries such as Canada, Ireland, and the United Kingdom (World Ranking, 2022). Given this disparity, localized adjustments to spatial dimensions such as vertical clearances or furniture placements can improve usability without compromising inclusivity.

Likewise, the dimensions of mobility aids used in Indonesia differ from those specified in ISO 7176-5. Locally available wheelchairs are typically about 650 mm wide and 1,060 mm long (Yudiantyo et al., 2023), whereas international models often exceed 700 mm in width and 1,300 mm in length (Sariadji et al., 2024). These variations suggest that while international guidelines recommend a minimum footpath width of 1,500 mm, slightly smaller configurations may be sufficient in Indonesia. Tailoring these features to local norms ensures that infrastructure remains functional, cost-effective, and culturally responsive.

4.2 Participatory priorities in design

Findings from the questionnaires and focus groups confirm the high daily mobility of people with disabilities in Jember, most of whom travel for work, education, and services. This underscores the need to prioritize infrastructure improvements in frequently accessed locations such as schools, markets, government offices, and healthcare facilities. Because several participants identified themselves as teachers, students, entrepreneurs, and civil servants, inclusive access to these nodes becomes essential for equitable participation in public life. The results align with Niitamo (2024), who emphasizes the value of integrating user experience into planning processes not only as a technical input, but also as a democratic practice in inclusive urban governance.

Design features such as tactile paving, braille signage, and audible cues identified as user priorities must be deployed in a contextually meaningful way. For example, the responses obtained in the focus groups indicated that many participants preferred combinations of features to accommodate diverse sensory needs and environmental constraints. These findings validate the importance of integrating universal design principles into locally adapted practices that reflect actual use patterns, spatial habits, and daily routines.

4.3 The role of local policy and enforcement

Beyond design features, the effectiveness of pedestrian infrastructure also depends on policy implementation and regulatory enforcement. The focus groups highlighted recurrent issues such as illegal parking and the encroachment of pavements by street vendors. These barriers severely disrupt mobility for individuals with disabilities and elderly pedestrians, especially in densely populated zones. To address these challenges, local authorities must enact and enforce regulations that define acceptable use of pedestrian zones. In Indonesia, Article 101 of Law No. 8 of 2016 (State Gazette of the Republic of Indonesia, no. 69/2016) specifies that pedestrian facilities accessible to persons with disabilities, including pavements and crossings, are essential components of inclusive transport infrastructure. Mukherjee & Saha (2022) also argue that sustainability in accessibility planning is not solely about design but requires continued oversight, policy responsiveness, and community engagement to ensure that infrastructure remains inclusive over time. Consistent with the findings of Lawson et al. (2022), unregulated use of pavements compromises pedestrian safety and negates the intended benefits of physical infrastructure improvements.

Furthermore, according to Article 11, Paragraph 4b of Indonesian Law No. 2 of 2022 Concerning the Second Amendment to Law No. 38 of 2004 on Roads (State Gazette of the Republic of Indonesia, no. 17/2022), lanes designated for two-wheeled motor vehicles, pedestrians, cyclists, and/or persons with disabilities are considered part of the road utility space. In this regard, road authorities are obligated to ensure that pedestrian facilities integrate the elements of inclusivity for vulnerable groups, including persons with disabilities, the elderly, children, and pregnant women. Thus, measures such as fines for parking violations, zoning restrictions for street vendors, and awareness campaigns for shared space etiquette are critical to ensuring long-term compliance (Savolainen et al., 2011; Getu et al., 2023; Muley et al., 2025).

5 Conclusion

This study contributes to the growing discourse on inclusive urban design by exploring how global accessibility standards can be adapted to the local context of Jember Regency, Indonesia. Through an exploratory qualitative approach integrating structured questionnaires, focus groups, and literature benchmarking, the study reveals critical gaps in the pedestrian infrastructure that disproportionately affect people with disabilities. The findings underscore the importance of multisensory design features, including braille signage, audible cues, and tactile paving, and reinforce the need for appropriate spatial dimensions and regulatory enforcement to ensure safe and independent pedestrian mobility. Beyond technical compliance, accessibility is reframed here as a matter of social justice and spatial inclusion requiring participatory planning and culturally grounded adaptations of international principles. This glocalized design approach contributes to the broader discourse on inclusive urbanism, especially in low- and middle-income contexts.

Nevertheless, the study has several limitations. Participants with visual impairments were overrepresented, which may have influenced the strong emphasis on multisensory accessibility features. This was not due to recruitment bias but likely reflects varying levels of engagement across disability communities. Future research is encouraged to apply stratified or targeted sampling strategies to ensure more balanced representation. Secondly, while the use of descriptive statistics provides valuable insights, it does not fully capture the complexity of intersectional mobility experiences. Future studies should consider employing longitudinal and participatory action research approaches to evaluate the long-term usability and social acceptance of proposed features, as well as to iteratively refine inclusive design strategies. By bridging empirical evidence with international frameworks and local lived experiences, this study not only informs municipal action in Jember but also advances theoretical dialogue on inclusive urbanism, especially in underrepresented regions.

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Exploring the impact of urban green spaces on wellbeing in Prishtina, Kosovo

This article examines the impact of urban green spaces on wellbeing in Prishtina, Kosovo, using a quantitative approach. Data from 384 respondents, collected through stratified random sampling, were analysed using the principal component analysis and regression techniques. The findings reveal that quality and aesthetic appeal, and community connection are key predictors of perceived wellbeing, highlighting the importance of well-maintained visually appealing green spaces that foster social interaction. However, accessibility and availability, amenities and functionality, and safety did not show significant relationships, reflecting contextual challenges in Prishtina. Policymakers should prioritize high-quality inclusive green spaces that support social connection while addressing spatial inequalities and governance gaps to enhance urban wellbeing.

Keywords: urban green spaces, wellbeing, accessibility, community connection, Prishtina

1 Introduction

Urban green space accessibility is vital for enhancing physical and mental wellbeing, with urban planning increasingly focusing on equitable distribution. Research shows that cumulative opportunity measures – such as the number of parks, total green space area, or variety of recreational spaces within walking distance – are more strongly linked to positive health outcomes than simple proximity metrics (Chen et al., 2020; Hsu et al., 2022). However, disparities persist: wealthier communities, such as northern neighbourhoods in Atlanta or affluent districts in Berlin and Paris, often benefit from higher park density, better maintenance, and safer green spaces than lower-income or marginalized areas (Buckland & Pojani, 2022; Chen et al., 2020; Hsu et al., 2022). The "15-minute city" model promotes accessibility by ensuring that services, including green areas, are within walking or cycling distance (Liu, Kwan et al., 2022). Nonetheless, many cities in South America, Africa, and Asia face challenges in achieving equitable access – such as informal settlements in Nairobi lacking nearby public parks, or high-density districts in São Paulo and Dhaka offering limited green infrastructure per capita (Long et al., 2022).

The quality of green spaces also significantly impacts health and social wellbeing. Well-maintained spaces with vegetation, biodiversity, cleanliness, and safety promote physical activity and reduce health risks such as obesity (Daniels et al., 2018; Knobel et al., 2020; Stessens et al., 2020). High-quality green spaces regulate microclimates, support biodiversity, and improve neighbourhood satisfaction (Semeraro et al., 2021). Socially, they encourage interaction and cohesion (Barrera et al., 2016). Planning assessments of vegetation cover and spatial distribution support equitable green space development (Zhang et al., 2017; Giannico et al., 2021). Whereas links between the quality of green spaces and health require further study, culturally responsive designs such as varied soundscapes may enhance usability (Nguyen et al., 2021).

Green spaces also serve essential ecological and social functions. They mitigate heat, filter air pollutants, and support biodiversity (Kabisch et al., 2017; Daniels et al., 2018). As part of blue–green infrastructure, they help manage urban water and reduce flood risks (Mu et al., 2020). They facilitate physical activity, social interaction, and psychological restoration, which are key to urban liveability (Lee et al., 2015). Multifunctional, inclusive planning is vital in dense cities with limited space (Belmeziti et al., 2018; Hansen et al., 2017).

This study is distinct in centring on Prishtina, a fast-growing capital city in a post-communist context with acute green space shortages and planning limitations. Kosovo's urban areas, particularly those in Prishtina, face persistent deficits in both the quantity and quality of green infrastructure. Prishtina provides only around 2.9 m^2 of public green space per capita, which is far below the WHO's recommendation of 9 m^2, leaving many residents without adequate access to nature (UN-Habitat, 2019, 2020). In Prishtina, the main urban green spaces include Gërmia Park, City Park, Ulpiana Park, Dardania Park, and Tauk Bashqe Park. These parks vary in size, biodiversity, and accessibility. Gërmia Park is the largest and has the greatest biodiversity, whereas others such as Dardania Park are smaller and centrally located, but lack diversity and amenities (Balaj et al., 2022). There are also smaller green spaces around the city such as that in the Përmendorja area or the Bregu i Diellit neighbourhood (Figures 1 and 2).

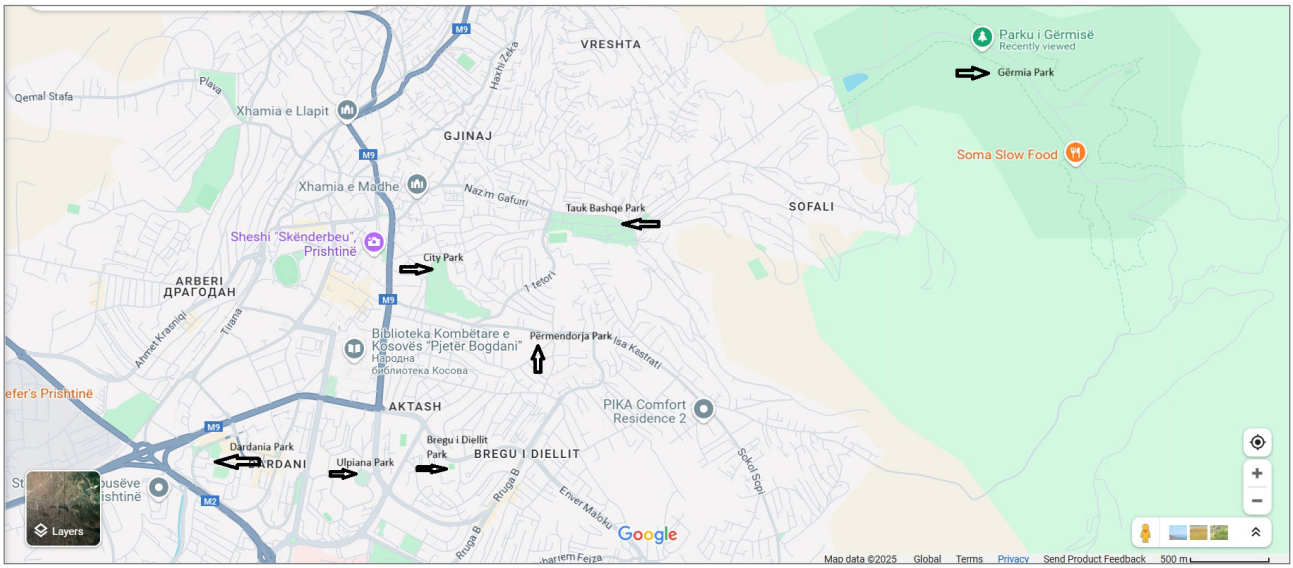

Figure 1: Location of urban green spaces studied in Prishtina (source: Google Maps).

Figure 2: a) Gërmia Park; b) City Park; (c) Ulpiana Park; d) Dardania Park; e) Tauk Bashqe Park; f) Bregu i Diellit Park; g) Përmendorja Park (photo: Hana Hoxha).

Available green spaces are unevenly distributed, often poorly maintained, and under pressure from unregulated urban development (Balaj et al., 2022). Environmental equity concerns are also rising; for example, Gërmia Park on Prishtina's periphery provides a large recreational area, but it remains inaccessible to many residents of dense inner-city neighbourhoods, which lack walkable alternatives (Kosovo Team UN, 2021; Open Government Partnership, 2024). These inequities are compounded by unregulated urban expansion, limited municipal planning capacity, and a lack of green-oriented zoning policies (Prishtina Insight, 2019; D4D, 2022). The effects are visible in rising urban heat exposure, increased air pollution, and limited opportunities for physical and social engagement. Although strategic efforts such as the Prishtina Green City Action Plan have acknowledged these challenges (City of Pristina, 2021), empirical evidence on how residents experience urban green spaces remains scarce. This study addresses that gap by assessing how dimensions such as accessibility, quality, functionality, safety, and community connection influence perceived wellbeing and health in Prishtina, offering policy-relevant insights for more equitable and resilient urban planning in Kosovo and comparable post-communist countries. These structural issues are reflected in how residents perceive and use green spaces, providing the basis for this study.

By linking locally grounded insights to broader debates on urban equity, health, and resilience, the study contributes original, policy-relevant insights for cities facing similar developmental and environmental constraints. Based on the gaps identified in the literature and the urban dynamics of Prishtina, it investigates the following research question: How do multiple dimensions of urban green space – including accessibility and availability, quality and aesthetic appeal, amenities and functionality, safety, and community connection – affect residents' perceived wellbeing and health in Prishtina?

To address this question, the study formulates and empirically tests five hypotheses:

- H1: Accessibility and availability of urban green spaces positively influence perceived wellbeing and health.
- H2: Quality and aesthetic appeal of urban green spaces positively influence perceived wellbeing and health.
- H3: Amenities and functionality of urban green spaces positively influence perceived wellbeing and health.
- H4: Safety of urban green spaces positively influences perceived wellbeing and health.
- H5: Community connection fostered by urban green spaces positively influences perceived wellbeing and health.

1.1 Literature review

To systematically address the research question posed, the review is organized according to five hypotheses, corresponding to these dimensions, with a sixth section discussing broader health outcomes. Recent empirical studies from the Western Balkans provide a comparative lens to contextualize Prishtina's urban green space challenges.

Accessibility and availability are foundational to ensuring that urban green spaces serve all populations equitably. Ekkel and de Vries (2017) advocate for cumulative accessibility indicators, which take the total accessible green space into account and are more predictive of health benefits than simple proximity. Wang et al. (2015) underline the importance of both physical and subjective access factors: walkability, connectivity, safety perceptions, and cultural similarity. Socioeconomic disparities persist in green space provision across cities, with disadvantaged areas, such as parts of Kowloon or inner-city neighbourhoods around the globe, often facing limited access (Almohamad et al., 2018; Wei et al., 2022; Liu et al., 2022). Similar patterns appear in Sarajevo, where Tatlić et al. (2024) found public green space availability as low as 1.4 m^2 per capita, highlighting spatial inequalities despite overall high green coverage. Novi Sad shows similar challenges, with green infrastructure better represented in outer districts, whereas the city centre lacks functional and accessible spaces (Jevtić et al., 2021).

In terms of quality and aesthetic appeal, Stessens et al. (2020), Veinberga and Zigmunde (2019), and Tan et al. (2019) demonstrate that cleanliness, tranquillity, and landscaping are vital for increasing the number of visits and perceived satisfaction. Subiza-Pérez et al. (2019) highlight that multisensory richness (i.e., sound, texture, and seasonal changes) increases emotional attachment to green spaces. Sarajevo's forest parks dominate in size but are poorly maintained and often inaccessible (Tatlić et al., 2024), whereas in Belgrade visually appealing parks have been correlated with reduced stress and lower medication use (Vujčić et al., 2018). In Prishtina, Balaj et al. (2022) found that Gërmiaamong the four major parks (Gërmia, City Park, Tauk Bashqe, and Dardania) only Gërmia Park had a moderate diversity index (above 1.5), whereas Dardania Park scored only 0.68, indicating limited ecological richness and potentially reduced user satisfaction. Their study emphasizes that quality deficits in species diversity and plant composition affect both the aesthetic and ecological performance of parks in the city. These examples highlight how maintenance and perceptual quality mediate usage and mental health outcomes.

Functionality and amenities are equally critical. D'yachkova and Mikhailov (2023) stress that seating, lighting, and clear pathways are essential for inclusivity. Technological upgrades through urban facility management further enhance functionality and comfort (Abdelkarim et al., 2023). In Sarajevo, Tatlić et al. (2024) report that most urban green space types fall under the limited access category, with few community-specific functions or adaptable features, limiting their potential as multifunctional, inclusive spaces. Balaj et al. (2022) point to Prishtina's green areas as lacking adaptive infrastructure that accommodates the needs of families, the elderly, or persons with disabilities. Their findings highlight that functional limitations such as absence of playgrounds, accessible paths, and rest areas reduce the potential of urban parks to act as inclusive and community-oriented spaces. Prishtina's challenges echo these issues, with few amenities integrated in high-density areas (Bejtullahu, 2015).

Safety perceptions, often shaped by lighting, visibility, and environmental upkeep, also influence who uses green spaces. As Wang et al. (2015) and Tan et al. (2019) argue, safety concerns are magnified in vulnerable demographics. Integration of smart surveillance, lighting, and infrastructure (Abdelkarim et al., 2023) may address these deficits. Although Balkan literature tends to treat safety indirectly, Šuklje Erjavec et al. (2022) and Kozamernik et al. (2024) highlight successful models in Slovenia, where planning and public health sectors collaborate to create safer, inclusive parks. Balaj et al. (2022) do not directly address safety infrastructure in Prishtina's green spaces, but their findings about the dominance of decorative, rather than functional, vegetation suggest a preference for an aesthetic over practical design approach, which may neglect basic user safety concerns. This gap underscores the need for local empirical data on safety perceptions to inform inclusive park planning in Prishtina.

Community connection is a key outcome and driver of urban green space value. According to Kabisch et al. (2015) and Qin et al. (2021), parks that host events and informal interaction build trust and civic pride. Ward Thompson et al. (2016) and Rugel et al. (2019) link frequent urban green space use with reduced social isolation. In the post-communist context, Starczewski et al. (2024) find that well-maintained green spaces in high-density housing estates support ecological cohesion and urban branding. However, Noszczyk et al. (2023) caution that urban growth and infrastructure expansion continue to threaten green corridors in Polish cities, a trend that parallels the uncoordinated sprawl seen in Prishtina (Mejzini, 2015; Tahiri & Momirski, 2019). Balaj et al. (2022) underscore that, whereas parks such as City Park have historical and social significance for Prishtina's residents, their community-enhancing potential is limited by uneven vegetation distribution, aging infrastructure, and lack of participatory planning. The authors argue that future design should integrate more inclusive and culturally resonant green elements to promote community interaction and wellbeing.

Beyond the five dimensions, the health benefits of green space exposure are well documented. Studies link green space availability to lower stress, anxiety, and depression (Callaghan et al., 2020; Kondo et al., 2018; Rugel et al., 2019). Urban green spaces also support cardiovascular health and physical activity, while helping mitigate urban heat and pollution (Jennings & Bamkole, 2019; Kabisch, 2019; Dadvand et al., 2016; Dadvand & Nieuwenhuijsen, 2018). Balaj et al. (2022) provide initial local evidence supporting these claims, noting that biodiversity-rich parks such as Gërmia promote psychological restoration and respiratory health, especially in contrast to heavily urbanized zones such as Dardania. However, their study also reveals a lack of structured health-monitoring tools or longitudinal data, which limits understanding of the long-term health impacts of urban green spaces in Prishtina. Despite their known benefits, many cities, including Prishtina, lack longitudinal evidence to fully quantify these impacts in local contexts – an important gap this study aims to address.

Spatial conditions are critical in determining how effectively urban green spaces promote human wellbeing. Key factors such as accessibility, proximity, scale, exposure, quality, and perceived characteristics significantly influence whether green spaces are used and whether they contribute to psychological restoration and public health. Numerous studies confirm that the optimal benefits of green spaces emerge when they are located within 30 to 1,000 m of users, with both proximity and cumulative availability showing a non-linear, inverted *U*-shaped relationship to life satisfaction (Bertram & Rehdanz, 2015; Labib et al., 2019; Jia et al., 2023). Finer spatial assessments, using neighbourhood-scale or multi-scale exposure frameworks, allow more accurate evaluations of how green space access relates to health outcomes (Labib et al., 2019; Jia et al., 2023). Equally important are qualitative aspects: natural features, biodiversity, soundscapes, perceived safety, and overall usability shape people's emotional and restorative responses to green environments (Fisher et al., 2020; Xu et al., 2025). The presence of amenities and thoughtful, inclusive design improves not only aesthetic appeal but also practical use for diverse urban populations (Lee et al., 2015; Russo, 2024).

Despite the clarity of these findings in the international literature, there remains a significant empirical gap in research focused on Prishtina. Even though Balaj et al. (2022) offer foundational data on vegetation diversity and spatial distribution in four of Prishtina's key parks, their analysis primarily focuses on the ecological perspective and does not comprehensively

address spatial accessibility, perceived quality, or health-related benefits. The city continues to lack integrative, evidence-based assessments that explore how spatial conditions, functional design, and user perceptions collectively shape wellbeing. Moreover, in contrast to cities such as Ljubljana, Belgrade, and Sarajevo, where recent studies have emphasized participatory planning, community engagement, and equitable infrastructure, the planning and policy environment in Prishtina remains underdeveloped. Lessons from these comparative contexts underscore the value of cross-sector collaboration and inclusive design, both of which are largely absent from green space development in Kosovo. Therefore, this study contributes a necessary, multidimensional, and user-centred analysis of how green space accessibility, aesthetics, functionality, safety, and community connection influence perceived health and wellbeing in Prishtina, addressing a key gap in both the local and regional literature and offering broader implications for equitable urban planning in post-communist settings.

2 Methodology

2.1 Research design

This study employs a quantitative correlational research design to explore the relationships between multiple dimensions of urban green space (i.e., accessibility, quality, amenities, safety, and community connection) and their perceived impact on resident wellbeing in Prishtina. Principal component analysis was used to examine the internal structure of the survey instrument and identify underlying components. Subsequently, multiple regression analysis was conducted to determine the dimensions of green space use that most significantly predict perceived health and wellbeing benefits.

The study uses a two-section questionnaire, following Grum and Temeljotov Salaj (2011). The first section includes demographic questions related to age, sex, and education. The second section assesses accessibility, quality, amenities, safety, community connection, and perceptions about the wellbeing and health impact of green spaces. The questionnaire comprises multiple sections, each with eight items measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). These sections assess various aspects of green spaces, including accessibility, quality, amenities, and their impact on personal wellbeing. The statements used in the questionnaire were developed by the authors based on the spatial conditions identified in the literature review and the hypotheses formulated at the beginning of the study.

The accessibility and availability section evaluates the ease of access to green spaces and their distribution across the city. This includes items related to proximity to green spaces, the presence of multiple green spaces near residences, and whether these spaces are large enough to accommodate visitors. It also assesses the availability of public transportation and the presence of clear and safe walking paths.

The quality and aesthetic appeal section explores the condition, cleanliness, and visual appeal of green spaces. It evaluates maintenance, absence of litter and pollutants, and the health of trees and other plants. Moreover, it addresses whether green spaces provide a serene environment, have attractive landscape designs, and benefit from seasonal beauty. Items also assess the role of green spaces in enhancing the city's appearance.

The amenities and functionality section assesses the availability and functionality of facilities within green spaces, such as seating, activity areas (e.g., playgrounds and sports fields), and restrooms. It also examines the provision of clean drinking water, safety of amenities, sufficient lighting, clear pathways, and shaded areas for relaxation.

The wellbeing and health impact section examines how green spaces contribute to respondents' physical and mental health, stress reduction, community connection, and overall quality of life. It evaluates whether spending time in green spaces improves mood, clears the mind, and increases satisfaction with the living environment.

2.2 Sampling method

This study employs stratified random sampling to ensure the representativeness of Prishtina's population eighteen to sixty-five years old, as suggested by Jonker and Pennink (2010). The sample consisted of 384 respondents, distributed proportionally by sex, age, and education to match the city's population structure based on the 2024 census by the Kosovo Agency of Statistics. To achieve proportional representation, stratified quotas were applied during data collection, and respondent recruitment was adjusted in real time based on age, sex, and education group responses. This quota-based approach ensured that the final sample closely mirrored the population structure. Table 1 provides a breakdown of the sample structure. For example, men constitute 50.17% of the sample, reflecting their proportional representation in the population. Similarly, education levels from primary school to master's degree or doctorate were proportionally included.

The age groups from eighteen to sixty-five correspond to 68% of Prishtina's total population. Age groups younger than eighteen and those between sixty-five and eighty-five were excluded from the sample. In terms of education status, the active population in the eighteen to sixty-five age group was considered

Table 1: Structure of respondents in Prishtina.

Category	Respondents, *n* (%)	Prishtina population (18–65), *n* (%)
Sex		
Male	193 (50.17)	72,085 (50.17)
Female	191 (49.83)	71,598 (49.83)
Total	384 (100.00)	143,683 (100.00)
Age (years)		
18–34	157 (41.00)	59,076 (41.00)
35–55	169 (44.00)	62,650 (44.00)
56–65	58 (15.00)	21,957 (15.00)
Total	384 (100.00)	143,683 (100.00)
Education		
Primary school	72 (19.00)	27,300 (19.00)
Secondary school	153 (40.00)	57,473 (40.00)
Bachelor's degree	139 (36.00)	51,725 (36.00)
Master's or doctorate	20 (5.00)	7,185 (5.00)
Total	384 (100.00)	143,683 (100.00)

Source: Kosovo Agency of Statistics (2024).

for calculating the number of respondents in each stratum. The age group above sixty-five was not included in the final sample due to limited digital accessibility and low representation on Facebook (Hallakate, 2020), which was the primary data collection platform. Even though we recognize that older adults often face unique barriers to green space access, their exclusion was the result of a methodological constraint tied to the digital format of the survey.

Given that Prishtina's total population in the eighteen to sixty-five age group is 143,683 (Kosovo Agency of Statistics, 2024), the sample size of 384 respondents achieves a 5% margin of error, an acceptable level in the social sciences, which ranges from 3% to 7%, as suggested by Cochran (1977).

Respondents were recruited via Facebook, leveraging its significant user base in Kosovo and Prishtina. With 86% of Prishtina's population using Facebook (Hallakate, 2020), the web-based survey ensured accessibility and representativeness. The response rate was 85%, yielding 384 completed surveys.

2.3 Research procedure

The questionnaire was distributed online via Google Forms. Respondents received an introduction explaining the study's purpose, survey instructions, and confidentiality assurances. The web-based approach was chosen for its convenience, wide reach, and efficiency, as noted by Evans and Mathur (2005). Kosovo's 96% internet penetration rate (Kosovo ICT Association, 2019) ensures the sample thus obtained is representative of the general population.

2.4 Statistical analysis

IBM SPSS 23.0 was used for data analysis. Principal component analysis (PCA) identified latent components within the questionnaire, using promax oblique rotation to account for correlated components. PCA transformed items into components explaining the highest proportion of variance. Multiple regression analysis evaluated predictors of wellbeing and health perceptions, identifying significant relationships between accessibility, quality, amenities, safety, community connection, and perception of wellbeing and health related to green spaces. This methodology provides valuable insights into the accessibility, quality, and impact of green spaces on residents' wellbeing in Prishtina. A conceptual model illustrating the hypothesized relationships between green space dimensions (accessibility, quality, amenities, safety, and community connection) and perceived wellbeing and health was developed and used to guide the regression analysis.

3 Results

To begin the quantitative study, a reliability analysis was conducted in IBM SPSS 23.0 to evaluate the consistency of twenty-eight variables related to accessibility and availability, quality and aesthetic appeal, and amenities and functionality of green spaces, safety, community connection, and perceptions about wellbeing and health impact. First, a sampling adequacy test and Bartlett's test of sphericity were performed. The KMO value of 0.872 demonstrates that the chosen sample was highly sufficient. Bastič (2006) suggests that a KMO value exceeding

Table 2: Component loadings of the questionnaire.

Item	Component					
	1	2	3	4	5	6
I live close enough to a green space to access it easily.	.510	–.172	–.422	.144	.369	–.107
There are multiple green spaces near my residence.	.590	–.247	–.533	.051	.297	–.016
Green spaces in my area are large enough to accommodate many visitors.	.590	–.392	–.402	.158	.234	–.084
I feel that green spaces are available in various parts of the city.	.587	–.262	–.027	–.090	–.282	.337
I can visit green spaces any time without issues like limited hours or closures.	.540	–.361	–.317	–.024	–.231	.128
It is easy for me to get to a green space without spending much time.	.568	–.377	–.479	–.026	.084	.079
Public transportation options make it convenient to reach green spaces.	.562	–.158	.026	–.145	–.278	.473
There are clear and safe walking paths leading to green spaces.	.506	–.404	.024	–.059	–.314	.322
The green spaces I visit are well maintained.	.324	–.586	.141	–.066	–.350	–.324
Green spaces in my area are free from litter and pollutants.	–.329	.544	.067	.035	–.252	–.489
The trees and other plants in green spaces appear healthy and well cared for.	–.156	.624	.093	–.046	–.279	–.380
Green spaces offer a visually pleasing environment that feels natural.	.273	.620	.065	–.481	.008	–.216
I find the landscape design and layout of green spaces attractive.	.377	.503	.060	–.586	.153	–.030
The seasonal changes in green spaces add to their beauty.	.431	.507	.024	–.432	.036	–.007
The green spaces are sufficiently quiet and offer an escape from city noise.	.477	.566	.067	–.259	.212	.023
I feel that green spaces contribute positively to the city's appearance.	.391	.620	–.192	–.088	.004	.203
There are enough seating areas in green spaces for everyone to use.	143.	–.243	550.	.425	.181	.206
The green spaces have designated areas for specific activities (e.g., playgrounds and sports fields).	.039.	–.191	540	.384	.244	.232
I feel that there are adequate restrooms available.	.235	–.294	.502	.104	.316	–.027
I feel safe using amenities in green spaces, such as playgrounds or benches.	.106	–.171	.048	.564	.183	–.028
There is sufficient lighting for visits during early morning or evening.	078	–.311	.030	.519.	.133	.045
Spending time in green spaces helps me clear my mind and relax.	049	.662	–.069	.198	–.052	.578.
I feel less stressed after visiting green spaces.	–.077	.642	.040	.299	–.041	.562
My mental wellbeing has benefited from the availability of green spaces.	–.009	.411	.016	.448	–.131	.557
I feel more connected to my community when I visit green spaces.	–.083	.435	.106	.437	.513	–.058
I feel that green spaces enhance the overall quality of life in my area.	–.141	.490	–.098	.260	.514	.140

Note: extraction method = principal component analysis; rotation method = promax with Kaiser normalization.

0.5 is required for representativeness. The Bartlett's test score of 4,523.891 indicates significant dimensions predicting perceptions regarding green spaces' impact on wellbeing and health. From an inter-item correlation matrix, it became evident that, whereas most items demonstrated moderate to strong positive correlations, indicating good consistency among variables related to green space accessibility, quality, amenities, and health impact, two items – "Green spaces provide clean drinking water or there are vendors nearby" (−0.015) and "Having access to green spaces increases satisfaction with the living environment" (−0.095) – exhibited negative correlations. Following Field's (2017) recommendations, these items were excluded to improve the model's reliability. After their removal, reliability testing showed a Cronbach's alpha of 0.887 based on twenty-six items, confirming that the adjusted scale maintains a high level of internal consistency and better aligns with the underlying construct.

Furthermore, an initial analysis was conducted to extract eigenvalues for each component within the data set. Six

components surpassed Kaiser's criterion of 1, as recommended by Field (2017), and together accounted for 63.93% of the total variance. The decision to retain six components was based on the large sample size and the convergence of both the scree plot and Kaiser's criterion for this value. These components likely reflect the distinct dimensions of green space accessibility, quality, functionality, and wellbeing impact, while also acknowledging potential overlap or correlations between items. Consequently, an oblique rotation (promax) was applied to enhance interpretability by extracting component loadings. The rotated component loadings are presented in Table 2.

The items that load onto the same components use the criterion of component loadings greater than 0.5, as suggested by Field (2017). Hence, it is possible to establish the following six components:

- Component 1: accessibility and availability of green spaces; measured through eight questionnaire items listed in Table 2 referring to proximity to green spaces, multiple venues for green spaces, size of green spaces, availability of green spaces, access to green spaces without time constraints, easy access, public transportation options, and clear and safe walking paths to green spaces.
- Component 2: quality and aesthetic appeal of green spaces; measured through eight items referring to the maintenance of green spaces, green spaces free from pollution, caring for plants, offering a visually pleasing environment, attractiveness of landscape design and layout, the beauty of seasonal changes, provision of quiet environment, and positive contribution to the city's overall appearance.
- Component 3: amenities and functionality of green spaces; assessed through three items covering the availability of seating areas, designated activity spaces (e.g., playgrounds and sports facilities), and adequate restrooms.
- Component 4: safety; measured through two items, focusing on the safety of using green space amenities and sufficient lighting for safety.
- Component 5: community connection and living environment; measured through two items reflecting the role of green spaces in enhancing social bonds and improving the overall quality of life in the area.
- Component 6: perception of wellbeing and health impact; evaluated through three items examining the mental and physical health benefits of green spaces, including improved physical health, mood enhancement, mental clarity, stress reduction, and overall wellbeing due to access to green spaces.

Components are generally more reliable measures of complex phenomena than individual questions. To assess reliability, Cronbach's alpha was calculated for all six components: Component 1 = 0.828, Component 2 = 0.793, Component 3 = 0.692, Component 4 = 0.694, Component 5 = 0.691, and Component 6 = 0.814. According to Nunnally (1978), a threshold of 0.69 is recommended for reliability, and all six components met or exceeded this value. Based on these results, linear regression was conducted using Components 1–5 as independent variables and Component 6 as the dependent variable.

Subsequently, a multiple regression analysis was conducted to predict the perception of wellbeing and health impact as the dependent variable. The results reveal an R^2 value of 0.485, indicating that 48.5% of the variance in the perception of wellbeing and health impact of green spaces is explained by the other five components. The remaining variance ($1 - R^2$, or 51.5%) is attributed to other factors not included in the model. The regression analysis further confirms that these components significantly contribute to explaining the variance in the perception of wellbeing ($F(5, 357) = 67.118$, $p < 0.001$, $R^2 = 0.48$, $R^2_{adj} = 0.47$).

The regression coefficients are presented in Table 3, indicating that two components – quality and aesthetic appeal, and community connection – show significant positive correlations with the dependent variable (i.e., perception of wellbeing). In contrast, accessibility and availability, amenities and functionality, and safety do not demonstrate statistically significant correlations with the dependent variable in this model.

In summary, based on the multiple regression analysis, the study tested the five hypotheses regarding the predictors of perceived wellbeing and health impact from urban green spaces. Hypothesis 2, which posited that quality and aesthetic appeal significantly predict perceived wellbeing, was confirmed ($p < .001$) in addition to Hypothesis 5, proposing that community connection is a significant predictor ($p < .001$). However, Hypothesis 1 (accessibility and availability), Hypothesis 3 (amenities and functionality), and Hypothesis 4 (safety) were rejected because their correlations with the dependent variable were not statistically significant ($p > .05$). These findings suggest that, in the context of Prishtina, perceptual and social dimensions of green spaces play a more critical role in shaping wellbeing than physical or infrastructural characteristics.

4 Discussion

This study provides new insights into how the perceived wellbeing and health impact of urban green spaces in Prishtina are shaped more by their quality and social function than their accessibility or infrastructure. The findings reveal that quality and aesthetic appeal, and community connection significantly predict perceived wellbeing, whereas accessibility and availa-

Table 3: Linear regression coefficients.

	Unstandardized coefficients		Standardized beta coefficient	*t*	Sig.
	B	SD			
(Constant)	.997	.193		5.154	.000
Accessibility and availability	−.046	.049	−.042	−0.935	.350
Quality and aesthetic appeal	.311	.059	.249	5.245	.000
Amenities and functionality	−.023	.056	−.020	−0.417	.677
Safety	−.047	.051	−.046	−0.921	.357
Community connection	.588	.042	.583	13.917	.000

Note: dependent variable = perception of wellbeing. The inter-item correlation matrix is available to readers upon request as supplementary material.

bility, amenities and functionality, and safety did not show significant correlations in the model. This suggests that in Prishtina, where the quantity and equitable distribution of green spaces remain limited, people derive the greatest benefits from the aesthetic value and social experiences offered by green spaces rather than from their proximity or basic services.

According to Balaj et al. (2022), green spaces in Prishtina are unevenly distributed, suffer from vegetation quality disparities, and lack infrastructure that fosters functionality and inclusivity. These structural limitations likely explain why accessibility, amenities, and safety did not emerge as significant predictors: with limited choices and inadequate investment, residents may prioritize quality and social value in the few spaces available.

This pattern differs from cities such as Sarajevo and Belgrade. Tatlić et al. (2024) demonstrate that, even though Sarajevo's forest parks are underutilized due to inaccessibility and design issues, their location and scale still contribute to perceived good environmental quality. Vujčić et al. (2018) found that Belgrade's aesthetically pleasing parks correlated with lower stress and reduced medication use. These comparative examples reinforce our findings by highlighting the greater influence of perceived quality and community interaction when infrastructure or access is lacking. However, unlike Ljubljana or other Slovenian cities where inclusive planning policies and cross-sectoral collaboration guide green space development (Šuklje Erjavec et al., 2022; Kozamernik et al., 2024), Prishtina continues to lack such institutional frameworks.

From a theoretical perspective, the study confirms arguments made by Cleary et al. (2019) and Giannico et al. (2021), who emphasize that subjective perceptions, especially those related to naturalness, design, and emotional connection, can outweigh purely physical dimensions such as size or proximity in determining wellbeing. Moreover, as Zhang et al. (2017) and Zhan et al. (2022) suggest, in contexts in which green infrastructure is scarce or poorly distributed, social functionality and aesthetics gain even greater relevance.

The implications for urban policy are clear: city authorities in Prishtina should prioritize the ecological and aesthetic revitalization of parks and integrate participatory planning mechanisms to ensure green spaces meet community needs. Investing in landscape design, biodiversity, seating, and community programmes may yield higher wellbeing returns than merely expanding the park area without addressing quality. Socially inclusive programmes in parks, such as festivals, educational events, or intergenerational activities, can strengthen the community connection dimension.

Finally, for society at large, this research reinforces the fact that the perceived value of green spaces is co-shaped by their physical features and the social experiences they foster. In transitional urban contexts like Prishtina, targeted investment in quality and social infrastructure may offer a path toward healthier, more cohesive communities.

5 Conclusion

This study provides important insights into how urban green spaces influence perceived wellbeing in Prishtina, emphasizing that quality and aesthetic appeal, and community connection are the strongest predictors. These findings align with the regional literature from Belgrade and Sarajevo, and underscore the urgent need for better-maintained, inclusive, and socially engaging green spaces in Kosovo's capital. Components such as accessibility, amenities, and safety were not statistically significant predictors, which may reflect Prishtina's uneven spatial distribution of green infrastructure and the underdevelopment of supportive policies and inclusive planning practices. The study advances the literature by offering a multidimensional, user-centred framework adapted to the post-communist urban context of Prishtina, filling a critical gap in empirical research.

From a policy perspective, these results highlight the importance of prioritizing not only the quantity but especially the quality and social function of green spaces in urban planning strategies. Investing in design features that foster emotional attachment, social belonging, and visual appeal can improve urban liveability despite limited space and resources.

Limitations of the research conducted include the use of self-reported data and correlational analysis, which restrict causal inference. Future research should incorporate longitudinal and spatial data and further explore how governance, infrastructure, and cultural preferences shape the relationship between green space and wellbeing in transitional urban environments such as Prishtina.

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Netnography as a methodological lens for uncovering heritage ambience: A case study of the Tlemcen medina

The concept of heritage ambience reconfigures cultural preservation by prioritizing multisensory experiences and human subjectivity, transcending static architectural analysis. However, capturing these intangible dimensions – rooted in sensory engagement, memory, and local narratives – remains methodologically challenging. This study employs netnography to decode interactions between sensory atmospheres and collective memory in historic urban spaces, using the medina in Tlemcen, Algeria, as a case study. Analysis of digital narratives, social media discourses, and community-generated content reveals how nonexpert knowledge reconstructs heritage values often marginalized by traditional conservation frameworks. The results demonstrate that the medina's ambience is not merely a backdrop but a dynamic archive of lived experiences, where smells, sounds, and textures intertwine to shape cultural identity. This research advocates integrating local perspectives into protection strategies, challenging the hegemony of institutional approaches. By linking digital ethnography and sensory urbanism, it proposes a reproducible methodological framework for reimagining heritage as a living, participatory practice where the spirit of place thrives through community governance.

Keywords: atmosphere, urban heritage, netnography, spirit of place, Tlemcen medina, Algeria

1 Introduction

In its contemporary definition, urban heritage departs from a strictly material perspective. It encompasses not only prestigious monuments and ordinary architecture structures but also less tangible elements, generally collectively referred to as the atmosphere or the spirit of place (UNESCO, 2003). The Québec Declaration (ICOMOS, 2008) conceptualizes the spirit of place as a dialectical process – simultaneously constructed and reconstructed – that synthesizes tangible dimensions (built environments and landscapes) and intangible dimensions (oral histories, rituals, and artisanal practices). This interplay endows heritage sites with symbolic meaning, affective resonance, and interpretive significance.

Atmosphere, as a phenomenological construct, arises from sensory-emotional entanglement and demands corporeal engagement for its apprehension (Flécheux, 2019). Zumthor (2006: 17) epitomizes this immediacy: "I enter the building, I perceive the space, I sense the atmosphere, and in an instant, I grasp what resides there." The philosopher Gernot Böhme expands this notion, framing atmosphere as a "spatially diffused affect" that permeates the environment. It thus embodies a diffuse ineffability – a sensory singularity tethered to objects, situations, spaces, and distinct environments (Böhme, 2014; Griffero, 2014).

Building on this experiential foundation, living heritage provides a privileged observatory for studying sensory extensions, integrating built structures and social practices within an evolving dynamic. Its historical depth – the capacity to perceive a site's antiquity without specialized expertise – fosters a profound emotional bond between users and their environment (Albertsen, 2019; Böhme, 2014). This emotional connection, shaped by individual and collective memory, reveals a divergence between experts and laypeople: heritage professionals often prioritize objective criteria (such as representativeness and typicality) and seek to neutralize emotional subjectivity, whereas nonspecialists express admiration, attachment, nostalgia, or indignation, actively inhabiting and defending sites that resonate emotionally (Heinich, 2012; Parker et al., 2024). Thus, emotion transcends mere ornamentation to become a catalyst for redefining heritage practices.

Facing these challenges, conservation approaches have undergone a paradigmatic shift: in contrast to conventional methods that prioritize formal authenticity at the risk of aesthetic homogenization and erasure of historical traces (Simonnot, 2012), Brandi's (1963) critical conservation valorizes patina as a "surface of sensory inscriptions", ensuring transmission that is both faithful and meaningful. To reconcile heritage continuity and functional renewal, participatory and interdisciplinary frameworks are essential, uniting historians, architects, sociologists, and local communities around shared goals that integrate technical constraints, civic expectations, and aesthetic coherence.

Consider the Saint-Ouen Flea Market (Milliot, 2016): rather than pursuing an idealized structure, restoration prioritized preserving the site's unique ambience – valorizing patina and incorporating contemporary uses – successfully harmonizing historical remnants with present-day functions (Belakehal, 2012; Said, 2014). This approach embodies adaptive reconstruction, which mediates heritage continuity and innovation in line with the principle of "safeguarding without freezing" (Simonnot, 2012; UNESCO, 2023).

The Saint-Ouen case demonstrates that adaptive reconstruction derives legitimacy from the spirit of place. This example underscores how the vitality of heritage lies primarily in the affective bonds that individuals and communities forge with their environments, where attachment and nostalgia play pivotal roles.

1.1 Place attachment

Place attachment unfolds along a continuum of experiences, ranging from basic familiarity and passive awareness of a place to activist engagement in its preservation, encompassing visceral forms of connection (Relph, 1976; Altman & Low, 1992; Shamai, 1991; Twigger-Ross & Uzzell, 1996). It arises from the interplay of memories, social interactions, and cultural representations, intensifying through local participation and the quality of neighbourhood relationships (Lewicka, 2009; Shumaker & Taylor, 1983), while community identification strengthens with residential longevity (Twigger-Ross & Uzzell, 1996).

Topophilia (Tuan, 1988) enriches this bond with an intimate dimension, intertwining personal history and collective memory. It operates through three interdependent registers: 1) sensory: sounds, smells, and textures that immediately anchor emotion; 2) cognitive: narratives and symbols that structure a place's meaning; and 3) emotional: feelings of security, sacredness, and continuity that justify its defence (Lei et al., 2025).

At the core of this dynamic, nostalgia acts as a catalyst: it amplifies the sense of lived authenticity and identity cohesion (Slivar et al., 2024), drawing from both positive emotions (e.g., wonder and gratitude) and negative ones (e.g., guilt and disappointment), independent of visitors' origins and unrelated to perceived authenticity (Prayag & Del Chiappa, 2021).

Educational attainment influences these processes: less-educated individuals typically exhibit stronger local rootedness, whereas better-educated groups tend to extend identification beyond immediate surroundings (Rollero & De Piccoli, 2010). The lexicon register used to describe a place – rich and valorizing in cases of strong attachment, and more neutral or critical when attachment is tenuous – reflects, inversely, the intensity of this bond (Stedman, 2002).

Guided by these theoretical outputs, this study prioritizes data collection methods that make possible analysis of affective bonds, aiming to fully capture how they structure user experiences and shape living heritage.

1.2 Problem and hypothesis

Building on the principles of adaptive reconstruction and "protecting without freezing", this research focuses on illuminating the sensory dimension of living heritage. Studies by Djedi and Belakehal (2022), Alves (2016), and Said (2012) have demonstrated the critical need to integrate narratives, sensory perceptions, and daily practices to fully comprehend heritage atmospheres. These atmospheres – constructed through sounds, smells, textures, and individual memories – contribute to the construction of a place's meaning and form its essence.

To date, most research has prioritized guided tours and on-site observations to capture these atmospheres. For instance, Said (2012) illustrated how sensory traces in a Cairo neighbourhood emerged through guided walks enriched with travel narratives and films. Similarly, Djedi and Belakehal (2022) validated this method for decoding the atmospheres of the Casbah of Algiers, and Karoui and Ben Fraj (2016) relied on resident interviews to document olfactory and auditory impressions in Tunis' historic Hara district.

However, these conventional methods face limitations in addressing the ephemeral and subjective nature of atmospheres: such fleeting experiences often elude formal inventories and standardized protocols. A persistent gap remains between the richness of lived sensory experiences – lay knowledge embedded in gestures, sensations, and stories – and conventional research tools, which are poorly suited to capturing the fluidity of the spirit of place.

This raises the central question of this study: How can lay knowledge – narratives, affective responses, and practices – be systematically collected and integrated to enhance the conservation and valorization of heritage atmospheres?

Concurrently, in the field that explores human spatial experiences, social media has emerged as a critical tool for capturing the complexity of spatial interactions and generating multidimensional datasets (Nummi, 2018; Redi et al., 2018). User-generated content – including memorial narratives, emotional responses to places, and spontaneous critiques – offers a valuable window into social practices and intangible values tied to space.

In participatory urban planning, Nummi (2018) demonstrates how combining public participation geographic information systems (PPGIS) with Facebook posts makes possible the mapping of collective memories and civic expectations, unveiling symbolic layers often invisible to conventional approaches. Complementarily, Redi et al. (2018) leverage geotagged Flickr photos and computer vision techniques to map the ambience of London neighbourhoods, creating an original taxonomy of perceived atmospheres (e.g., artistic, traditional, or "hipster"). Their method reveals how iconic visual elements – such as a Shoreditch street art mural or a South Kensington Victorian façade – can belong to the same perceptual category while embodying distinct atmospheres shaped by collective imaginaries.

A particularly insightful contribution comes from Wight (2020), who applies critical netnography to analyse visitor perceptions at three major Holocaust heritage sites in Europe (the Anne Frank House in Amsterdam, Auschwitz-Birkenau in Poland, and the Jewish Museum in Berlin). Through a Foucaultian discourse analysis of online content, his study identifies four narrative archetypes: social memory, emotional reactions, obligation and ritual, and visitor transgressive behaviours. Wight highlights ethical tensions, such as inappropriate selfie-taking, underscoring the need for critical scrutiny of memorial consumption practices.

This approach illustrates that digital platforms, far from merely reflecting public discourse, act as spaces for the co-construction of heritage meanings by making possible the exploration and sharing of lived cultural experiences (Lian & Xie, 2024). By exposing visitors' cultural priorities and affective values, these platforms provide unprecedented insights into the emotional dynamics shaping heritage sites (Svensson & Maags, 2018).

Collectively, these studies affirm that social media now serves as a living laboratory for understanding heritage appropriation and emergent collective sentiments. Hybrid tools – semantic analysis, computer vision, and geolocation – allow researchers to map the ambience and shared memory of such spaces (Psomadaki et al., 2018).

This study builds on this foundation, proposing the following hypothesis: digital narratives disseminated on social media constitute a legitimate and rich source for identifying intangible heritage components, particularly the atmospheres

perceived and lived by ordinary users. Grounded in netnography – the qualitative analysis of online practices, discourses, and interactions within sociocultural contexts – we focus on the medina in Tlemcen, Algeria, to develop a methodological framework for decoding these sensitive expressions, often invisible to expert-driven methods. This framework integrates them into an expanded understanding of heritage rooted in collective memory and lived experience.

1.3 Case study

Located in northwestern Algeria, the Tlemcen medina bears the historical vestiges of successive dynasties, from antiquity to the medieval era. Its origins are traced to the Roman settlement of Pomaria (founded in AD 201), followed by the establishment of the Muslim city of Agadir (670–1078). The Almoravids later founded Tagrart in 1078, a site further consolidated under Almohad rule starting in 1147. The city reached its zenith as the capital of central Maghreb under the Zayyanid dynasty (1236–1517), a period marked by remarkable economic prosperity and urban development (Lagardère, 1988).

As a complex urban space, the medina holds profound social and identity significance for Tlemcen's inhabitants. Morphologically, it centres on a historic core surrounded by a multifunctional framework. Primary pedestrian pathways connect key hubs of religious, educational, and commercial activity – mosques, inns for merchants (*fondouks*), markets

Figure 1: Citizen-led rehabilitation of alleys in the Tlemcen medina (source: Tourisme Tlemcen, 2019).

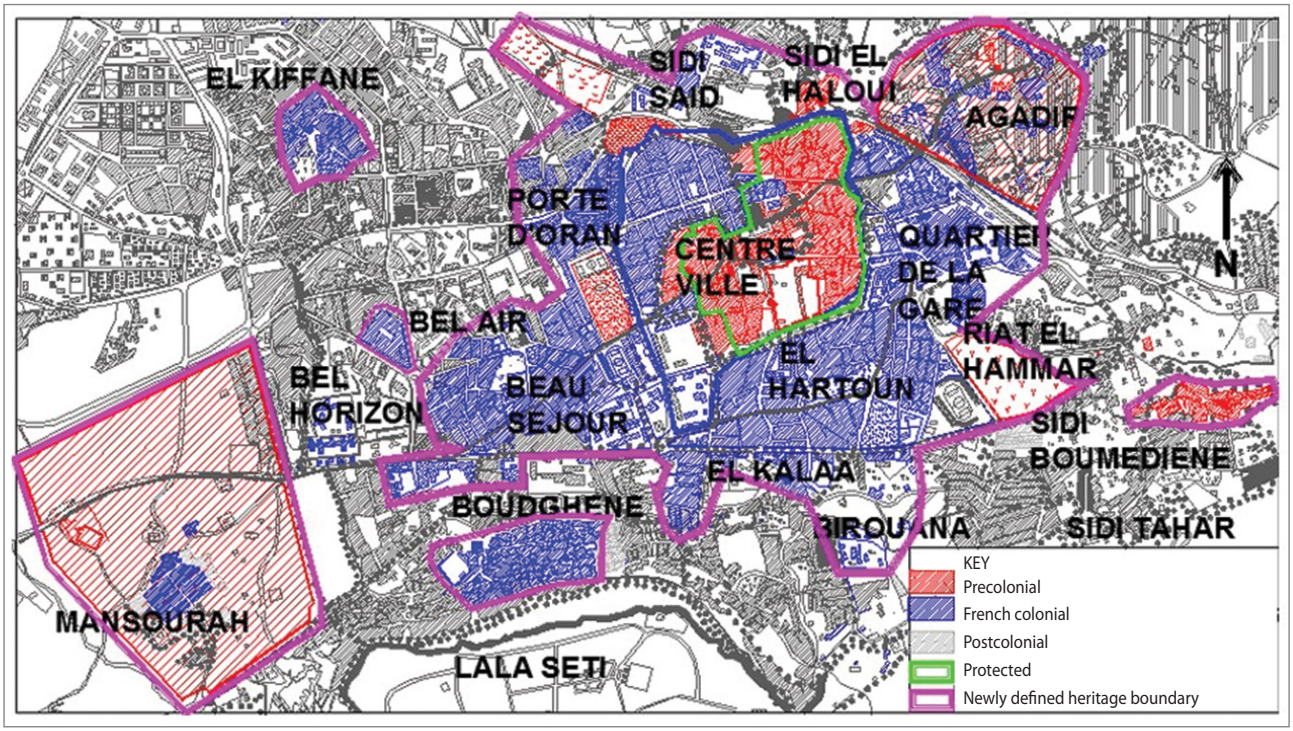

Figure 2: Location of the precolonial, colonial, and postcolonial urban fabrics in relation to the protected area of the Tlemcen medina (source: Hamma et al., 2016).

(*souks)*, Islamic schools (*médersas*), Sufi shrines (*zaouïas*), and Quranic schools – and secondary roads branch into residential quarters, cul-de-sacs, and dead ends (Tahar, 2018). This spatial hierarchy transitions from public zones (economic and administrative districts) to private residential areas, mediated by public squares (*tathata*) – spaces that serve as sites of social interaction, cultural expression, and shared heritage.

In 2009, Algeria's Decree no. 09-403 (Fr. *Décret nº 09-403*, JORA, no. 71/2009) formally established the protected area of Tlemcen's old town, protecting architectural remnants from the Almoravid, Zianid, and Ottoman eras and demarcating the boundaries of the ancient Almoravid city of Tagrart (*Décret nº 09-403*, JORA, no. 71/2009). Historically, Tlemcen's status as a crossroads of Arab, Turkish, and French influences forged a cosmopolitan identity (Ghoumari, 2009), reflected in its layered urban fabric and architectural eclecticism. This amalgamation of cultures has endowed the medina with exceptional heritage value, blending Maghrebin, Andalusian, and Ottoman motifs into a unique built environment.

The protected area of Tlemcen's old town covers fifty-one hectares (*Décret nº 09-403*, JORA, no. 71/2009). Elevations range from 817 meters at Bab el Hadid to 769 meters at Bab Zir. The elevation difference between these two points is forty-eight meters over a distance of 1,300 metres, with a slope of 3.6%. The site of the medina is an inclined plane from south to north.

2 Methodology

2.1 Procedure

This study employs passive netnography, an interpretive methodology derived from digital ethnography that involves unobtrusive observation of organic content (texts, images, and videos) generated by online communities, ensuring non-intrusive data collection and preserving discourse authenticity (Kozinets, 2015). Eschewing active netnography mitigates social desirability bias and ensures that the posts analysed reflect users' spontaneous heritage experiences (Wight, 2020). Focusing on digital narratives bridges the gap between intangible heritage and lived experiences, illuminating how atmospheres are constructed, debated, and conserved online.

"Deterritorialized" data (i.e., devoid of geolocation) was deliberately prioritized to overcome limitations inherent to approaches dependent on geotagging or tourist traffic (Redi et al., 2018; Bassols-Gardella & Coromina, 2022). Spontaneous images of the Tlemcen medina – carved doors, shaded alleys, and architectural details – provide rich material for capturing emotional and symbolic attachments to space, independent of precise location (Svensson & Maags, 2018; Laaksonen & Varga, 2023).

These photographs function as photo-elicitation tools (Du & Meyer, 2008; Riom et al., 2018), activating users' affective and multisensory memories: a single image of an inner courtyard may evoke recollections of aromas of spices, murmuring water, or plant-cooled air, revealing latent emotions – nostalgia and sacralization – often inaccessible to in-situ ethnography, even when enriched with tactile or olfactory perceptions (Hammersley & Atkinson, 2007).

Thematic content analysis constitutes the final and pivotal phase of the methodology, systematically structuring and interpreting the collected netnographic corpus. Informed by Bardin's (1977) foundational work – defining this method as a rigorous procedure to extract latent meaning from messages – and guided by Charmaz's (2006) grounded theory principles, this approach merges methodological objectivity with interpretive depth. Leveraging the atmospheric coding technique (ACT), validated in heritage ambience studies (Belakehal & Farhi, 2008; Said, 2014; Zidelman & Belakehal, 2016), sensory and emotional experiences emerging from online discourse were faithfully reconstructed through three iterative phases: 1) pre-analysis: defining recording units and thematic categories; 2) analysis: data collection (aggregating digital narratives), filtering (removing irrelevant content), and coding (identifying patterns); and 3) synthesis: classifying results into categories that reflect collective perceptions of ambience.

This method aligns with our goal of decoding intangible heritage values embedded in community narratives, bridging the gap between expert-driven preservation frameworks and lived sensory experiences.

2.2 Pre-analysis

In investigating the correlation between atmospheric perception and the medina's spatial configuration, architectural and urban typologies emerge as critical parameters for establishing affective relationships. Drawing from Tlemcen's land use plan (ANAT, 2001), spaces within the medina were categorized into seven types: 1) heritage-value structures (e.g., El Mechouar Palace, the Grand Mosque, and Sidi Belahcen Mosque); 2) minor heritage structures (e.g., traditional houses, communal ovens, and small public baths); 3) non-heritage structures (post–French colonial additions); 4) urban spatial design (alleys and cul-de-sacs); 5) urban amenities (public squares and markets); 6) environmental amenities (gardens and water systems); and 7) extra muros heritage (structures outside the protected perimeter).

This intentionally flexible classification acknowledges that certain sites span multiple categories. It establishes a clear conceptual framework for coding subsequent digital content and analysing how spatial configurations shape inhabitants' sensory-emotional narratives.

To operationalize the concept of "ambience" within this thematic analysis, we adopted a deductive approach synthesizing interdisciplinary theoretical frameworks. Augoyard (1998) defines ambience as the product of interactions between a site's materiality (spatial configurations, fixed and mobile structures) and its interiority (personal affect, collective emotions). Building on this, Bott (2000) proposes four interdependent domains to characterize the "spirit of place": physical framework (site morphology), cultural framework (beliefs and rituals), affective domain (emotional attachments), and functional domain (practices and uses). Belakehal and Farhi (2008) emphasize plural influences, including context (climate, culture, and society), architectural space (configurations and uses), sensory environment (thermal, olfactory, auditory, and visual stimuli), and users (perception and behaviour). Amphoux et al. (1998) further highlight the interplay between built environments, social practices, and ambient factors in shaping the sensory lived experience of heritage sites.

From these foundations, four analytical dimensions were derived: 1) tangible factors: built forms, spatial hierarchies, geometry, materials, furnishings, and objects – aligning with Augoyard's (1998) theoretical constructs; 2) sociocultural factors: beliefs, oral traditions, rituals, artisanal knowledge, personal narratives, memories, and periodic uses (celebrations, events) – resonating with Bott's (2000) cultural and functional domains; 3) sensory factors: visual, luminous, tactile, thermal, auditory, olfactory, and kinaesthetic phenomena, as identified by Belakehal and Farhi (2008) in their studies of medina atmospheres; and 4) contextual factors: climatic conditions, temporalities (seasonality, festivals), and historical evolution – consistent with the "context" dimension outlined by Belakehal and Farhi (2008) and by Amphoux et al. (1998).

This multidimensional framework allows the coding of textual or visual data extracts into one or more domains, providing a deductive yet flexible tool for thematic analysis. By allowing code co-occurrence (e.g., a site coded as both "sensory" and "functional"), this approach ensures methodological coherence while preserving the interpretive depth required to capture heritage atmospheres.

2.3 Analysis

2.3.1 Data collection

The private Facebook group *S.O.S l'antiquité Tlemcen l'authenticité* (S.O.S Antiquity Tlemcen Authenticity), with approximately 100,500 members, is a dedicated platform for sharing and discussing all heritage-related topics concerning the Tlemcen medina. This community brings together current residents, former residents, and urban history enthusiasts that actively exchange personal memories, historical anecdotes, and archival photographs, and engage in detailed discussions on topics ranging from vernacular architecture to the city's urban evolution.

Analysis of posts reveals significant linguistic and stylistic diversity, oscillating between colloquial language, poetic expressions, scholarly references, and specialized terminology. This discursive richness reflects the plurality of local voices and memories, offering fertile ground for exploring identity construction dynamics and the transmission of heritage knowledge.

For this study, data were collected from May 2021 to May 2022 through passive observation of publicly accessible posts. To ensure transparency, we obtained consent from the group administrator, disclosed our researcher identity, anonymized all data, and excluded private content.

2.3.2 Data filtering

Given the substantial volume of raw data collected (over three hundred posts and four thousand comments), a rigorous filtering stage was essential. This iterative process involved meticulously reviewing each entry, removing redundancies and irrelevant content, and retaining only material directly pertinent to the research objectives.

Following this filtering, the refined dataset – comprising 138 posts and 1,325 comments – was subjected to in-depth analysis to address the study's core questions. These selected entries were systematically coded to identify patterns, themes, and affective responses tied to the medina's ambience.

2.3.3 Data coding

Coding and categorization formed the foundational phase of analysis, allowing the systematic organization of data into coherent themes. As Dey (1999, cited in Saldaña, 2013: 95) observes: "With categories, we impute meanings; with coding, we calculate them."

Categories and codes	Typology of places						
	Buildings with heritage value	Minor heritage	Structures without real heritage value	Design of urban space	Urban amenities	Environmental amenities	Structures on outskirts of medina
Tangible factors: geometry, structure, materials, volume, distribution, furnishings, objects present in the space, etc.							
Sociocultural factors: beliefs, opinions, stories, rituals, skills, personal background such as subjective memories, emotions and behaviours of the individual, etc.							
Sensory factors: visual, light, tactile, thermal, sound, olfactory, kinaesthetic, etc.							
Functional factors: periodic celebrations and events, or primary or secondary permanent activities							
Context: climate, historical period, culture, temporality							

Figure 3: Blank analysis grid to capture affective relationships with places (source: authors).

This study employed a priori (provisional) coding (Miles & Huberman, 1994: 58), predetermining codes during pre-analysis to align with the research objectives. However, following Miles and Huberman's (1994) emphasis on flexibility, codes were iteratively refined as new insights emerged from the dataset.

The coding framework comprised five primary categories, subdivided into twenty-eight distinct codes. These categories were cross-referenced with the typology of places (the analysis grid is shown in Figure 3), allowing an exploration of how spatial configurations intersect with atmospheric elements (e.g., sensory stimuli and sociocultural practices). This intersectional approach facilitated a theoretical reconstruction of the affective relationship between individuals and heritage spaces, revealing how tangible and intangible factors collectively shape ambience.

The following examples illustrate the application of topic coding to a representative sample of comments. Descriptive codes (single words or short phrases) summarize each excerpt's dominant theme, whether manifest (explicit) or latent (implied). For each comment, the most relevant code was assigned based on its primary theme or sub-theme (see Figure 3). This method streamlined data analysis by rapidly identifying key topics. Below are translated excerpts with their corresponding codes.

Example 1, comment 81.E: "I lived in Derb Sidi Hamed (an alley in the medina) and passed through this square daily to go to high school. I remember the birds chirping[1] and the shadows of the trees.[2]" Codes: [1]sound, [2]light.

Example 2, comment 169.F: "It's sad to see the disappearance of the cobblestones[1] that gave the pretty appearance[2] to the city of art and history." Codes: [1]materiality, [2]aesthetics.

Example 3, comment 45.B: "You remind me of the wonderful smells[1] of stews cooked on braziers in front of doors on the street or alley. It was the charm of good neighbours.[2] Alas, it's gone like a dream." Codes: [1]olfactory, [2]social bonds.

Example 4, comment 74.B: "She found herself in her native alley, overwhelmed by a sense of belonging: the universe of stamped breads,[1] the district of Andalusian singers where the traditional lute echoes,[1] elders resting on doorsteps watching grandchildren play,[2] and the communal oven continuing its work.[3]" Codes: [1]craftsmanship, [2]intergenerationality, [3]daily rituals.

As shown above, some data units are inherently complex, containing multiple dimensions or overlapping themes that resist reduction to a single code. This complexity arises from contextual diversity and interpretive variability (Saldaña, 2013). By allowing multi-code assignments, this approach captures the richness of user-generated narratives while maintaining analytical rigor.

3 Results

The study's results reveal deeply contrasted dynamics within the Tlemcen medina. Traditional neighbourhoods – characterized by organic urban fabric (narrow alleys, spatial hierarchies) – emerge as hubs of social interaction, accounting for 29% of posts and 25.8% of comments (Table 1). In contrast, recently developed urban amenities (public squares and modern infrastructure) and structures on the outskirts of the medina remain underrepresented, reflecting limited community engagement with these zones.

However, Table 1 confirms a strong relationship between post frequency and comment volume for four types of places: structures without real heritage value, the design of urban space, environmental amenities, and structures on the outskirts of the medina. This relationship suggests that increased media visibility of a site systematically amplifies public reactions,

Table 1: Distribution of data analysed by type of place.

	Typology of places							
	Buildings with heritage value	Minor heritage	Structures without real heritage value	Design of urban space	Urban amenities	Environmental amenities	Structures on outskirts of medina	Total
Posts collected and analysed	23	20	16	40	23	10	6	138
	(16.7%)	(14.5%)	(11.6%)	(29.0%)	(16.7%)	(7.2%)	(4.3%)	(100%)
Coded comments	153	281	134	342	277	81	57	1,325
	(11.5%)	(20.2%)	(10.1%)	(25.8%)	(20.9%)	(6.1%)	(4.3%)	(100%)

Source: authors.

Table 2: Results of thematic data analysis.

Category	Code	No. of occurrences	Code frequency (%)	Category frequency (%)
Tangible factors	Geometry and volume	70	3.90%	22.0%
	Distribution	42	2.40%	
	Materials	37	2.10%	
	Furnishings, objects present in the space	135	7.60%	
	Structure	29	1.60%	
	Landmark	79	4.40%	
Sociocultural factors	Beliefs and opinions	34	1.90%	26.2%
	Stories	246	13.80%	
	Rituals and skills	38	2.10%	
	Personal background such as subjective memories	78	4.40%	
	Positive feelings	66	3.70%	
	Negative feelings	5	0.30%	
Sensory factors	Visual	103	5.80%	16.9%
	Light	8	0.40%	
	Tactile	16	0.90%	
	Thermal	15	0.80%	
	Sound	29	1.60%	
	Olfactory	26	1.50%	
	Kinaesthetic	44	2.50%	
	Taste	27	1.50%	
	Negative sensation	34	1.90%	
Functional factors	Periodic celebrations	26	1.50%	16.2%
	Primary permanent activities	130	7.30%	
	Secondary permanent activities	132	7.40%	
Context	Negative context	25	1.40%	18.5%
	Temporality	17	1.00%	
	Culture	59	3.30%	
	Historical period	207	11.60%	
	Climate	21	1.20%	

Source: authors.

underscoring visibility's catalytic role in mobilizing civic engagement around urban heritage.

Several categories deviate from this pattern. Minor heritage and urban amenities have a low post frequency (14.5% and 7.2%), but these spaces generate high comment volumes (20.2% and 6.1%), indicating sustained community reactivity or polarized debates (e.g., discussions about the functions of traditional ovens). Buildings with heritage value generate 16.7% of posts, but they account for only 11.45% of com-

ments, suggesting formal or institutional interest rather than genuine emotional attachment.

Thematic analysis derived from the coding framework (see Table 2) reveals a broadly diversified distribution of ambience perceptions in the Tlemcen medina, structured into five conceptual categories: sociocultural (26.2%), tangible (22%), contextual (18.5%), sensory (16.9%), and functional (16.2%). A 10% frequency gap between the most represented (sociocultural) and least represented (functional) categories indicates a moderately balanced distribution, in which no single dimension dominates, underscoring the plurality of factors shaping heritage ambience.

The sociocultural category (26.2%) is dominated by narratives, beliefs, and emotions. The most frequent code, "space-related narratives", highlights the symbolic and narrative weight of sites in collective memory. Tangible factors (22%) focus on the physical environment and objects. The dominant code, "furnishings and objects", reflects the role of material elements as visual anchors for spatial appropriation. Contextual factors (18.5%) encompass historical, climatic, and cultural dimensions. The prevalent code, "historical period", emphasizes temporal depth in ambience perception. Sensory factors (16.9%) capture users' multisensory engagement. The codes rank as follows: visual (dominant), auditory, kinaesthetic, and olfactory, revealing heightened sensitivity to visible morphology while acknowledging contributions from other sensory modalities. Functional factors (16.2%) relate to spatial uses and occupancy dynamics. Two primary codes emerge: "primary permanent activities" and "secondary permanent activities", with a near-equal distribution illustrating the diversity of daily practices.

4 Discussion

The concept of place attachment, defined in the literature as the affective and identity-based bond linking individuals to their built environment (Altman & Low, 1992), is reaffirmed and nuanced in our findings. These reveal a spatial variability of attachment, manifesting differently across types of places – from institutional monuments to quotidian settings.

Thematic analysis highlights a balanced distribution of perceptual registers (material, sensory, and social), demonstrating that heritage ambience is not reducible to a singular dimension but emerges from a sensory and cultural palimpsest. This plurality confirms the evolution of heritage toward a holistic approach, integrating the spirit of place beyond architectural objects to encompass intangible and multisensory dimensions.

By intersecting types of places (monumental, peripheral, and colonial) with thematic categories (sociocultural, tangible, and contextual), the analysis underscores three key insights into the expanded conceptualization of heritage: 1) the affective disjuncture between monumental heritage and minor spaces: influenced by ambient composition (e.g., density of social rituals in traditional neighbourhoods); 2) the revalorization of urban margins: peripheral zones and colonial legacies act as vectors of living heritage, bridging collective memory and artisanal practices; and 3) the methodological contribution of netnography: this captures micro-narratives of ambience, which are often absent from traditional heritage frameworks.

4.1 The role of minor heritage spaces in constructing heritage ambience

The results highlight a pronounced focus on minor spaces – such as alleys, courtyard houses, traditional ovens, and public baths – which generate disproportionate comment volumes relative to their limited representation in posts (14.5% of posts vs. 20.2% of comments for minor heritage). These spaces, although marginalized in institutional discourse, emerge as hubs of social interaction where narratives and daily practices amplify their mnemonic significance.

With regard to traditional ovens, user comments emphasize childhood memories, communal baking rituals, and intergenerational exchanges, illustrating how heritage ambience extends intangible heritage. These sites are perceived not merely as physical artifacts but as emotional anchors, sustaining practices that endure despite urban transformations. The following ethnographic excerpts illustrate this interplay.

241-B. The vanishing tradition of communal bread-making at Etterah ovens epitomizes a lost sensory ritual. At dawn, women orchestrated the process while children shaped dough into symbolic forms. The climax – a golden, crackling loaf emerging from wood-fired heat – created an olfactory and tactile spectacle inseparable from familial bonds. Today, these ovens survive only as relics in Tlemcen's aging quarters.

170-E. The removal of the wrought-iron kiosk – a bandstand hosting Sunday brass ensembles – erased not just a structure but a sonic and social anchor for square gatherings.

These observations align with the argument by Heinich (2012, cited in Ungan, 2014) that "minor heritage", although rarely valorized by institutions, constitutes a vital component of living heritage, deriving value from the constant reactivation of memorial practices. Thus, diverging from monumental criteria, heritage ambience here manifests through ordinary spaces bearing invisible yet deeply rooted collective memories.

4.2 Heritage structures between institutional symbolism and affective distance

In contrast to minor spaces, high-value heritage buildings – such as the El Mechouar Palace – generate relatively few comments. This dissociation between institutional visibility and affective engagement suggests that such emblematic sites, although they are central to official heritage, struggle to foster meaningful community interactions.

This finding resonates with the distinction between "monumental heritage" (tied to conservation policies) and "lived heritage" (embedded in daily practices) made by Heinich (2012, cited in Ungan, 2014). Tlemcen's monumental heritage, although aesthetically valorized, appears partially disconnected from residents' sensory and narrative experiences, underscoring a paradox in heritage ambience perception.

4.3 Peripheral significance and the ambiguity of colonial heritage

The examination of spaces beyond the official protected heritage boundaries reveals that they do not weaken place attachment but instead reinforce its cognitive and spatial dimensions (Lewicka, 2011). Functioning as socioeconomic nodes and reservoirs of artisanal knowledge, these sites act as critical identity markers, expanding the notion of heritage beyond formal limits. This observation calls for rethinking conservation frameworks: How can these "living zones" be integrated into holistic heritage policies?

Furthermore, colonial-era buildings exemplify the inherent complexity of attachment: their hybrid aesthetics evoke mnemonic ambivalence, rooted in both historical value and the rupture caused by episodes of dispossession. Although their exclusion from official frameworks fragments the urban cultural ecosystem, their reintegration could forge an urban palimpsest, where colonial past and present coexist in layered continuity.

4.4 Netnography as a tool for accessing collective memory and ambience perceptions

Netnographic analysis allowed an in-depth exploration of online perceptions expressed by local communities, particularly revealing the richness of micro-narratives tied to minor heritage spaces – narrow alleys, communal ovens, and public baths – that often evade traditional surveys. By systematically examining posts and comments, this method reconstructs memories, emotions, and daily practices that neither questionnaires nor formal interviews can fully capture. This unfiltered view of lived experience confirms the centrality of these spaces in collective memory and highlights the sensory and affective dimensions underpinning the spirit of place.

Online discourse also reveals significant tensions around the patrimonialization of colonial structures, which are perceived alternately as intrusive architectural impositions or vessels of shared memory. This paradox, absent from institutional archives, emerges clearly in digital narratives, illustrating postcolonial ambivalences and semantic conflicts shaping the urban landscape. By amplifying residents' voices, netnography illuminates these heritage dissonances and equips researchers with tools to decode tensions invisible to formal methodologies.

Integrating such data into heritage work allows scholars and practitioners to co-design conservation strategies attuned to real-world ambiences. Moving beyond monuments, they can now account for ordinary practices and collective emotions, expanding heritage toward a "living heritage" paradigm centred on user experiences. This participatory approach, grounded in direct community engagement, fosters projects that respect the spirit of place and strengthen the bond between past and present.

Finally, adopting an intergenerational lens is critical to enriching this framework. Younger generations' heritage expectations and interaction modes – shaped by digital and cultural practices – may profoundly differ from those of older cohorts. Involving researchers, artists, and residents in co-constructing heritage narratives will unveil new facets of place attachment and perpetually enrich urban storytelling.

5 Conclusion

This study demonstrates the potential of netnography as a key method for decoding the intangible dynamics of urban heritage. Although it is limited to a single qualitative approach, it reveals how online interactions – reflections of daily practices and collective memories – contribute to the construction of lived heritage. Focused on the Tlemcen medina, this research highlights transferable mechanisms applicable to other historic cities, where marginal spaces and ambivalent legacies (e.g., colonialism) remain understudied despite their role in shaping local identity.

Future research would benefit from integrating these findings with computational methods (e.g., automated analysis of iconographic corpora) to systematically analyse sensory dimensions. Similarly, mixed-method approaches (field surveys combined with social network analysis) could triangulate data, enhancing interpretive robustness while including voices often

excluded here (non-connected elderly individuals, minority groups, or youth demonstrating no attachment).

Conceptually, this study urges a reimagining of heritage as a living ecosystem, perpetually reconfigured through negotiations between historical layers, ambient materialities, and contemporary adaptations. Community bread ovens or street vendors' calls are not mere "local curiosities" – they are key actors in a heritage scenography where the mundane gains symbolic density through repetition and sharing.

These findings advocate for adaptive governance, in which planners and residents co-construct conservation tools that integrate both tangible structures and intangible practices. Such an approach, rooted in dialogue and experimentation, could reconcile preservation with urban vitality, transforming heritage from a museumified object into a collective, resilient process.

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Špela KRYŽANOWSKI

ARCH-E project: A view into the European competition landscape

Introduction

(ARCH-E, 2025)

ARCH-E is a project on architectural design competitions (ADCs) co-funded by the European Union under the Creative Europe framework (CREA). It started in February 2023 and will last for three years. ARCH-e is composed of ten European partner organizations – the Austrian Federal Chamber of Civil Engineers (BKZT), the Architects' Council of Europe (ACE), the Croatian Chamber of Architects (CCA), the Chamber of Architecture and Spatial Planning of Slovenia (ZAPS), the Association of Architects of Cyprus (CAA), the Federal Chamber of German Architects (BAK), Eindhoven University of Technology (TU/e), the Polytechnic University of Valencia (UPV), Sepa Engineering GmbH (SEPA), and the Chamber of Hungarian Architects (MÉK) – with the Chamber of Architecture and Spatial Planning among them, and five cooperation partners: the Czech Chamber of Architects (ČKA), the French National Chamber of Architects (CNOA), the Chamber of Architects of the Province of Bozen, the Swiss Society of Engineers and Architects (SIA), and the International Union of Architects (UIA). ARCH-E recognizes the crucial role of ADCs in the creation of a safe, fair, sustainable, inclusive, and beautiful built environment. Its main objective is to promote high-quality architectural solutions for the built environment by increasing the use of ADCs in Europe. To achieve this, it has developed several strategies. ARCH-e intends to enhance cross-border collaboration among various architecture professionals through the use of the ARCH-E platform and network, services, and digital solutions. It aims to raise awareness and facilitate learning processes among stakeholders, architects, policymakers, and ADC procurers, leading to new ways of thinking about architectural challenges and promoting long-term innovation strategies. ARCH-E seeks to create a transnational competition culture through the circulation and exchange of ideas.

Figure 1: Meeting of the ARCH-E consortium at ZAPS in Ljubljana in 2023 (photo: ZAPS).

Because ADC procedures are determined by national frameworks and traditions and due to a lack of information exchange, there is very low transnational participation. This information lack excludes many architects from participating in the (cross-border) market and thus hinders competition. Small or micro-enterprises – with an above-average proportion of female and/or young architects – are particularly affected, which has a detrimental effect on their professional career. Promoting ADCs will lead to better implementation of the Davos Declaration for Baukultur and of the New European Bauhaus in European planning and building pro-

jects on a daily basis, and it will help to meet the climate challenge and improve the quality of the built environment.

The newly developed ARCH-E online platform (https://arch-e.eu) provides a wide range information on ADC systems (with a special focus on consideration of Baukultur und New Bauhaus standards), and it facilitates transnational participation. Its core element is a network of over five hundred architects from more than twenty countries, from which transnational working groups can be quickly recruited for participation in ADCs. This is especially important for women and young professionals, who usually have fewer transnational business contacts. The ARCH-E consortium reaches over 560,000 architects across Europe that benefit from the project results.

The main outputs of the project are the ARCH-E ADC Map, a comparative description of national ADC systems, the multilingual ARCH-E Glossary with technical terms, and the ARCH-E Architects' Needs Report. In addition, the ARCH-E webpage provides a SWOT analysis tool, and one of the final ARCH-E outputs will be the ARCH-E White Paper, in which we will inform policymakers about the project results and provide recommendations on how the internationalization of careers, equal treatment, and green deal goals can best be achieved in architecture.

ARCH-E ADC Map

(Bekkering et al., 2025)

The ARCH-E ADC Map provides directions to architects and other experts in architecture on where to find procurement platforms, information on national regulations, chambers representing architects, and other helpful resources helping people orient themselves in the international ADC landscape. ARCH-E is an ongoing project involving partners and related projects

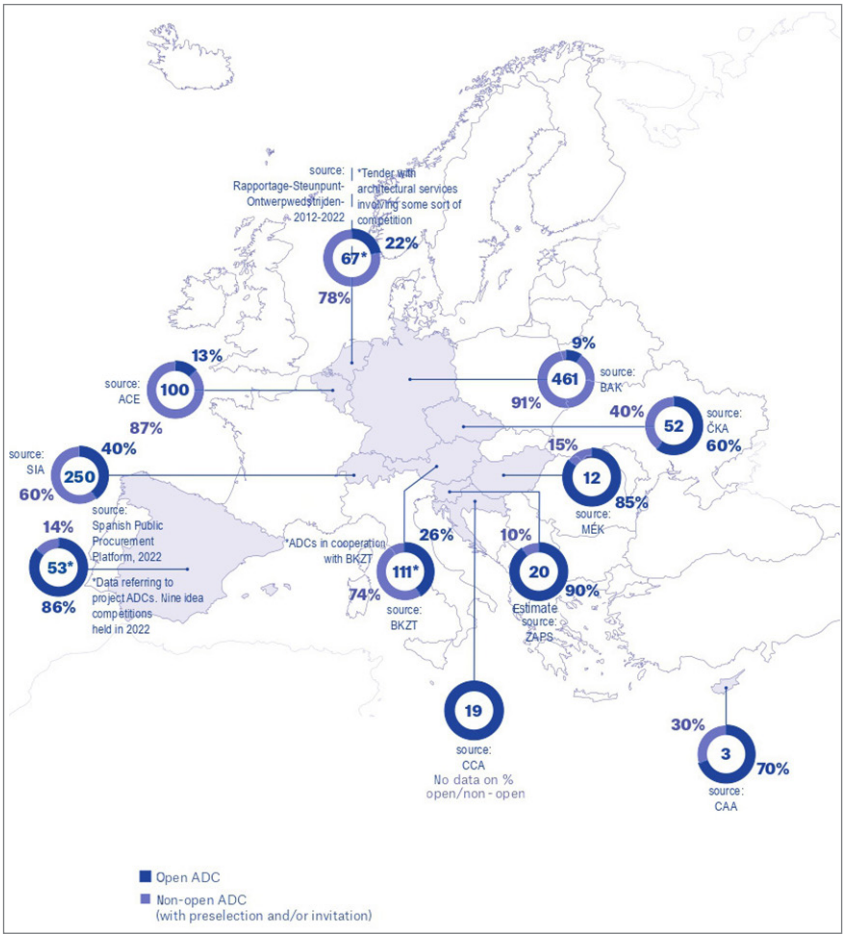

Figure 2: Map of the average number and types of ADCs per year in selected EU countries. (image: ARCH-E).

all over Europe. Therefore, the ARCH-E ADC Map is growing and is gradually incorporating more information. The ARCH-E ADC Map is now already available in pdf and print form in English (https://www.arch-e.eu/maps-on-adcs) and in the national languages of the partners (the Slovenian version is available at https://www.arch-e.eu/files/maps-on-adcs/ARCH-E_MapOnADCs_SL_web_v1.pdf). It contains four chapters: Mapping the European Landscape of ADCs, Five Parameters for a European Debate on ADCs, Good Practices in European ADCs, and Conclusion.

Chapter 1 presents an overview of the European context of ADCs. It has two main parts: 1) the graphic visualization of national data on ADCs and the architecture profession in comparative maps and 2) eleven country profiles with a textual and infographic description of their national competition systems. Chapter 2 focuses on the European dimension of ADCs. Structured on the basis of the five parameters (regulations, accessibility, quality, transparency, and stakeholders' benefits), the second chapter brings to the fore challenges and opportunities for an EU market of architectural services. Through the experiences and voices of interview participants, this chapter seeks to stimulate reflection and discussion, emphasizing the subjective quality of ADC participation, implementation, and results. Chapter 3 is a collection of selected national cases that represent successful practice in the organization and implementation of ADCs. It is important to stress that the qualification as a "successful practice" always refers to specific contextual conditions and

should be understood in relative terms. For this reason, the examples in this chapter are proposed as "good" practices instead of "best" practices in absolute terms. The focus of the examples presented in Chapter 3 is on how the selected competition procedure addresses a given challenge and positively relates to one or more of the five parameters (regulations, accessibility, quality, transparency, and benefits for stakeholders). The quality of the selected cases is not on the architectural outcome, but rather on the competition process itself. Finally, the conclusion summarizes the lessons learned from the first year of the ARCH-E experience and research activities, providing suggestions for the future implementation and expansion of the study on ADCs.

The ARCH-E ADC Map shows that, at the national level, country-specific frameworks and traditions contribute to the uniqueness of local ADC systems. These reflect the richness and variety of architectural cultures and heritages across Europe. In a committed effort at knowledge dissemination, it is important to translate these differences into learning opportunities. Moreover, a long-term strategy for collecting and sharing ADC data across Europe is missing. Through its research initiatives, the ARCH-E project addresses the problems related to knowledge and information exchange that are faced by European architects, their chambers, and professional associations.

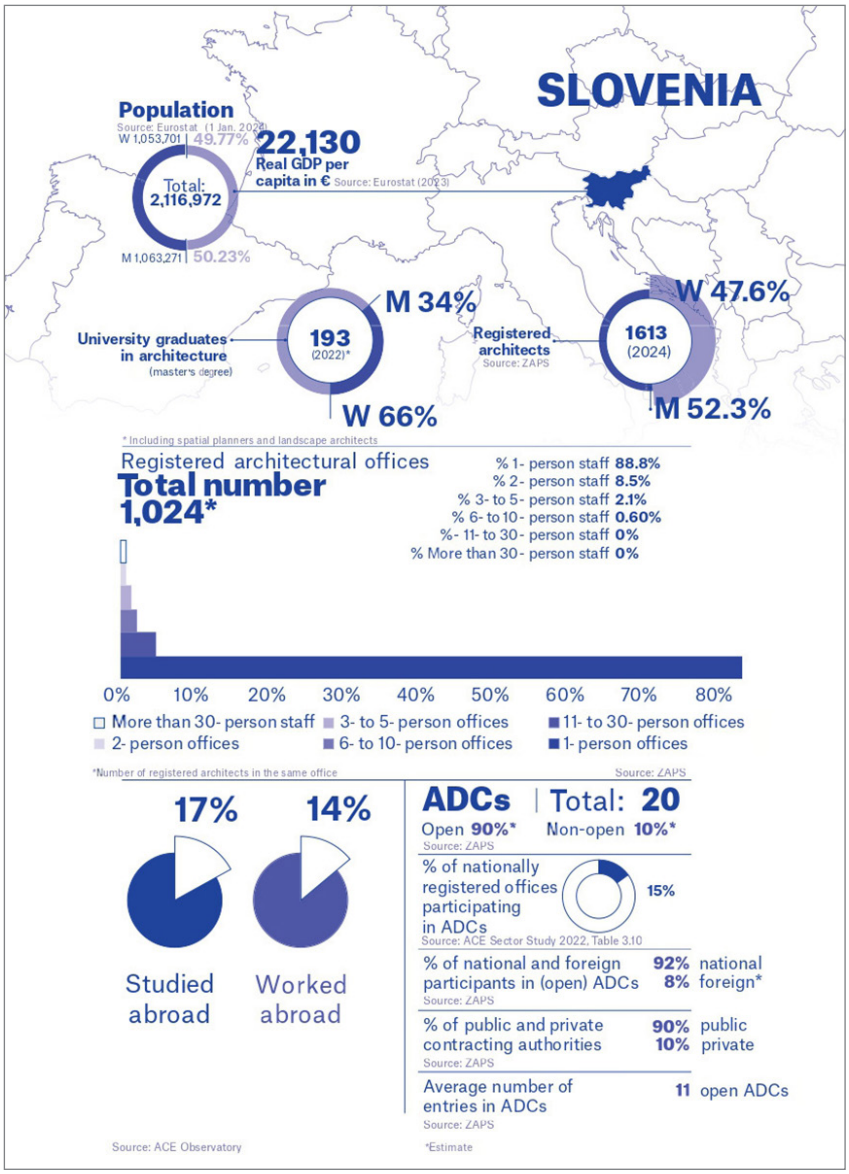

Figure 3: ADCs in Slovenia in numbers (image: ARCH-E).

ARCH-E Glossary
(ARCH-E, 2025)

The ARCH-E Glossary brings together eleven country-specific perspectives on architectural competition procedures in Europe. A total of 190 terms explain the regional characteristics of competition culture. Because the language variations are not mere translations, but original descriptions of the local practice in the subject areas, the terms can be compared with each other and examined for similarities and differences. This compendium currently contains around a thousand definitions. A comment function invites users to suggest changes to the definitions and practical reports on the topics, thus allowing the ARCH-E Glossary to grow continuously. ARCH-E is a multifaceted project that will be carried out until 2026. As the project (including its studies, collaboration between the partners involved, and transfer of know-how to other cooperation partners and projects) evolves, the online tools are also continually being refined. For this reason, the ARCH-E Glossary is work in progress.

ARCH-E Architects' Needs Report
(Alvarez Isidro et al., 2025)

The ARCH-E Architects' Needs Report focuses on providing a structured analysis of architects' engagement with transnational ADCs and identifying challenges, motivations, and potential areas for improvement within the existing framework. To achieve the goal, an extensive multilingual survey was

conducted among architects and other ADC stakeholders. The survey reached 1,290 respondents in more than twenty countries. The main lines of inquiry addressed in the survey were architects' interest in transnational ADCs; the knowledge, skill gaps, and barriers they face; their level of international networking; and how the ARCH-E project can support their professional growth and development. The primary objective of the survey was to highlight the challenges architects encounter when participating in ADCs in other countries. The findings will serve as a foundation for developing targeted recommendations for chambers and associations of architects, helping them provide better support for cross-border participation. They will contribute to a broader understanding of ADCs across Europe, highlighting key trends, challenges, and opportunities for improvement.

The results show that regulatory challenges such as complex bureaucratic requirements and country-specific regulations hinder international ADC participation. Ten per cent of respondents cited a lack of familiarity with foreign legal frameworks, and 6.6% reported being unable to meet financial turnover requirements. Regarding accessibility, only 25% of respondents participated in international ADCs, compared to 69% in national competitions. Financial constraints (12.5%), language barriers (11.3%), and perceived low success rates (9.8%) were major deterrents. Although it is not considered an issue to worry about by respondents, the reality is that only 18% of female architects participated in international ADCs, compared to 27% of men. Men were also twice as likely to receive direct invitations to ADCs (22% vs. 11%). The economic benefits of ADCs were limited. Seventy-one per cent of firms reported earning no revenue from international ADCs, and only 2% of firms generated more than 60% of their income from such competitions. Many architects felt that ADC selection processes favoured well-established firms. National chambers of architects played a key role in providing ADC information, but the Architects' Council of Europe (ACE) was perceived as less impactful. Private-led ADCs were seen as more flexible and innovative, but these raised concerns about transparency and reliability. Public ADCs, although structured, were often bureaucratically rigid. Winning an ADC did not always guarantee a contract for preparing project documentation. Only 35% of female winners (of the 18% that took part in international ADCs) and 34% of male winners (of the 17% that took part in international ADCs) secured a commission, highlighting the need for reforms. Although 40% (of around 35% of participants in international ADCs) cooperated with local bureaus in the preparation phase of the competition solution, only 31% did so during construction, indicating challenges in sustaining partnerships. No need for further education was seen by 31.1% of respondents, whereas 30% considered training "helpful indeed", and 10.2% saw it as "an absolute must". Language skills and legal knowledge were among the most significant gaps. Swiss and Austrian competitions were praised for their transparency and efficiency.

Conclusion

(Bekkering et al., 2025)

The research activity undertaken with the ARCH-E project on ADCs should be seen as an ongoing endeavour rather than a completed task. Currently, the project encompasses the countries associated with ARCH-E partners and cooperation partners. However, to create a more comprehensive picture of European design competitions, it is essential to expand the research to include a broader range of countries and their ADC systems. This expansion would not only provide a more complete picture but also reveal new opportunities for cross-border collaboration and participation. Moreover, expanding the types of data collected and involving a wider range of stakeholders in data provision are crucial areas for further research. The current state of the project offers a preliminary overview of European ADCs, emphasizing the opportunities and challenges within the EU market. However, future research should focus on the roles of various actors from a practical perspective, with an eye toward implementing concrete interventions through pilot projects and collaborative activities. In this regard, the ARCH-E platform and its digital tools (the ARCH-E Glossary, the online ARCH-E ADC Map, and the network) serve as valuable resources to facilitate research expansion.

In conclusion, the initiatives and research outcomes of ARCH-E underscore the benefits of a cross-border collaborative approach in addressing the complexities of ADCs in Europe. The involvement of diverse stakeholders and experts within the architectural profession (including representatives from chambers, policy experts, designers, managers, clients, and academics) highlights that a comprehensive understanding of the multifaceted nature of ADCs requires sustained cooperation, exchange, and dialogue. Therefore, it is crucial to broaden the network of interested parties and promote experimental methods of collaboration to challenge traditional competition models and foster innovation. By recognizing the pivotal role of competitions in achieving architectural excellence, the ARCH-E project opens up the arena for a committed discussion on design competitions and invites new participants into the ongoing conversation about the proactive improvement of Europe's living environment.

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Forrest, R., in Murie, A. (ur.) (1995): *Housing and Family Wealth.* London, Routledge.

Dimitrovska Andrews, K. (2005): Mastering the post-socialist city: Impacts on planning the built environment. V: Hamilton, F. E. I., Dimitrovska Andrews, K., in Pichler-Milanović, N. (ur.): *Transformation of cities in Central and Eastern Europe: Towards globalization,* str. 153–186. New York, United Nations University Press.

Stanovanjski zakon. Uradni list Republike Slovenije, št. 69/2003. Ljubljana.

Statistični urad Republike Slovenije (2007): *Statistični letopis 2007*. Ljubljana.

Sendi, R. (1995): Housing reform and housing conflict: The privatisation and denationalisation of public housing in the Republic of Slovenia in practice. *International Journal of Urban and Regional Research,* 19(3), str. 435–446.

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Forrest, R. & Murie, A. (eds.) (1995) *Housing and family wealth.* London, Routledge.

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Planning act 2008. Statutory Instrument, no. 2260/2009. London.

Office for National Statistics (2009) *Statistical yearbook 2009.* London.

Sendi, R. (1995) Housing reform and housing conflict: The privatisation and denationalisation of public housing in the Republic of Slovenia in practice. *International Journal of Urban and Regional Research,* 19(3), pp. 435–446.

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Urbani izziv (Urban Challenge) is a journal dedicated to presenting research and discussing issues in spatial planning in Slovenia and abroad. It features articles on a variety of spatial topics in various fields such as urban planning, architecture, landscape architecture, spatial planning, geography, geodesy, sociology, and economics. Authors focus on spatial, urban, and landscape planning, urban regeneration, urban governance, regional development, natural and cultural heritage protection, the environment, spatial information science, housing, transport, demography, and accessibility. The journal has been published since 1989, when the first issue was published to mark the thirtieth anniversary of the Slovenian Urban Planning Institute. Today it is the leading Slovenian periodical in the spatial sciences. Grounded in social science, it is interdisciplinary in nature and promotes the development of new approaches and the integration of knowledge.