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Toponymic Approach to Bicycle Lane Naming in Indonesia's New Capital: Merging Local Language and Cultural Heritage

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ABSTRACT

This article examines the role of toponymy in naming bicycle lanes in Indonesia's new capital, Nusantara (IKN), with a focus on preserving and empowering local languages and intangible cultural heritage, particularly among indigenous communities such as the Paser. As IKN aspires to become a smart, green, and cultured city, the promotion of non-fossil fuel transportation, including bicycles, requires thoughtful and culturally sensitive naming practices. However, interdisciplinary studies that combine transportation planning, language, and cultural heritage are still lacking. Using a qualitative approach, this study argues that incorporating local languages and cultural values into the naming of bicycle lanes not only functions as a tool of collective memory but also strengthens local identity and cultural sustainability. Furthermore, this article highlights the importance of balancing local languages with the national language, Bahasa Indonesia, in public toponymy to ensure both cultural representation and national unity. Such integration supports an inclusive urban identity while also recognizing

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and respecting the diversity of Indonesia's cultural landscape. By embedding local linguistic and cultural elements into the naming system, the physical space of IKN can serve as a living reflection of its people's heritage, positioning the capital not only as an administrative center but also as a beacon of cultural identity and continuity.

Keywords: Toponymy; Indonesia New Capital City; Local Language; Intangible Cultural Heritage; Bicycle Lanes

1. Introduction

The Indonesian government is building a new national capital (from now on, IKN) called Nusantara. This has been regulated in Law Number 3 of 2022 concerning the National Capital. The development of IKN is referred to as the improvement of human civilization and as a representation of the nation's progress^[1]. The location of IKN has been determined through Law Number 3 of 2022 concerning the National Capital. The law embodies the principles of IKN with the concept of being a smart capital, green capital, and cultural capital. As a derivative of the Law, a master plan for the IKN development has also been completed, showing the concepts of smart cities, green cities, and cultural cities, which are reflected through the planning of road construction and transportation systems to be carried out.

In supporting the concept of green cities, non-fossil fuel transportation modes such as electric vehicles and bicycles need to be encouraged. Therefore, there is a need for a comprehensive study, in terms of the social, cultural, and environmental aspects, following the characteristics of travel and interaction between land uses in the central government area of the capital IKN, which covers an area of 6856 ha. Bicycle lanes are specifically intended for bicycle user traffic and vehicles that are not motorized but require human labor and are separated from motor vehicle traffic to improve the safety of bicycle user traffic. Bicycles have the potential to be a means of transportation for movement within the city as well as for short-distance activities. The controlled use of bicycles in the national capital is expected to reduce the activity of motorized vehicles, which impacts reducing the use of fuel oil (BBM) to reduce gas emissions that cause global warming.

In addition to ecological considerations, the construction of bicycle lanes in the IKN area is also supported by Law Number 22 of 2009, Article 25, concerning traffic and road transportation. The content of the law states that every road used for traffic is generally required to be equipped with road equipment, including facilities for bicycles, pedestrians, and

people with disabilities. The law also states that supporting facilities for the implementation of traffic and road transportation include bicycle lanes (Article 45), and the government must provide ease of traffic for cyclists. Bicycle users have the right to support facilities for security, safety, order, and smooth traffic (article 62). The design of bicycle lanes is also related to Law Number 38 of 2004 concerning roads and Law Number 26 of 2007 concerning Spatial Planning. To fulfil the law's mandate, constructing bicycle lanes in the central government area of the new national capital is very feasible.

The construction of bicycle lanes in the IKN area is incomplete without local cultural studies, which are then used to name the bicycle lanes. The use of regional languages, such as the language of the Paser, which is an indigenous tribe at the construction site of the Central Government Core Area (KIPP), should also need to be considered because it is related to the culture of the local community. These street names on bicycle paths serve as urban memory^[2]. Shared with newcomers who later occupy the country's capital and the local community. Sharing memories can integrate residents with migrant communities.

As a smart, green, and cultured city, bicycle lanes need to be constructed with attention to these three aspects. However, until now, no study has discussed the bicycle lane by paying attention to these three aspects. Moreover, there has also been no research on bicycle transportation routes that are seen in a multidisciplinary manner, namely, transportation science and cultural studies. The existing research on IKN is mostly about ecological, economic, and geographical aspects of IKN^[3]. The location of IKN is also important to pay attention to in the development of IKN, including encouraging the use of bicycles, so it is necessary to have an arrangement and management plan at the initial stage of the program to build bicycle transportation lanes at IKN.

Existing research on the cultural aspects of the IKN is limited to inventorying various cultural products, both in the form of archaeological remains^[4-8].

Various studies agree that the presence of IKN has the

potential to harm the preservation of local culture and local knowledge contained in it because it will cause the entry of foreign cultural flows along with the presence of IKN, but these studies have not offered a cultural strategy. The protection of intangible cultural heritage in the IKN community is seen more as local knowledge concerning Indigenous peoples' forest and land rights^[9], even though various other kinds of intangible cultural heritage are also important to preserve and revive in these Indigenous communities.

Toponymy, the study of place names, plays an essential role in the preservation of intangible cultural heritage, as it embodies local languages, oral histories, and cultural meanings embedded in place names. These names function as vessels of collective memory, connecting present communities with their past and ancestral identity. In Indonesia, many local toponyms encode cultural values, spiritual beliefs, and environmental knowledge, often rooted in indigenous cosmologies and practices^[10]. Preserving such names not only safeguards linguistic diversity but also reinforces a community's attachment to place, particularly as rapid urban development and administrative renaming threaten traditional toponymic systems. The UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage also recognizes language and naming as fundamental expressions of intangible heritage. Therefore, integrating toponymic research into cultural policy contributes to the sustainable conservation of intangible cultural heritage and affirms local identities in a globalizing world^[11].

This article aims to present the results of a qualitative study on how the intangible cultural heritage of local communities in the development area of the IKN's Central Government Core Area (KIPP) can be used as bicycle lane names as a way to preserve and empower the local culture of indigenous tribal communities in IKN, based on a toponymy approach. The article will review the existing bicycle lane road development plans in regulation, the language and cultural conditions that need to be preserved, and the design of naming bicycle lane roads using local languages to implement smart, green, and cultured city design.

1.1. Bicycle Transportation as an Application of Sustainable Transportation

According to Kenworthy^[12], criteria for sustainable cities related to transportation are realizing sustainable cities

by minimizing the number of motorized vehicles and transportation directed at using bicycles and walking. Many alternative modes connect the city center and suburbs, so they do not depend on private cars. The application of *sustainable* transportation is based on the principle of a transportation system that provides high accessibility for its users. Everyone, including people with disabilities, has access to a good transportation system. *Sustainable* transportation in its application needs to prioritize using *unmotorized transport* in the transportation system.

Therefore, it is necessary to integrate *unmotorized transport* with other *modes of transportation*. One of the unmotorized modes of transport is the bicycle. Bicycle transportation mode is an attractive choice for the community because of its low operational costs. The added value of bicycle use is that it can reduce pollution levels and vehicle accidents^[13]. Concerning lowering the rate of vehicle accidents and the safety of bicycle users, there is a need for facilities that can provide security and comfort for bicycle users. In the Guidelines for Roads and Bridges of the Directorate General of Highways of the Ministry of Public Works and Public Housing Number 05/P/BM/2021 concerning the Design of Cyclist Facilities, it is stated that cyclist facilities that need to be provided include cyclist lanes, signs, markings, and bicycle parking lots.

Bicycle lanes are prioritized for bicycle user traffic, separate from motor vehicle traffic, to improve bicycle traffic safety. Several major cities in Indonesia, including Jakarta, have implemented bicycle lanes by integrating with motor vehicles and pedestrian vehicles. The bicycle function also uses feeders to transfer points of other modes of transportation. The detailed concept of applying cyclist paths in Jakarta is divided into three categories: bike path, bike lane, and *bike road*^[14]. According to prior research, implementation of bicycle lanes which integrated with other modes of transportation is not supported by special bicycle parking facilities, and bicycle users are less comfortable with changing modes of transportation^[15].

Therefore, in developing new cities, bicycle lanes must be planned systematically to implement sustainable urban development as a whole^[14]. The development of bicycle lanes must consider the diversity of personal public needs^[12]. Bicycle lane routes need to consider the sustainability of planned paths based on community behaviour and travel

needs as an effort for social, economic, and cultural integration^[1, 14].

1.2. Urban Memory, Language, and Urban Toponyms

In cultural architecture, Hatice Ayatac and Selime Araz^[2] developed thoughts about urban memory and urban toponymy that depart from the study of collective memory and language. According to them, the street is a crucial social structure component and a memory space encapsulating previous cultural experience. One factor contributing to the growth of urban communities comes from the formation of cities which starts from villages, both planned growth and wild^[16]. The general requirements of urban development are sustainable resources (including water, food, raw materials, and those integral to development and population recruitment flows) plus a viable economic role (including financial, central, administrative, and religious functions). This flow of population or migration then enlivens the city with various activities. Thus, the arrival of residents of a new town will meet with residents who should foster an attitude of tolerance, mutual respect, and dialogue initiatives in the daily process that creates social cohesion.

Urban Memory^[2] is a shared memory in urban communities of information stored in the city from natural and cultural landscapes created by humans. Memory has a structure that can sort out which parts will be remembered and which will be forgotten, depending on who or which society composes the memory. In urban toponymy, the memory of places embedded as names is the study of place names (toponymy), their origin, meaning, use, and typology. Naming places based on worldwide conventions reveals that each country or region has created a memory system based on its culture in certain areas.

Ayatac and Araz^[2] said street names provide a comprehensive and rapid understanding of urban memory. Street names, which are used repeatedly by residents, lead to memory. Concepts in the population's memory may change, or the name of something may be forgotten, but collective memory can reshape history^[17, 18].

In addition, the capital city's functions are preserving culture and history^[19] and carrying out its functions as government administration management, integration, and formation of symbols or symbolization. Therefore, IKN, as

the new capital of Indonesia, also needs to consider its function as a presser and preserve the historical memories of the community.

Meanwhile, Rubin^[17] presents his theory of memory in oral tradition regarding Parry and Lord, who state that oral tradition is seen as human behaviour and not as a *reified* text. He mentioned that oral tradition is also related to the study of psychology because it concerns human behaviour related to cognitive aspects. From the perspective of psychology and biology, behaviour is studied as a *quaint* and artful form of memory in society's technology. Oral tradition plays a role in carrying out the inheritance of these memories. The legacy of oral tradition is related to memory in its care (preservation). The heritage of oral tradition is successful because it is stored in one's memory and passed on continuously. Of course, the heritage of oral tradition undergoes changes that we later know as versions of it.

Regarding Rubin's opinion above, oral tradition, local language, and intangible cultural heritage related to the behavior and memory of society can be proposed and utilized in naming bicycle lanes in the central government area of the new national capital. The proposal to name the bicycle lane in the main government area of the new capital is an effort to preserve the oral tradition that was initially stored in the memory of the people into not only "living *memories*" but also "living traditions" that can cross time boundaries and cross mediums from oral to written that will be remembered and read by future generations.

Toponymy holds strategic value in the development of sustainable infrastructure in Indonesia's new capital (IKN), particularly in naming healthy, green, and smart bicycle lanes. Integrating indigenous languages and local ecological knowledge into toponyms can promote environmental awareness and cultural identity while enhancing user experience through place-based narratives. For example, naming bike routes after native flora, traditional paths, or cultural figures can transform utilitarian infrastructure into living cultural landmarks. As Tent and Blair^[10] note, "toponyms are not merely geographic references; they reflect community values, identity, and environmental interaction." In the context of IKN's vision for a smart and green city, culturally meaningful toponyms support inclusive urban design by embedding local heritage into modern mobility systems. This approach fosters a sense of belonging, encourages ac-

tive transportation, and ensures that cultural sustainability is integrated into urban planning.

Toponymy, as a subfield of linguistics, studies place names to understand how language reflects cultural, historical, and social contexts within a region. It involves analyzing the linguistic structure, etymology, and semantic meanings of toponyms, which often preserve archaic language forms and local dialects^[20]. Through this linguistic lens, toponyms reveal insights into human geography, migration patterns, and cultural identity^[21, 22]. Moreover, the study of toponyms aids in documenting endangered languages and oral traditions, as place names frequently encode indigenous knowledge and community heritage^[18]. Therefore, toponymy bridges linguistic analysis with cultural and spatial understanding, offering a unique perspective on how language and place interconnect.

The toponymic method employed in naming bicycle routes within the Indonesian new capital (IKN) involves a multidisciplinary approach combining linguistic analysis, ethnographic fieldwork, and participatory mapping. This method identifies local toponyms by documenting oral traditions, indigenous language use, and historical associations with the landscape. As Azaryahu and Kook^[23] emphasize, “toponymic practices are deeply embedded in the politics of space and the cultural construction of place,” making it essential to involve local communities in naming processes. By integrating data from local elders, traditional ecological knowledge, and historical maps, planners ensure that the toponyms reflect both cultural continuity and ecological relevance. This method not only preserves intangible cultural heritage but also contributes to sustainable urban identity-making, aligning with IKN’s goals for a liveable, smart, and culturally grounded city. The application of toponymic methods thus becomes a tool for spatial justice and inclusive planning^[24].

2. Materials and Methods

This research uses a qualitative and multidisciplinary approach involving three fields of study, namely transportation, language, and cultural studies. This approach is helpful in comprehensively seeing the construction of environmentally and culturally friendly bicycle lanes in IKN. The researchers involved in this study also represent a variety of

complementary disciplines, such as the study of oral tradition, language, transportation science, and culture.

The location of this research is the area that will become the National Capital (IKN), especially the Central Government Core Area (KIPP). However, because this research is also preliminary, a literature review was carried out, and data were collected from information related to IKN from the IKN Authority Agency and the Ministry of Transportation in Jakarta.

The methods used for data collection consist of four ways: library and literature review, focus group discussion (FGD), field observation, and in-depth interviews. Data is obtained in four ways:

(1) Library study.

The literature review is needed to obtain information related to IKN through existing IKN development plan documents at the IKN Authority Agency and a literature review of transportation routes owned by the Ministry of Transportation. The literature review focused on reviewing IKN and local language and cultural history documents to identify local knowledge representing the region.

(2) Focus Group Discussion (FGD).

FGD is carried out by inviting experts from the IKN Authority Agency and the Ministry of Transportation to get input related to the IKN concept and transportation routes at IKN, local leaders, local activists, and local government.

(3) Field observations are required for compliance and mapping of bike paths.

The mapping is intended to ascertain the demographics and topography of bike lanes. Will it someday expand bicycles without engines for flat routes and bicycles with machines? Mapping is also helpful for determining stopping points, parking, bicycle lanes, tenancy, and *rest areas* for bicycle lane users at IKN. Mapping the location of bike lanes is necessary to ascertain the demographic character of bike lanes and the nature of bike lane users. The demographic character of the bike lane is helpful later to determine whether the bike to be used is a bike with no engine at all (if the path is flat) or a bike with half the engine power if the way is uphill and climbing. The character of bicycle lane users can be known from the distance travelled, which will be used by prospective bicycle lane users measured from residential and office locations or the destination of bicycle lane users. This mapping is also helpful to provide an overview to deter-

mine where the fitting points are for intermediate stations on bicycle lanes in the IKN Government Center in the future, such as bicycle parking lots integrated with bicycle repair sites, bicycle storage lockers, charging locations for electric bicycles, cafes, parks, rest areas, public spaces, and not far from the place of IKN offices. This entire landscape can only be obtained through field observations by transportation and mechatronics experts. Some mechatronic concepts can later be applied as examples for bike sharing management using smartphone applications, RFID biodata detection with E KTP for bicycle tenants, *tracking position* both with GPS and IOT and WIFI where the tenant and bicycle are located, how long the rental time is, can also notify *emergency* conditions for bicycle users along the bike path, and so on. The KIPP center of the Capital City of the Archipelago carried out this observation and mapping.

(4) Interviews were conducted with indigenous community leaders, village government leaders, religious leaders, and local communities in direct contact with IKN to obtain the necessary language and cultural data. The data was acquired through in-depth interview techniques and audio and visual recording. The snowball technique is used to determine the informant to interview. Interviews with government elements were conducted at least at the nearest sub-district

to the location of KIPP IKN, namely Sepaku District, North Penajam Paser Regency. We conducted interviews with the local sub-district; only then could further information on the *snowball* it will be traced according to the recommendations of the sub-district.

3. Results and Discussion

3.1. Biking Trails in IKN

If we look at the IKN development design, especially in KIPP, the bicycle lane is one of the transportation lanes designed in the road structure. It is a consequence of the vision of a green and smart city in the development of IKN.

When viewed in terms of transportation systems, IKN's target as an integrated and sustainable city, as well as a "10-minute city", requires IKN to have an integrated land use and transportation plan and integration of the entire infrastructure supported by a high level of accessibility. Planning a transportation system that is more pro to the use of non-motorized vehicles and public transportation needs to be prepared appropriately to minimize the use of private motorized vehicles in the IKN Area and its surroundings. The transportation system in question includes transportation facilities, infrastructure, and ease of accessibility (**Figure 1**).



Figure 1. Cyclist Path Plan at IKN (See Green Bikeway Line).

3.2. Paser Community's Intangible Cultural Heritage

Apart from being a smart and green city, IKN is also directed to become a 'cultured city,' meaning a city that respects the cultural values of the local community. Proven in various regulatory documents, it is stated that IKN also maintains the local wisdom of local or indigenous communities. In order not to be lost in people's memories due to the

insistence of urbanization entering the capital, the culture of indigenous people needs to be preserved. One way to keep it is to make the culture of society a collective memory of the community. The indigenous people in the KIPP IKN area are the Paser Tribe people, and one of the cultural products that can become the collective memory of the community is intangible culture. The following **Table 1** is the intangible cultural heritage of the Paser Tribe community.

Table 1. The Intangible Cultural Heritage and Its Name in Local Language in the Paser Community.

Intangible Culture Type	Name of Intangible Culture in Local Language	Information
Dance	<i>Tari ronggeng</i>	The dance art of <i>Ronggeng</i> Paser has existed since ancient times. There are many types of dances within <i>ronggeng</i> , but the name includes <i>ronggeng</i> , usually accompanied by songs containing advice and rhymes.
	<i>Tari Guntur</i>	<i>Guntur</i> dance art is also a traditional Paser dance that depicts the arrival of heroes who have just returned from the battlefield. However, this art is more prevalent in the southern region, South Kalimantan. This dance is also commonly performed in traditional ceremonies.
	<i>Tari agong</i>	The <i>Agong</i> dance originated in the Paser Pematang tribe and shows the villagers' gratitude for the excellent news from Datuk Nalau, who went hunting about hunting, which was greeted with joy with <i>kulintang</i> , drum, and gong dances and music.
	<i>Tari rembara</i>	<i>Rembara</i> dance is an inland Paser traditional dance art incorporated in rituals or dances performed during Paser traditional ceremonies such as <i>Belian</i> and other traditional ceremonies, as well as other official events.
	<i>Tari Japen Muslim</i>	<i>Jepen</i> Muslim dance is based on the movements of a Muslim during prayer.
	<i>Tari singkir</i>	<i>Singkir</i> dance is a traditional Paser dance that uses bamboo as a medium in the interior. It is a ritual dance that usually accompanies traditional ceremonies.
	<i>Gendang agong</i>	<i>Gendang Agong</i> , one of the traditional arts of the Paser coastal community, is displayed whenever there is a crowd or accompanying the bride's procession in marriage.
Belian	<i>Petika muara adang</i>	This traditional <i>gambus</i> rhythm comes from Muara Adang village. This rhythm combines dynamic music with conventional songs created deliberately to disturb the tranquility of the night created by the small waves on the coast of Muara Adang.
	<i>Belian</i>	<i>Belian</i> is a ceremony to hold meetings with gods and spirits in places that are considered sacred, such as mountains, oceans, rivers, large wooden trees, and large stones. Since ancient times, <i>belian</i> has been the center of medicine. In Paser, it is called " <i>mulung</i> ", which means one proficient in dissecting both inside and out. Before the existence of modern medicine, <i>mulung</i> could examine people alive without medical drugs, with the tool usually used being a <i>mandau</i> .
	<i>Sentiu</i>	Usually, this type of purchase is made within two days and two nights and is for medicinal purposes only.
	<i>Basipung</i>	This purchase can be done one day and one night, two days and two nights, or three days and three nights. It is used when first clearing land that has never been cultivated, such as clearing forests for gardening or farming.
	<i>Timbu</i>	This type of <i>belian</i> is usually done one day and night to treat crazy people or <i>pasung</i> .
	<i>Bennyaru</i>	This purchase is usually made daily and nightly; <i>Benyaru</i> is generally used for medicine and clearing land. <i>Besipung</i> differs from <i>Benyaru</i> because it is used for land cultivated for a long time.
	<i>Boat kokat</i>	This <i>belian</i> is the same as <i>benyaru</i> , but the coke boat lasts four days and four nights.
	<i>Buntang</i>	This purchase is carried out for four days and four nights and is performed alternately by eight <i>mulung</i> people, with one <i>gading</i> assisted each night. <i>Belian buntang</i> , or big <i>belian</i> , is done to rid a village of diseases and plant-destroying animals until the following year. This purchase is rarely done because the ancients used humans as sacrifices.

Table 1. Cont.

Intangible Culture Type	Name of Intangible Culture in Local Language	Information
Traditional martial arts/sports	<i>Kuntau</i>	<i>Kuntau</i> , Paser's signature martial arts, differs from other martial arts. In addition to functioning as a martial art for the Indigenous people of the Paser tribe, <i>kuntau</i> is also part of the performance of cultural arts displayed at traditional events, such as weddings and so on.
Acara-acara adat	<i>Ungan Purun</i>	Paser Traditional Institute preserves the traditional event of <i>Unga Purun</i> . Since " <i>ungan</i> " means work and " <i>purun</i> " means united or together, <i>ungan purun</i> means working together in an activity.
	<i>Melas tahun</i>	In Paser language, <i>melas tahun</i> is <i>mulis kampung</i> , which means to treat the village as a whole. In the past, <i>melas kampung</i> was only done for one village. This event may be the same as the village cleanup and rescue event.
	Traditional <i>kembo</i> feast	In the form of a development exhibition event in the Paser community.
Paser traditional ceremonies	<i>Tipong tawar</i> or <i>jumit buroi</i>	It is done if a person violates the rules of life, such as breaking taboos, etc.
	<i>Nampa ponta</i> ceremony	The <i>nampa ponta</i> ceremony is carried out to welcome the rice harvest by making emping from half-aged rice, then frying or roasting, then pounding together, and the results are eaten together.
	<i>Nembayu bias</i> or <i>bias bayu</i>	It is a traditional ceremony performed after rice cutting, usually performed in small quantities by each family.
	<i>Napa jaja wadu warna</i>	It is a ceremony performed every year after the rice harvest. It is done on a large scale because one village usually gathers to do it.
Paser Language		Languages spoken by the Paser people
Folklore		There are about 20 Paser tribal folklore, such as Putri Petong, Lalung and Putri Junjung Bulau, Putri Darah Putih, Pego and Putri Kayangan, Sungai Suatang, Owl and Seven Rattan Seekers, The Curse of Dewi Nilam, The Birth of Princess Petung, Nalau Raja Tondoi.
The Art of Speech		<i>Betoreh</i> , is an art of storytelling for various purposes.
Traditional residence of the Paser Tribe	<i>Balai Paser</i>	A house inhabited by several heads of families, usually 3 to 7 heads of families
	<i>Lamin</i>	Paser Indigenous gathering place
	<i>Kuta</i>	A leader's house, like a chief's house
	<i>Dalam</i>	Home to the king
	<i>Pondok</i>	A temporary stopover to take shelter on a trip
Ancestral homes	<i>Rumah Panti</i>	The orphanage house is a house made as a symbol of the stopover of the ancestors of the Paser Tribe.
Paser Tribe Culinary		<i>Siput bakau</i> , <i>siput batang</i> , <i>sop tekalo</i> , <i>sambal bawang rambut</i> , <i>sambal terong asam</i> , <i>daging rusa</i>

3.3. Local Language and Toponymy

The use of local languages in naming various forms of intangible cultural heritage reflects the important role of toponymy in preserving linguistic and cultural identity. Toponymy—the linguistic study of place names—is a vital area that connects with multiple disciplines such as history, geography, and cultural studies. It offers valuable insights into cultural heritage, local identities, and historical patterns of human settlement. More than just the act of naming locations, toponymy functions as a means of safeguarding the linguistic and cultural narratives of communities. The diverse dimensions of this field are examined through various

lenses and case studies in the papers presented. Toponymy is recognized as a form of intangible cultural heritage, as illustrated by its use in Galicia^[25], where place names serve as educational tools to foster students' connection to their cultural history and encourage the preservation of local heritage. Therefore, toponymy also plays a valuable role in the preservation of intangible cultural heritage. In the context of the new capital city (IKN), toponymy is particularly important for safeguarding the diverse cultural heritage of local communities.

Based on existing toponymy, village names tend to be more general and are typically rendered in Indonesian. This reflects a social condition in which local communities have

merged with migrant populations—such as Javanese, Sundanese, Buginese, Banjarese, and Makassarrese—largely due to the region’s history as a transmigration area. Among the Paser Balik people, for instance, there appears to be a fading or absence of awareness in using expressions from their native language. Folk narratives that once formed part of their cultural memory are now difficult to recall or retell in their indigenous tongue. According to community elders, many no longer remember the traditional stories or legends they used to hear, perhaps due to aging, and their children are also unable to pass them on. Although dictionaries of the Paser and Paser Balik languages have been initiated, they have not yet been widely applied or integrated into the naming of streets or public buildings—efforts that could help preserve and collectively recall their cultural heritage.

3.4. Naming Bike Paths Based on Local Language and Intangible Cultural Heritage

The naming of bicycle paths using the names of the intangible cultural heritage of the Paser Tribe community will be a reminder of the various intangible cultural heritages owned by the Paser Tribe community. The naming of bicycle lanes in IKN is an entirely new name for paths or roads because bicycles are currently not vehicles used daily by

the Paser Tribe community. Using the names of intangible cultural heritage as bicycle path names will be a reminder of the existence of the Paser indigenous tribe.

The way to name bicycle lanes using the names of intangible cultural heritage mentioned above is to group each word into types of intangible cultural heritage. For example, one block uses the names of intangible cultural heritage in the Paser type of dance or traditional ceremony. If there are many names of intangible cultural heritage, such as folklore types, which have about twenty folklores, it can be one group of paths that use folklore-type names. It can be done as follows.

Table 2 presents an example of a pilot project illustrating the application of local languages and cultures—particularly intangible cultural heritage—in the naming of bicycle lanes. These proposed names can be classified according to types of intangible cultural heritage found among both indigenous and migrant communities, such as traditional dances, culinary practices, folklore, customary ceremonies, or local languages. For each category, one representative name is selected as a potential name for a bicycle lane, exemplifying how local linguistic and cultural elements can be integrated into urban toponymy. The criteria for selecting bicycle lane names are based on categories of intangible cultural heritage, as outlined in **Table 2**.

Table 2. Schemes of Bike Line and Its Name Based on Local Language.

	Line Names	Example of Local Language for Naming Lanes
Line 1 Types of Dance	Based on dance names	Tari Ronggeng Lane, Tari Guntur Lane
Line 2 Types of Culinary	Based on culinary names	Tekalo Lane, Sambal Bawang Rambut Lane
Line 3 Types of Folklore	Based on significant characters in folklore	Putri Petong Lane, Darah Putih Lane, Putri Junjung Bulau Lane
Line 4 Types of Traditional Ceremonies	Based on the names of traditional ceremonies	Nondoi Lane, Tipong Tawar Lane

4. Discussion

A capital city is not only a center of administration, community integration, and symbolization, but also a way of preserving its people’s collective memory and cultural heritage^[19]. Therefore, the names of intangible cultural heritage used in the names of paths and roads on bicycle paths are an implementation of the cultural preservation function of the community. It is what it later became. As stated by

Ayatac and Araz^[2] of these street names on bicycles serve as *an urban memory* shared with newcomers who occupy the country’s capital later and local communities. Sharing memories together can integrate residents with migrant communities. Thus, the function of cultural preservation will collaborate with the role of integration in developing the capital city.

The challenge is preventing conflict due to cultural rep-

representations that appear when naming bike lanes or other features. It is unavoidable, because East Kalimantan itself, which is the location of the IKN development, has many ethnic groups in it, especially since some villages in the IKN construction site are transmigration villages. This challenge can be controlled by balancing the cultural representation of other tribes in naming roads, public spaces, and meeting buildings. Still, the Paser Tribe and Paser Balik Tribe, who are indigenous tribes in the core area of IKN development, need to have a place in bicycle lanes, considering that bicycle lanes will be more suitable to be used as transportation routes in the city, and according to the vision of IKN development, namely as a green and cultured city. Thus, a sustainable city will be implemented^[12] in terms of a green environment and culture that continues to be sustainable.

Currently, the use of toponymy in naming bicycle lanes and place names in Indonesia's new capital city (IKN) is still limited and not fully integrated. This gap arises mainly because the city's development prioritizes modernization and urban planning, often overlooking the incorporation of local languages and cultural heritage embedded in traditional place names. The lack of local toponymic usage risks disconnecting the community from its intangible cultural heritage and may result in a loss of identity amid rapid urbanization. To address this, it is essential to adopt a toponymic approach that respects and preserves indigenous names and cultural meanings in the naming of bicycle lanes and public spaces. Such integration would not only enhance cultural continuity but also promote a sense of belonging and environmental awareness, supporting IKN's vision as a green, smart, and culturally vibrant city. Collaborative efforts among urban planners, linguists, local communities, and policymakers are crucial to ensure that toponymy becomes a foundational element in the city's spatial identity and sustainable development.

Balancing local languages and the national language in place naming within Indonesia's new capital city (IKN) requires a thoughtful approach that respects cultural diversity while promoting national unity. Integrating local toponyms alongside Indonesian (Bahasa Indonesia) names can foster inclusivity and preserve intangible cultural heritage, while ensuring accessibility and comprehension for a broader population. This bilingual or multilingual naming strategy supports cultural identity and community pride without compromising

the functionality of navigation and communication across diverse groups. Effective implementation involves participatory planning, involving local communities, linguists, and government authorities to select names that honor local heritage and are also understandable at the national level. Such a balance aligns with UNESCO's recommendations on safeguarding intangible cultural heritage through place naming, promoting both cultural diversity and social cohesion^[11]. Ultimately, a harmonized toponymic system in IKN can strengthen cultural preservation while supporting the city's role as a symbol of Indonesia's unity and progress. The initiative should actively engage local communities—both indigenous populations and migrant residents—to cultivate a sense of shared responsibility and cultural awareness in preserving intangible heritage through the use of local languages and traditions in bicycle lane naming.

5. Conclusions

Bike lanes that use the names of intangible cultural heritage can meet IKN's target as a smart, green, and culturally protective city. This article shows that the Paser community or other local communities that live in the centre of the IKN construction site have various intangible cultural heritages. However, these various intangible cultural heritages have the potential for extinction and urbanization due to IKN development. With the vision of a green city, the use of bicycles as a means of transportation needs to be considered, both in terms of the route and the design of the route. This article offers a route naming design based on the names of intangible cultural heritage as a collective memory of the original community culture at the IKN construction site.

Toponymy plays a crucial role in naming places and bicycle lanes, serving as a collective memory that reflects the local identity and intangible cultural heritage of communities such as the Paser and other indigenous groups in Indonesia's new capital city (IKN). Despite the richness of intangible cultural heritage, many local names remain underutilized in place naming, including for bicycle lanes in IKN. The marginalization of local languages further underscores the necessity of incorporating these languages into toponymic practices to preserve cultural diversity and strengthen community ties. At the same time, achieving a balance between local languages and the national language is essential to

ensure accessibility and unity across diverse populations. Therefore, integrating local linguistic heritage with Bahasa Indonesia in naming bicycle lanes and other public spaces not only supports cultural preservation but also promotes inclusivity and national cohesion in the evolving urban landscape of IKN.

Author Contributions

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Institutional Review Board Statement

The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board (or Ethics Committee) of BADAN RISET DAN INOVASI NATIONAL (protocol code B-56748/III.8/KP.11.00/11/2022 and December 6 2022).

Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

Data is available upon request from the corresponding author.

Conflicts of Interest

The authors declare no conflict of interest.

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