

Inheritance of consonant phonemes from Proto-Austronesian into Acehese: A comparative historical linguistics study

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ABSTRACT

Acehnese is a member of the Austronesian language family. As a descendant language, it retains significant vocabulary from Proto-Austronesian, while some vocabulary has evolved uniquely in Acehese. In Comparative Historical Linguistics, such inheritance is termed linear inheritance, the direct preservation of phonemes from the ancestor language to the descendant language without significant change; and innovative inheritance, phonological modifications that occur as languages evolve over time. Despite the abundance of studies on Austronesian languages, there is only a small portion discussing the preservation of specific consonant phonemes from Proto-Austronesian in its descendant languages. This study describes the inheritance of Proto-Austronesian consonant phonemes in Acehese. It aims to contribute to the development of Comparative Historical Linguistics. In order to track the transmission of consonant phonemes from Proto-Austronesian to Acehese, the study used the Comparative Historical approach. It is anticipated that this method will reveal patterns of phonological innovation and retention. By examining the evolution of consonant phonemes, this study reveals the mechanisms shaping the Acehese language and offers insights into the historical phonology of Austronesian languages. It used a list of 200 Swadesh vocabulary items to demonstrate that many Proto-Austronesian consonant phonemes are inherited linearly in Acehese (e.g., *b → b, *c → c, *d → d), while others show innovative changes (e.g., *p → t, *s → h). Our knowledge of the preservation of consonant phonemes during the history of Austronesian languages is anticipated to grow as a result of this work. Furthermore, it is anticipated that this research would shed light on certain linguistic mechanisms, such as phonological innovation and retention, that have shaped Acehese's evolution as a descendant language. The study's findings also provide insights into more comprehensive language theories that differentiate between inventive and linear inheritance. These results give a framework for examining the phonological evolution of additional Austronesian languages, in addition to advancing the reconstruction of Proto-Austronesian phonology.

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INTRODUCTION

Modern linguistics studies have shown that current modern languages have undergone gradual emerging processes from ancient languages (Benítez-Burraco & Progovac, 2020). These modern languages reached their current forms through extensive gradual evolution and development along

historical paths (Fujita & Fujita, 2022). They have evolved over centuries, and even millennia, after diverging from their ancestor languages, known as proto-languages (Rozov, 2023). Proto-Austronesian (PAN) is the ancestral language from which the languages of Southeast Asia and the Pacific are

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derived, exhibiting considerable variation in their contemporary forms (Ross, 2020).

The language family included by PAN originated in mainland Southeast Asia. There are two sub-groups within the Austronesian language family: the Eastern Austronesian sub-family, which includes Oceanic or Polynesian languages, and the Western Austronesian sub-family, which includes Indonesian and Malay languages. The languages of Malagasy, Formosan, Filipino, Minahasan, Acehnese, Gayo, Batak, Javanese, Madurese, Sundanese, Nias, and Minangkabau are all part of the Western Indonesian language group. Sula-Bacan, South Halmahera-West Irian, and Timor-Ambon are the languages that make up the Eastern Indonesian language group (Aldridge, 2024; Chen et al., 2022).

Recent studies on PAN have concentrated on the linguistic traits (Maunareng et al., 2020; Panjaitan, 2022), geographic distribution (Cho, 2020; Donohue & Denham, 2020), and historical evolution of its descendant languages (Fricke, 2023; Putra et al., 2020). The development of PAN into its contemporary descendants has been tracked by linguists using reconstructive and comparative techniques (Aminin & Dacholfany, 2021; Skirgård, 2024). As a result of migration, trade, and contact with non-Austronesian languages, PAN's vocabulary, phonology, and grammar have evolved throughout the Austronesian region, as these studies demonstrate. This expanding corpus of work sheds light on the historical and cultural linkages that Austronesian-speaking cultures have to their language history.

PAN did not simply transform to modern Austronesian languages. Complex interactions of sociolinguistic, geographic, and historical stimulation resulted in the descendancy languages (see Pakendorf et al., 202; Roque, 2022). This language family developed regional characteristics as it spread and diversified from Madagascar to Easter Island and from Taiwan to New Zealand over the course of many thousands of years. PAN went through change to become the lowlands variant through some innovation – some new features came as a result of internal changes or external influences – and some linear inheritance, which simply meant retention of the features of the language with little change (Padilla-Iglesias et al., 2020). While language innovation is seen as the response of speakers to new environmental or socio-cultural changes (cf. Grenoble & Osipov, 2023), something which linear inheritance does not offer satisfaction not only present global issues but also those historical ones depicting the relation to the proto-language (cf. Seržant & Moroz, 2022).

Recent linguistic studies has been helpful in answering questions related to the evolution of individual linguistic traits, such as consonantal systems, from PAN (Blevins, 2021). Consonants,

along with vowels, belong to the most profound phonological and phonetic units in the context of historical comparison of languages (cf. Trubach et al., 2023). It has been observed too that a number of distinct consonants are found in word forms belonging to different but related languages of the Austronesian group (Culhane, 2022). These studies, however, note the presence of changes and innovations in consonantal systems of the languages. These changes resulted from the displacement of peoples, the peculiarities in the language contact with the non-Austronesian languages and the geographical barriers (see Blench, 2020).

Recent linguistic studies help to appreciate the processes that brought certain linguistic features, in this case, consonantal systems, into existence. Specifically, consonantal systems can be reconstructed for the progenitor PAN. Consonants as one of the components of phonology are crucial in determining the historical relations of different languages (Berrebi et al., 2023; Bybee & Easterday, 2022). It has been noted in comparative studies that many Austronesian languages share consonantal elements (Culhane, 2022; Jiang, 2022; Smith, 2023), which feature in evidence of their genetic relationship. However, these studies also emphasize the general tendencies and innovations that take place in consonantal systems for various reasons: migration routes, contacts with non-Austronesian languages, or geographic remoteness (Urban, 2020).

The austronesian family contains at least 1,257 languages (see Yu & Li, 2021) It is the second most of any language family. The massive amount allows the large number of languages that have not been explored in historical linguistic studies. Among these languages, the Acehnese language has not been touched in many studies. Some recent studies on Acehnese mostly only touch sociolinguistic aspects, such as language attitude (Aziz & Aulia, 2021), modern language shift (Ismail et al., 2021), translanguaging, code mixing, and code switching (Akmal et al., 2022). Spoken primarily in Aceh, a province found in the northern most part of the island Sumatra, Acehnese can support the investigation of the relationship between linguistic 'proto' and 'modern'. Therefore, this study tries to fill an empty niche in mapping relations between Acehnese and its predecessor language.

Among the consonants of Acehnese there are those which can be described as implosive or glottalized which are well known to have been developed through a long history of linguistic activity. Their interest stems from the observation that some of these features emerged from PAN while some are localized innovations of the people of Aceh. This duality provides an interesting element in the study of the Acehnese people, that is how the Acehnese people incorporated their Austronesian roots with their sociocultural and geographical

surroundings. More specifically, this study is focused on consonant inheritance.

The study of consonantal inheritance and innovation in Acehnese is not only of linguistic interest but also contributes to broader discussions in both historical linguistics and cultural anthropology (cf. Khairiah et al., 2024). In most cases, the consonantal features of a language are reflections of interaction and culture contact (cf. Beloglazova et al., 2024; Pumpian, 2022). For example, the fact that Acehnese is a coastal language and has had a history of trade and migrations would have come in contact with languages of its vicinity and further afield. External factors like these and others developed the consonantal system in Acehnese, but in a very intricate manner.

Examination of consonantal inheritance and innovation involves some aspects of comparative linguistic and the phonological analysis of the investigated languages (Edwards, 2023; Yurayong & Szeto, 2023). Apart from that, comparative linguistics suggests ways for reconstructing the phonetic and phonological features of PAN, which can be assumed to be the basic parameters for the search for inherited elements in Acehnese. Continuity and divergence in the consonantal systems of Acehnese and other closely related Austronesian languages may also be established through comparison. Phenomenological analysis, on the other hand, does make it possible to explore the inter-structural relationships of the consonants within the hierarchy of the Acehnese language system, in which their historical background and distribution are also illuminated.

This study is expected to bring implications that go beyond linguistics. The diachronic change in systematization of consonants may reflect historical migrations, sociocultural phenomena, and the processes of language change (cf. Kapranov et al., 2024; Sanz-Sánchez & Moyna, 2023). For example, retention of certain Acehnese consonants can be considered as coming from earlier times in contact with PAN-speaking people while the changes could indicate times when the language and its speakers encountered new cultures or adapted to a new environment. Such data provide a fuller perspective of the history and identity of the speakers of the Austronesian languages.

Even though there exists a considerable number of linguistic works on Acehnese, there are still some unsolved questions as to the development of its consonants. Earlier studies have tackled the more general issues of phonological or grammatical theory leaving the particulars of consonants' inheritance or innovation rather sparse. This research intends to fill the gap by analyzing the consonantal system of Acehnese and its development from PAN. In doing so, it aims to

enhance the linguistic picture of the Acehnese and enrich the studies of Austronesian languages.

With regard to these focuses, the present study investigates consonantal addition and deletion in Acehnese from the perspective of their changes from PAN. In particular, it notes the linear inheritance of consonantal features, that is to say, preservation of elements with minimum changes from the proto language, as well as innovations that have developed as a result of the Acehnese language and culture. In part, through this analysis, the study hopes to reveal the interrelationship between stability and dynamics of a language evolving through time and space in the history of the Acehnese language as well as its linguistics.

METHOD

The present study tried to develop a comparative historical linguistic analysis to investigate the consonant phonemes inherited from PAN into Acehnese. As a methodological approach, this one is appropriate for the purpose of the study because it enables the reconstruction of a protolanguage and its contemporary variants. The study's methodology comprises the following stages: data collection, analytical framework, and interpretation of findings.

Data Collection

The corpus for this research has been mostly collected from the works of ethnolinguists (among others Keraf in Nasoichah, 2021; Panjaitan, 2022), and those who conduct the comparative study of proto language and its spreading descendant languages, particularly Acehnese (Akmal et al., 2022; Benjamin, 2024). The consonantal inheritances and innovations were traced using a core dataset of 200 Swadesh vocabulary items (Meliana et al., 2024). These lexical items were picked because their usage is common to most Austronesian languages thus enabling phonological elucidation of the cognate sets. Fieldwork involved direct engagement with native Acehnese speakers to confirm the phonetic realizations and phoneme patterns that cut across all dialects. Natural speech and interviews which complemented the lexical data revealed precise phoneme incorporation by the speakers of modern Acehnese.

This mixed-method approach, combining corpus-based analysis with field data, ensured the inclusion of naturally occurring linguistic phenomena while grounding the analysis in established comparative linguistic frameworks (cf. Granger & Lefer, 2020). Data from previous studies and historical reconstructions of PAN were also integrated to enhance the robustness of the analysis, ensuring a comprehensive perspective on the consonantal developments from PAN to Acehnese.

Analytical Framework

For the analytical approach, this study drew on a comparative historical linguistics framework (cf. Guardiano et al., 2020; Hartmann & Pleyer, 2021; Mohammadirad, 2024), common for studies that focus on the evolution of languages. This framework makes it possible to identify consonants and reconstruct their proto-forms through the study of the phonological correspondences and sound changes in the systems of related languages. Specifically, the framework focused on two processes: linear and innovative inheritances (Keraf in Orlandi, 2020; see also Pratiwy, 2019).

To put it simply, linear inheritance can be explained as phonemes that have not changed significantly from the holistic sounds believed to have been present in the cognate languages. However, innovative inheritance means that phonological alterations and substitutions or new phonemes that came into contact with any kind of environmental or even social factors emerged. This kind of cross section allowed the study to make distinctions between phonological components that were retained and those that were unique to Acehnese gradually helping to detail the linguistic development of the language.

In order to add value to the comparative approach employed by the researchers, articulatory phonetics afforded the researchers how the consonants are physically produced and articulated in Acehnese, thereby correlating the observed phonetic variation to its historical counterparts in PAn.

Stages of Analysis

The stage of analysis is operationally divided into three parts, all of which are interrelated in a way that the succession of processes aims at establishing the consonant features evolution from Proto-Austronesian towards Modern Acehnese, through the interface of historical persistence, phonological changes, and sociolinguistic factors.

1. **Data Preparation and Initial Comparison:** The first stage involved organizing the dataset of PAn phonemes and their hypothesized correspondences in Acehnese. This included transcribing recorded speech into International Phonetic Alphabet (IPA) notation to ensure consistency in phoneme representation. Each Acehnese consonant was mapped against its PAn counterpart, noting both linear and innovative developments.
2. **Identification of Sound Changes:** The second stage focused on identifying systematic sound changes by comparing Acehnese phonemes with their PAn equivalents. Patterns such as phoneme shifts (e.g., $b > \beta$), mergers (e.g., p and $f \rightarrow p$), and innovations (e.g., $z > j$) were

documented and categorized based on their frequency and context within the dataset. Changes were analyzed in terms of their phonological environments to determine if specific contexts (e.g., word-initial, intervocalic, or word-final positions) influenced the shifts.

3. **Validation and Hypothesis Refinement:** The final stage involved cross-referencing findings with existing studies and linguistic databases to validate the proposed phonological developments. Any discrepancies were revisited using additional data from field recordings and secondary sources, ensuring that conclusions were well-supported and reflective of broader linguistic trends.

Validation and Triangulation

In the interest of advocating for the reliability and the validity of the findings, this study employed some triangulation strategies. In its methodological triangulation, qualitative data collected throughout the field research was augmented by quantitative examinations of phoneme frequencies and sound changes. The integration made it possible to draw stronger conclusions as it provided evidence supporting the results obtained through diverse analytical approaches.

Data triangulation included an attempt to measure the Acehnese phoneme data against that of other Austronesian languages, with a focus on the languages belonging to the Western Austronesian sub-family, in order to verify the regularities observed. Some of the major findings were corroborated with the findings of other researchers such as Keraf (in Muhammad & Hendrokumoro, 2022) and Blust (in Billings & McDonnell, 2024; Lobel et al., 2022) so as to be consistent with the tenets of modern linguistic theory.

Lastly, validation by the experts was carried out with the aid of linguists who have specialized in the Austronesian languages. The analysis was improved with their feedback, removing some likely prejudices as well as making sure that the authors' ideas were within strict academic requirements. These validation measures taken together ensured that the study's claims regarding consonantal inheritance and innovation were substantial and convincing.

FINDINGS AND DISCUSSION

The processes of retention and change, that constitute the term linear and innovation, are distinct features that characterized the consonantal inheritance from PAn to Acehnese. From a comparative historical linguistic perspective, this study found that Acehnese has retained some PAn consonants with such massive changes that have

reordered its phonological system. The data show that the consonants in Acehnese include *b, c, d, g, h, j, k, l, m, n, p, r, s, t, w, y, z* although some of them were modified to various degrees. Changes in place of articulation, replacement, or the addition of new segments were the modificational processes which were more obvious in consonant inheritance. These changes denote both the stability and the change that have taken place in the language development of the Acehnese people from PAN.

Findings

This study found at least seventeen PAN's proto-consonants were inherited into Acehnese. The consonant phonemes have been systematically preserved or new-formed during the process of development of this language from a proto language to the language of modern Acehnese. Sounds which have been the subject of this investigation include the following proto-phonemes: /*b/, /*d/, /*g/, /*h/, /*j/, /*k/, /*l/, /*m/, /*n/, /*p/, /*R/, /*r/, /*s/, /*t/, /*w/, /*y/, /*z/. All phonemes encompass various points of articulation such as bilabials, apicodentals, velars, alveolars, palatals, and trill consonants. The analysis of the phonological relationships of argumental phonemes of the PAN and Acehnese languages enables this study to demonstrate how these proto-phonemes have either been retained in shape or changed systematically through innovative phonological processes leading to the creation of distinct phonetic and phonological features of Acehnese language to understand the linguistic evolution of the PAN to Acehnese (cf. Moran et al., 2021).

The inheritance of proto-consonant phonemes from PAN into Acehnese reflects a systematic process of both preservation and innovation. For instance, the proto-phoneme /*b/ is linearly inherited as the bilabial consonant /b/ in Acehnese. Bilabial consonants are produced by bringing the two lips together, which serve as both articulator and point of articulation (Uno et al., 2020). Words like *batu'* in PAN become *bate* in Acehnese, meaning "stone," and *babah* retains its form and meaning as "mouth." This consistent retention highlights the stability of bilabial consonants in Acehnese.

Similarly, the proto-phoneme /*d/ is also linearly inherited, preserving its articulation as the apicodental consonant /d/. Apicodental consonants are formed by the tip of the tongue contacting the area between the teeth (Bybee & Easterday, 2022). Examples include *dayah*, which becomes *darah* in Acehnese, meaning "blood," and *duwa*, which remains the same in both form and meaning as "two." The inheritance of /*d/ illustrates a clear continuity of its phonetic characteristics.

The velar consonant /*g/ in PAN similarly demonstrates a linear inheritance in Acehnese. Velar consonants are produced by the back of the tongue

against the soft palate (Johan & Cahyani, 2024). For instance, the PAN word *garut* becomes *garõ* in Acehnese, meaning "scratch." The retention of this consonant emphasizes the stability of velar articulation within the language.

The proto-phoneme /*h/ also maintains its velar articulation in Acehnese. Words like *hati* become *hate* ("heart"), and *babah* remains unchanged in both form and meaning as "mouth." This inheritance underscores the consistent phonological development of velar consonants in Acehnese.

The palatal consonant /*j/ is another example of linear inheritance, where the middle of the tongue articulates against the hard palate (Urmanchieva, 2022). In Acehnese, *jahat* becomes *jahet* ("wicked") and *hujan* becomes *hujеun* ("rain"). The palatal articulation is preserved without significant changes, demonstrating the language's tendency to retain proto-consonant sounds.

The velar consonant /*k/ in PAN is consistently retained as /k/ in Acehnese. Examples include *anak*, which becomes *aneuk* ("child"), and *manuk*, which transforms into *manok* ("chicken"). The articulation at the soft palate remains consistent, reflecting the robust retention of velar sounds.

The proto-phoneme /*l/ is inherited as the alveolar consonant /l/, produced by the tip of the tongue against the alveolar ridge. Examples include *bulan*, which becomes *buleun* ("month"), and *ulu*, which becomes *ule* ("head"). This consistent articulation points to the phonological stability of alveolar sounds in Acehnese.

The bilabial consonant /*m/ is inherited in Acehnese as /m/ but also demonstrates phonological innovation through deletion in medial positions. For example, *mata* retains its form and meaning as "eyes," but *'e(m)pat* becomes *pet* ("four"). This pattern highlights both retention and positional modification within the language.

The apicodental consonant /*n/ in PAN is inherited without change in Acehnese. For instance, *bulan* becomes *buleun* ("month"), and *bunuh* becomes *bunoh* ("killing"). The articulation remains consistent, illustrating the stability of this sound in the phonological system.

The bilabial consonant /*p/ is inherited as /p/ in Acehnese, but it also undergoes a positional shift to /t/ in final positions. For example, *'apa* becomes *apu* ("what"), and *kilap* becomes *kilat* ("lightning"). This reflects a dual pattern of preservation and phonetic innovation.

The trill consonant /*R/ in PAN is inherited as /r/ in Acehnese. Examples include *zaRum*, which becomes *jarõ* ("needle"), and *beRat*, which transforms into *brat* ("heavy"). This innovation of the trill consonant highlights the dynamic phonological adaptation in Acehnese.

The proto-phoneme /*r/ also reflects a linear inheritance as the trill consonant /r/, but it

occasionally undergoes decay. For instance, *rumpūt* becomes *rumpōt* ("grass"), and *garut* becomes *garō* ("scratch"). This pattern reveals both retention and weakening of the /r/ sound in certain environments.

The apico-alveolar consonant /s/ in PAN is largely preserved as /s/ in Acehnese, but it can also innovate into the velar consonant /h/. For example, *sira* remains *sira* ("salt"), but *asu* becomes *ase* ("dog"). This dual inheritance demonstrates the flexibility of the /s/ phoneme in Acehnese.

The apico-dental consonant /t/ is inherited as /t/ in Acehnese, with occasional shifts to /n/. Examples include *tipis*, which becomes *nipeh* ("thin"), and *tahun*, which becomes *thōn* ("year"). This indicates both a retention of the original articulation and contextual variation.

The bilabial consonant /w/ in PAN is consistently inherited as /w/ in Acehnese. For instance, *duwa* remains *duwa* ("two"), and *wiri* becomes *wi* ("left"). The bilabial articulation is preserved without significant changes.

The proto-phoneme /y/ is inherited as the palatal consonant /y/, while also undergoing innovations into /r/, /i/, and /e/ in Acehnese. Examples include *kayu*, which becomes *kaye* ("wood"), and *matay*, which transforms into *mate* ("dead"). This demonstrates a rich interplay of retention and phonological innovation.

Lastly, the proto-phoneme /z/ in PAN is inherited as /j/ in Acehnese, as in *zaRum*, which becomes *jarō* ("needle"). This shift from apico-alveolar to palatal articulation reflects a significant phonetic transformation in the language.

The analysis has slightly revealed complex patterns of phonological retention and innovation. While many proto-phonemes, such as /b/, /d/, /g/, /k/, and /l/, are linearly inherited with minimal alteration, others, like /m/, /r/, /s/, and /y/, exhibit notable innovations, including positional shifts, deletions, and transformations into other sounds. These patterns highlight the phonological stability of certain articulatory features while also emphasizing the dynamic nature of linguistic evolution in Acehnese. The findings pave the way for further discussion on the broader implications of these inheritances, particularly their role in shaping Acehnese as a distinct language within the Austronesian family.

Linear Consonants

Linear inheritance refers to the retention of PAN consonants in Acehnese with minimal changes to their phonological structure. Examples of linear inheritance include $b \rightarrow b$, $c \rightarrow c$, $d \rightarrow d$, and $g \rightarrow g$. These consonants maintain their original articulatory properties and point of articulation, reflecting the stability of certain phonological features over time.

For instance, the bilabial consonant *b* is consistently retained in words such as *batu* ('stone') in PAN, which remains *bate* in Acehnese. Similarly,

the apico-dental consonant *d* is preserved in words like *duwa* (*two*), which remains *duwa* in Acehnese. These examples illustrate the unaltered transmission of PAN consonants into Acehnese, underscoring their phonological resilience.

The study also notes that linear inheritance is not limited to individual consonants but extends to broader phonological patterns. For example, the velar consonant *k* is retained in words such as *anak* (*child*), which becomes *aneuk* in Acehnese. This pattern of preservation demonstrates the strong linguistic continuity between PAN and Acehnese, providing evidence of the latter's historical roots within the Austronesian language family.

Innovation Consonants

While many consonants are linearly inherited, others undergo significant innovation, reflecting Acehnese's dynamic phonological evolution (Easterday & Bybee, 2023). Innovations often involve changes in articulation, the merging or splitting of phonemes, and the introduction of entirely new sounds. These processes are influenced by various factors, including linguistic interactions, environmental adaptations, and social contexts.

One notable innovation is the transformation of *y* in PAN. In Acehnese, *y* can manifest as *y*, *r*, *i*, or *e*, depending on its phonological environment. For instance, *yumah* (*house*) in PAN becomes *rumoh* in Acehnese, with the palatal consonant *y* changing to the trill consonant *r*. Similarly, *matay* (*dead*) in PAN evolves into *mate* in Acehnese, with *y* becoming the middle vowel *e*. These changes illustrate the flexible and context-dependent nature of phonological innovation in Acehnese.

Another example of innovation is the transformation of *z* in PAN into *j* in Acehnese. In words like *zaRum* (*needle*), the apico-alveolar consonant *z* becomes the palatal consonant *j*, resulting in the Acehnese word *jarōm*. This change reflects a shift in articulation, from the alveolar to the palatal region, highlighting the adaptive mechanisms at play in Acehnese phonology.

Phonological Processes in Consonantal Inheritance

The research highlights a number of phonological rules regarding the inheritance of PAN consonants specifically in the Acehnese language. These include the following:

1. Substitution: This takes place when a PAN consonant is changed by another consonant in Acehnese. A case in point is the bilabial consonant *p* in PAN that transforms into apico-dental *t* in Acehnese for the word '*apa* (what) and becomes *apu*.
2. Deletion: In some instances, some PAN consonants are completely dropped in the Acehnese language. For example, the bilabial consonant *m* can be dropped in certain contexts as demonstrated in *e(m)pat*

in PAn bilabial which changes to pet in Achenese.

3. Merging and splitting: Phonemes can fuse into one consonant or diverge into different even more numerous ones. For example, the trill consonant *r* in PAn has the potential to diverge into *r* and the newly formed *R* in Acehnese depending on the phonetic environment.
4. Contextual adaptation: The pronunciation of each consonant varies depending on the context where each consonant is placed within a term. An example is the apical *t* consonant in PAn which turns to *n* in the Achenese language as in the word *tipsis* (thin) which changes to *nipeh*.

These processes exemplify the dynamics of the retention of features and innovations in regards to the evolution of the phonology of the Acehnese language.

CONCLUSION

This study dealt with the inheritance of consonant phonemes from Proto-Austronesian (PAn) into the Acehnese language through a comparative historical linguistic analysis. The findings revealed that the development of Acehnese phonology involves both retention of original PAn phonemes and innovations that reflect the dynamic nature of linguistic evolution. These processes have shaped the consonantal system of Acehnese, resulting in a language that simultaneously preserves its ancestral roots and demonstrates unique adaptations.

A key insight of this study is the dual nature of phoneme inheritance—linear and innovative. Linear inheritance describes the preservation of PAn consonants with minimal changes. Examples include the direct retention of consonants such as *b* → *b*, *d* → *d*, *g* → *g*, and *k* → *k*. This continuity underscores the stability of certain phonological features over time, particularly those that are fundamental to linguistic identity. These retained consonants serve as linguistic markers, linking Acehnese to its Austronesian lineage and confirming its place within the broader family of Austronesian languages.

On the other hand, innovative inheritance illustrates the phonological adaptations that have occurred as Acehnese evolved in response to unique sociolinguistic and environmental influences. This includes changes such as *p* → *t* in specific contexts, *s* → *h*, and the transformation of *y* into *r*, *i*, or *e*. Such innovations highlight the adaptive mechanisms of Acehnese, which allow the language to meet the communicative needs of its speakers while maintaining structural coherence. These changes also provide evidence of linguistic interactions and

cultural exchanges that have influenced Acehnese over centuries.

The study further demonstrates that innovations in phonology are not arbitrary but often follow systematic patterns. For instance, the transformation of *z* into *j* in Acehnese aligns with broader patterns of phoneme simplification and adaptation observed in other Austronesian languages. Similarly, the emergence of *h* from *s* suggests a natural progression of sound change influenced by articulatory and acoustic factors. These findings emphasize the interplay between linguistic universals and language-specific developments in shaping phonological systems.

The implications of these findings extend beyond the study of Acehnese phonology. By tracing the phonological inheritance from PAn to Acehnese, this study is expected to contribute to the broader field of historical linguistics, particularly in understanding the mechanisms of language change and evolution. It also underscores the importance of comparative methods in reconstructing linguistic histories and identifying relationships among languages. Such methodologies provide a robust framework for examining the intricate web of connections that define language families.

The retention of PAn phonemes may reflect the enduring influence of Austronesian heritage on Acehnese identity, while phonological innovations point to the dynamic interactions between Acehnese speakers and their social and environmental contexts. This dual perspective enriches our understanding of Acehnese as a living language that bridges the past and present.

While the analysis provides a detailed account of consonantal inheritance and innovation, future studies could explore the role of vowels and other phonological features in shaping the Acehnese language. Additionally, expanding the dataset to include more Austronesian languages would offer a more comprehensive view of phonological developments within the family. Such research could uncover new patterns of inheritance and innovation, shedding further light on the evolutionary pathways of Austronesian languages.

In conclusion, the inheritance of consonant phonemes from PAn into Acehnese exemplifies the linguistic continuity and change. Through linear retention, Acehnese preserves its Austronesian heritage, while innovative adaptations reflect its unique linguistic identity. These findings contribute to our understanding of the evolutionary processes that shape languages and highlight the rich linguistic heritage of Acehnese as a descendant of Proto-Austronesian.

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