

# The genetic relationship between the Thai language of Sukhothai and Ayutthaya

Pittayawat Pittayaporn<sup>1</sup>

Sireemas Maspong<sup>2</sup>

Shinnakrit Tangsiriwattanakul<sup>3</sup>

Yanyong Sikharit<sup>4</sup>

Chulalongkorn University<sup>1, 3</sup>, Cornell University<sup>2</sup>,  
Srinakharinwirot University<sup>4</sup>



# Medieval Tai languages

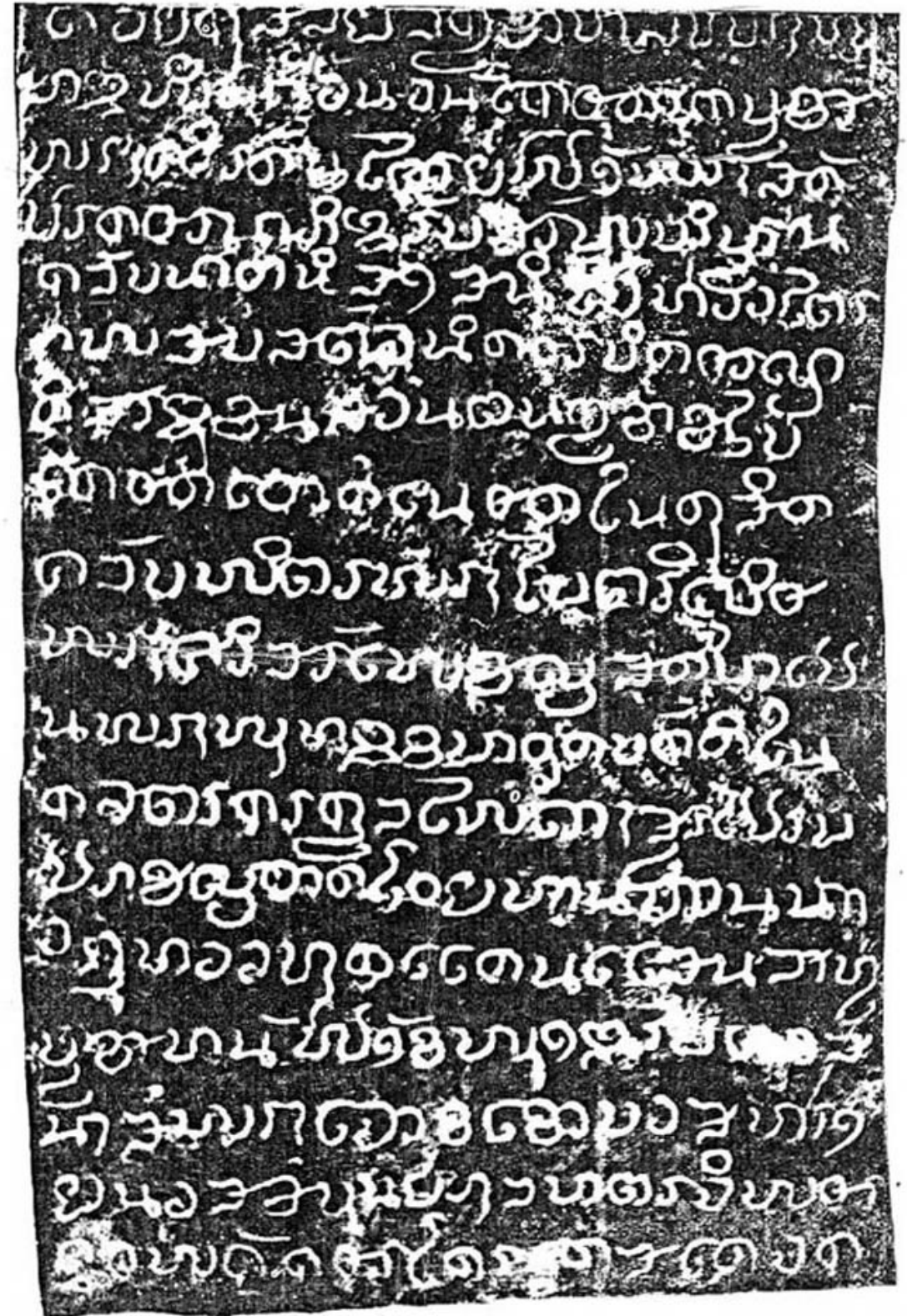
| Kingdoms  | Oldest inscriptions              | Dates        |
|-----------|----------------------------------|--------------|
| Sukhothai | Bang Sanuk Inscription           | 1339         |
| Ayutthaya | Tin Inscription of Wat Maha That | 1374         |
| Lan Na    | Lan Thong Kham Inscription       | 1376         |
| Lan Xang  | Nang An Inscription              | 14th century |
| Ahom      | Sadiya Snake-Pillar Inscription  | 1497-1537    |

# Bang Sanuk Inscription (1339)



จารึกวัดบางสนุก

# Tin Inscription of Wat Maha That (1374)







# Sukhothai and Ayutthaya

1238 AD

The first king of Sukhothai King Sri Indraditya began the Phra Ruang Dynasty

1350 AD

The first king of Ayutthaya King Ramathibodi I began the Uthong Dynasty

1438 AD

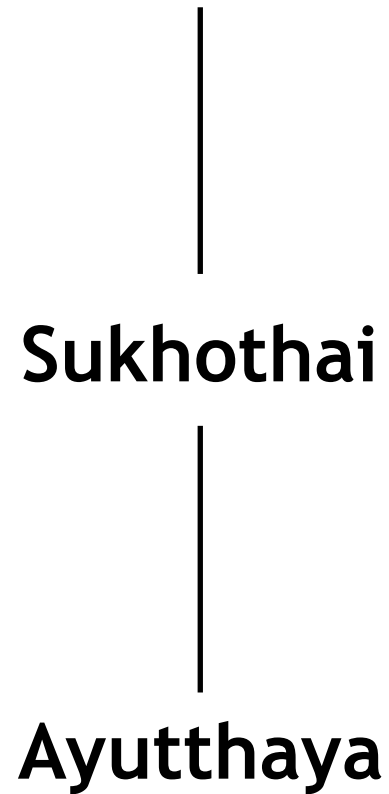
Merger into Ayuthaya Kingdom

1767 AD

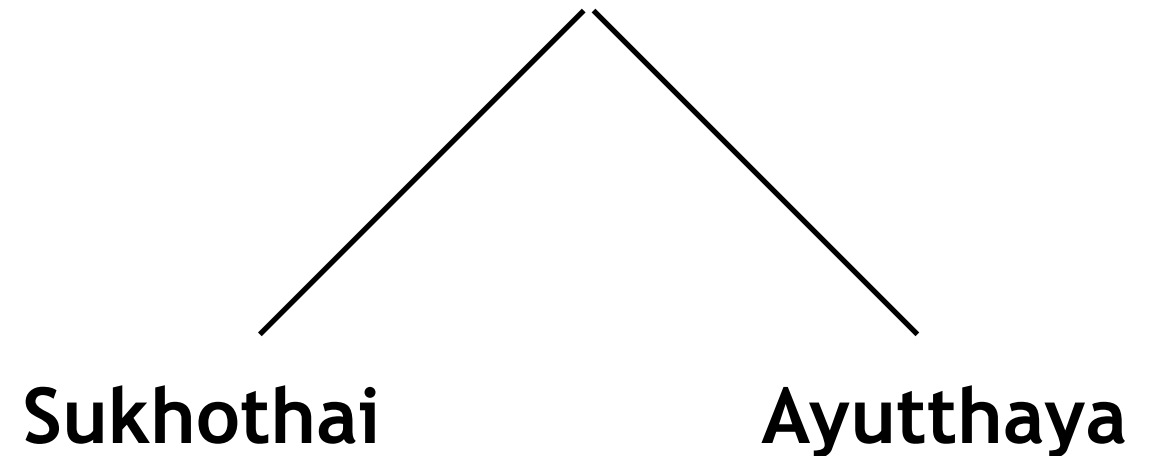
The fall of Ayutthaya Kingdom

# Mother-Daughter or Cousins?

Proto-Southwestern Tai



Proto-Southwestern Tai



# Proposal

- The Thai varieties attested in Sukhothai and Ayutthaya inscriptions are in fact the same language
  - Shared phonological innovations
  - Shared chronology



# Outline

- Historical background
- Previous phonological study of Sukhothai Thai (SKT) and Ayutthaya Thai (AYT)
- Early phonological innovations
- Later innovations
- SKT-AYT as Old Thai

# Historical background

# Foundation of Sukhothai and Ayutthaya

- SWT speakers must have arrived in present-day Thailand by the middle of the 12th century as attested by bas-reliefs in Angkor Wat (Coedès 1968; Phumisak 1976)
- A coalition of Thai chieftains took control of Sukhothai around 1249
- The foundation of the Ayutthaya kingdom is traditionally dated to 1350
- Unknown where the first Thai rulers of Sukhothai and Ayutthaya came from
- After 1361 Sukhothai was under Ayutthaya's control until its annexation in 1438



Sukhothai

Ayutthaya

Sri Indraditya 1249 AD

Ramkhamhaeng 1279 AD

Mahadhammaraja I (Li Thai) 1347 AD

Mahadhammaraja II 1368 AD

Mahadhammaraja III (Sai Lu Thai) 1400 AD

Mahadhammaraja IV (Boromapan) 1419 AD

1350 AD Ramadhipati I (U Thong)

1369 AD Ramesvara

1370 AD Borom Rajadhiraj I (Khunluang Pho Ngua)

1395 AD Ram Raja

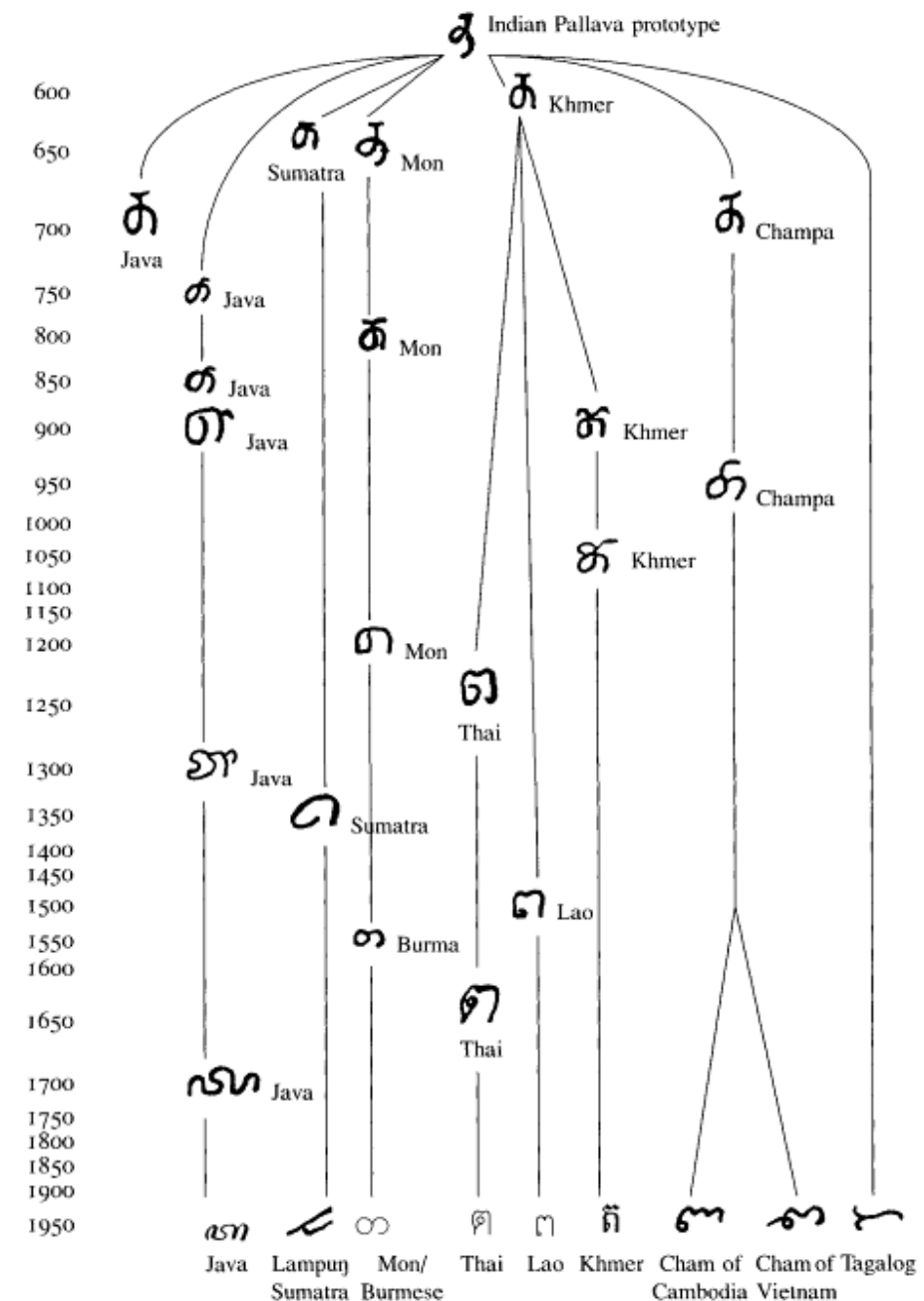
1409 AD Nagarindrathiraj

1424 AD Borom Rajadhiraj II (Sam Praya)

1448 AD Borom Trailokanath

# Origin of Thai writing

- Abugida belonging to the Indic family of writing system
- Adapted from Old Khmer script perhaps in the 13th century
- Claimed to be an invention of King Ramkhamhaeng, based on the controversial Inscription I (1292?)



# Early Thai inscriptions

|              | Sukhothai                                    | Ayutthaya                     |
|--------------|--|-------------------------------|
| Distribution | Upper Chao Phraya River basin                | Lower Chao Phraya River basin |
| Material     | Sand stone, slate, tin, copper, gold, silver |                               |
| Date         | 1339-1463                                    | 1350-1448                     |



# Early Thai inscriptions

|          | Sukhothai  | Ayutthaya  |
|----------|--|--|
| Language | Thai, Pali, Khmer  | Thai, Pali   |
| Script   | Thai, Khmer, Tham  | Thai, Khmer, Tham  |
| Content  | Oath, dededication, donation, wish, creation of religious objects, description of events | Donation, wish, creation of religious objects, description of events |



|       | Sukhothai | Ayutthaya      |
|-------|-----------|----------------|
| <k>   | ก ก       | ก ก ก          |
| <g>   | ค ค       | ค ค            |
| <ṅ>   | ง ง       | ง ง ง          |
| <n>   | ฌ ฌ       | ฌ ฌ ฌ          |
| <p'>  | พ พ       | พ พ พ พ        |
| <a>   | อ อ       | อ อ อ อ        |
| <i>   | อิ อิ     | อิ อิ อิ อิ    |
| <ī>   | อุ อุ อุ  | อุ อุ อุ       |
| <ei>  | เอ        | เอ             |
| <īey> | เีย       | เีย            |
| <īea> | เีย เีย   | เียเีย เีย เีย |



# **Previous phonological study of Sukhothai Thai and Ayutthaya Thai**

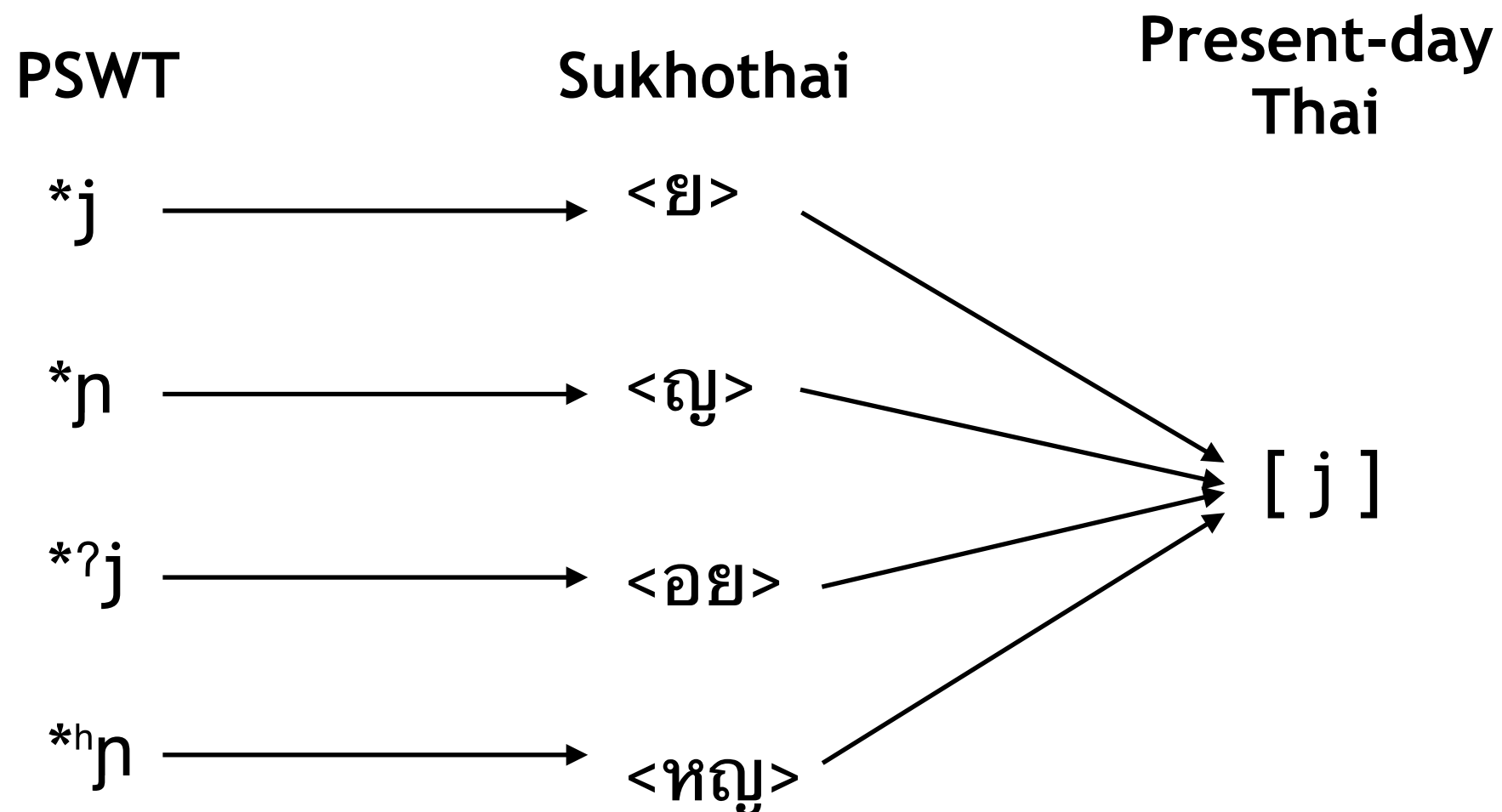
# Medieval Thai as SWT

- Modern Thai belongs to the SWT subgroup of the Tai branch of the Kra-Dai language family
- Modern Thai is descendent of the language of Ayutthaya (Pittayaporn 2016)
- Thai speakers can read transliterated Medieval Thai texts if obsolete words are explained



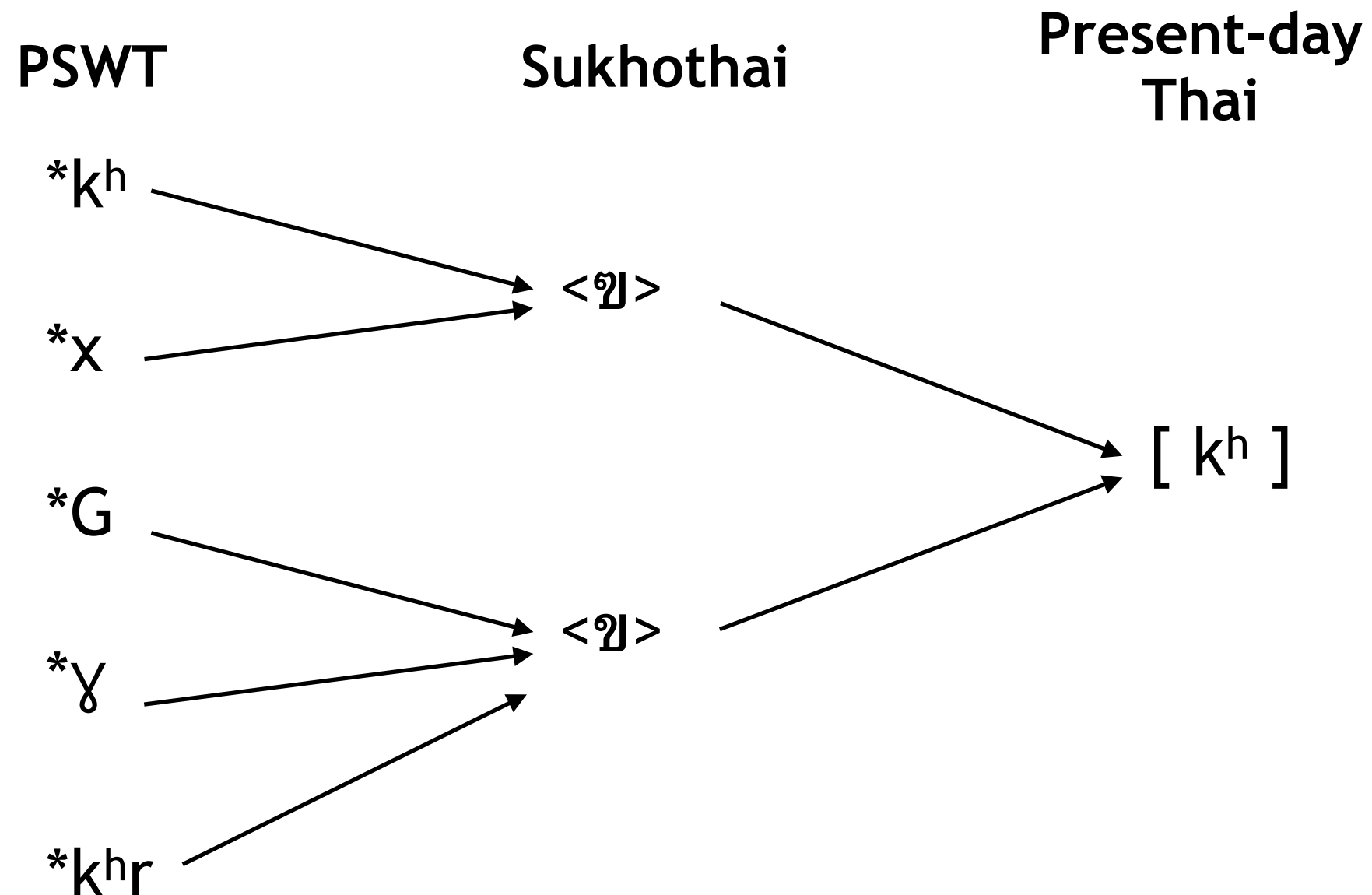
# Known Sukhothai developments

- Retain the distinction of PSWT \*j, \*ɲ, \*ʔj, \*<sup>h</sup>ɲ, which are all merged into [j] in Present-day Thai (Suwattee & Kullavanij 1976)



# Known Sukhothai developments

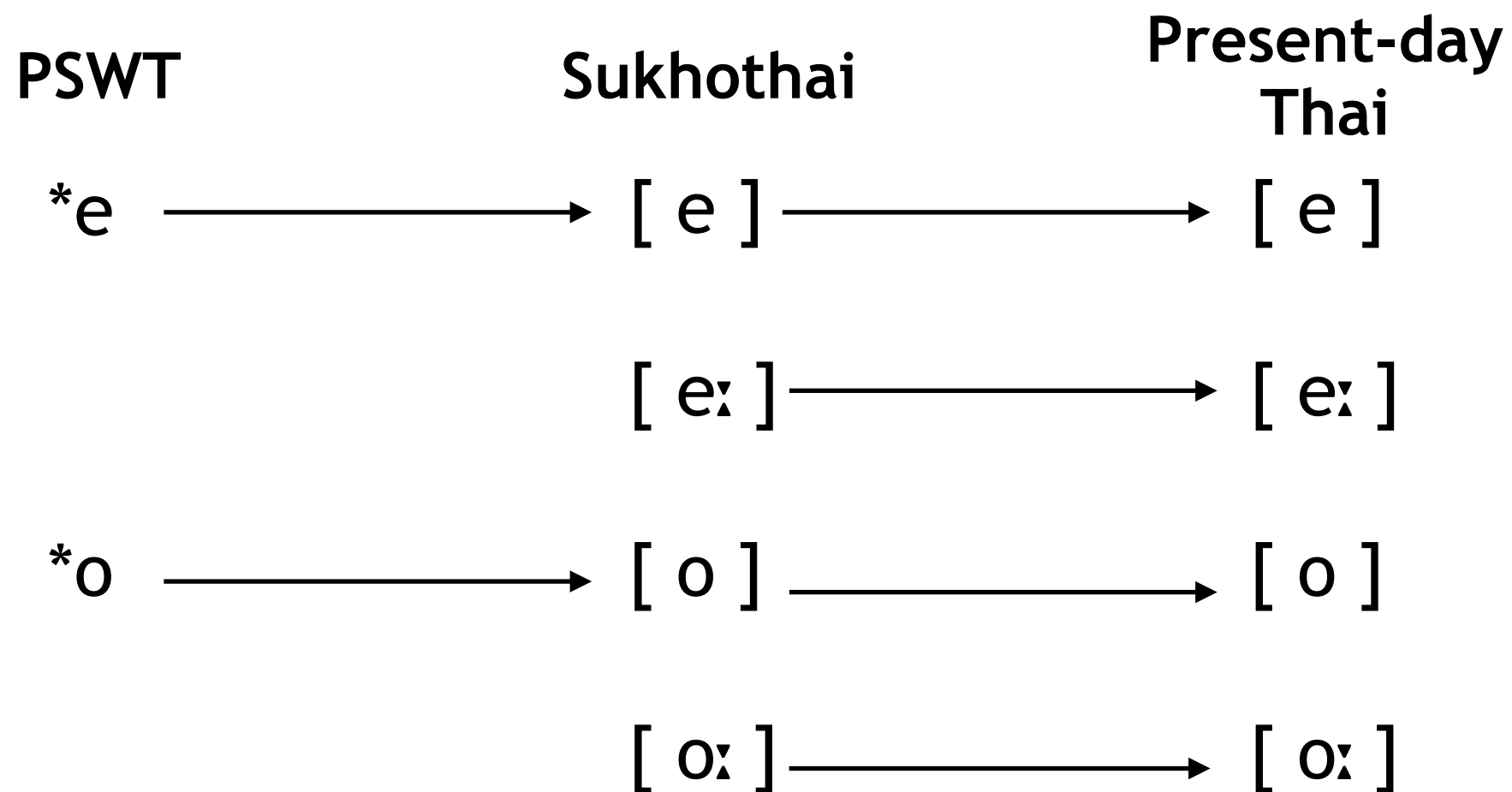
- Velar consonants are merged (Diller 1988)





# Known Sukhothai developments

- Creation of length distinction in high-mid vowels (Maspong 2016)



# Linear view

- Most historical work on Thai assumes that Sukhothai is an earlier stage of Ayutthaya
- Linear development: Sukhothai > Ayutthaya > Bangkok
- The linear view adopts the periodization of Thai history according to the nationalist historiography
- Common in historical syntax, semantics, and stylistics, e.g. Kallavanijaya (2008), Jaratjarungkiat (2012), Takahashi (2012)

# Cousin view

- An alternative view holds that Sukhothai and Ayutthaya belong to different subgroups
- First proposed by Brown (1965) on the basis of the comparative reconstructions of Modern Tai dialects.
- Adopted by work associated to the Tai dialectological tradition, e.g. Rod-in (1991), Rakpaet (1998)

# Early phonological innovation



# Shared innovations

- A shared-innovation is “the result of a change which took place in a single daughter language which then subsequently diversified into daughter languages of its own, each of which inherits the results of the change (Campbell 1998: 170)”
- A shared innovation is evidence for shared linguistic history
- If SKT and AYT belong to different subgroups, they must share a number of innovations

# Data & analysis

- Inscriptional data from The Inscriptions in Thailand Database (<http://www.sac.or.th/databases/inscriptions/>)
- Graphs that are used interchangeably are assumed to represent the same sound
- Evidence for merger
  - A graph that correspond to multiple proto-phonemes
  - Previously distinct graphs that are later used interchangeably

# Early phonological innovations

- Coalescence of \*ɸl-
- Aspiration of \*<sup>h</sup>r-
- Simplification of \*k<sup>h</sup>r-
- Occlusivization of primary \*x-
- Velarization of uvular consonants

# Coalescence of \*bl-

- PSWT \*b- and \*d- are represented by <p> and <t> respectively (reflecting Khmer implosivization)
- Words that go back to \*bl- are spelled consistently with <t> both in Sukhothai and Ayutthaya inscriptions
- SKT and AYT share \*bl- > d-, a change that predated the oldest inscription

# \*bl-

|               | PSWT                | SKT                              | AYT      | Modern Thai                      |
|---------------|---------------------|----------------------------------|----------|----------------------------------|
| ‘month, moon’ | *blɯən <sup>A</sup> | <t̄iean><br><t̄iean><br><t̄iean> | <t̄iean> | <t̄iean><br>/dɯən <sup>1</sup> / |
| ‘flower’      | *blo:k <sup>D</sup> | <tək>                            | <tək>    | <tək><br>/do:k <sup>2</sup> /    |



# Aspiration of $*^hr-$

- PSWT voiceless sonorants  $*^hm-$ ,  $*^hn-$ ,  $*^hɲ-$ ,  $*^hŋ-$ ,  $*^hr-$ ,  $^hl-$ , and  $*^hw-$  are represented by <hm>, <hn>, <hñ>, <hṇ>, <hr>, <hl> respectively
- Words that go back to PSWT  $*^hr-$  are spelled consistently with <h-> both in Sukhothai and Ayutthaya inscriptions
- SKT and AYT share  $*^hr- > h-$ , which occurred before the oldest attestation of Thai writing

\*hr-

|          | PSWT               | SKT   | AYT   | Modern Thai                   |
|----------|--------------------|-------|-------|-------------------------------|
| ‘to see’ | *hran <sup>A</sup> | <hen> | <hen> | <hě̃n><br>/hen <sup>5</sup> / |
| ‘six’    | *hrok <sup>D</sup> | <hak> | <hak> | <hak><br>/hok <sup>2</sup> /  |
| ‘head’   | *hruə <sup>A</sup> | <hvă> | <hvă> | <hvă><br>/huə <sup>5</sup> /  |
| ‘stone’  | *hrin <sup>A</sup> | <hin> | <hin> | <hin><br>/hin <sup>5</sup> /  |

# Simplification of \*k<sup>h</sup>r-

- Both SKT and AYT consistently represent PSWT \*k<sup>h</sup>r- with <kh->
- All other PSWT clusters are written with clusters
  - <plūk> for \*plu:k<sup>D</sup> 'to plant'
  - <grv> 'family' for \*gruə<sup>A</sup> 'family'
- SKT and AYT share \*k<sup>h</sup>r- > k<sup>h</sup>-, which predated Thai writing

# Occlusivization of primary \*x-

- PSWT \*x- is generally represented by <kh>, the grapheme for \*k<sup>h</sup>-
- Very few examples of <kh'> for \*x- e.g.
  - <kh'wā> for \*xwaː<sup>A</sup> 'right' in Inscription I (1835)
  - <kh'āw> for \*xaːw<sup>A</sup> 'white' in Wat Khema Inscription (2079)
- SKT and AYT share \*x > k<sup>h</sup>-, which predated Thai writing

\*X-

|           | PSWT               | SKT               | AYT               | Modern Thai                                   |
|-----------|--------------------|-------------------|-------------------|---|
| ‘white’   | *xaw <sup>A</sup>  | <khāw>            | <khāw><br><kh’āw> | <khāw><br>/k <sup>h</sup> aw <sup>5</sup> /   |
| ‘green’   | *xiəw <sup>A</sup> | <khayav>          | -                 | <khīeyv><br>/k <sup>h</sup> aw <sup>5</sup> / |
| ‘right’   | *xwa <sup>A</sup>  | <khwā><br><kh’wā> | -                 | <khwā><br>/k <sup>h</sup> wa <sup>5</sup> /   |
| ‘to sing’ | *xap <sup>D</sup>  | <khapp>           | -                 | <khăp><br>/k <sup>h</sup> ap <sup>2</sup> /   |



# Velarization of \*q- and \*χ-

- In general, PSWT \*q- and \*χ- are represented by <kh'>, esp. the first three sides of Inscription I (Diller 1991)
- SKT and AYT share \*q-, \*χ > x-, which predated Thai writing
- Started to be confused with <kh> early on

# Occlusivization of secondary \*x-

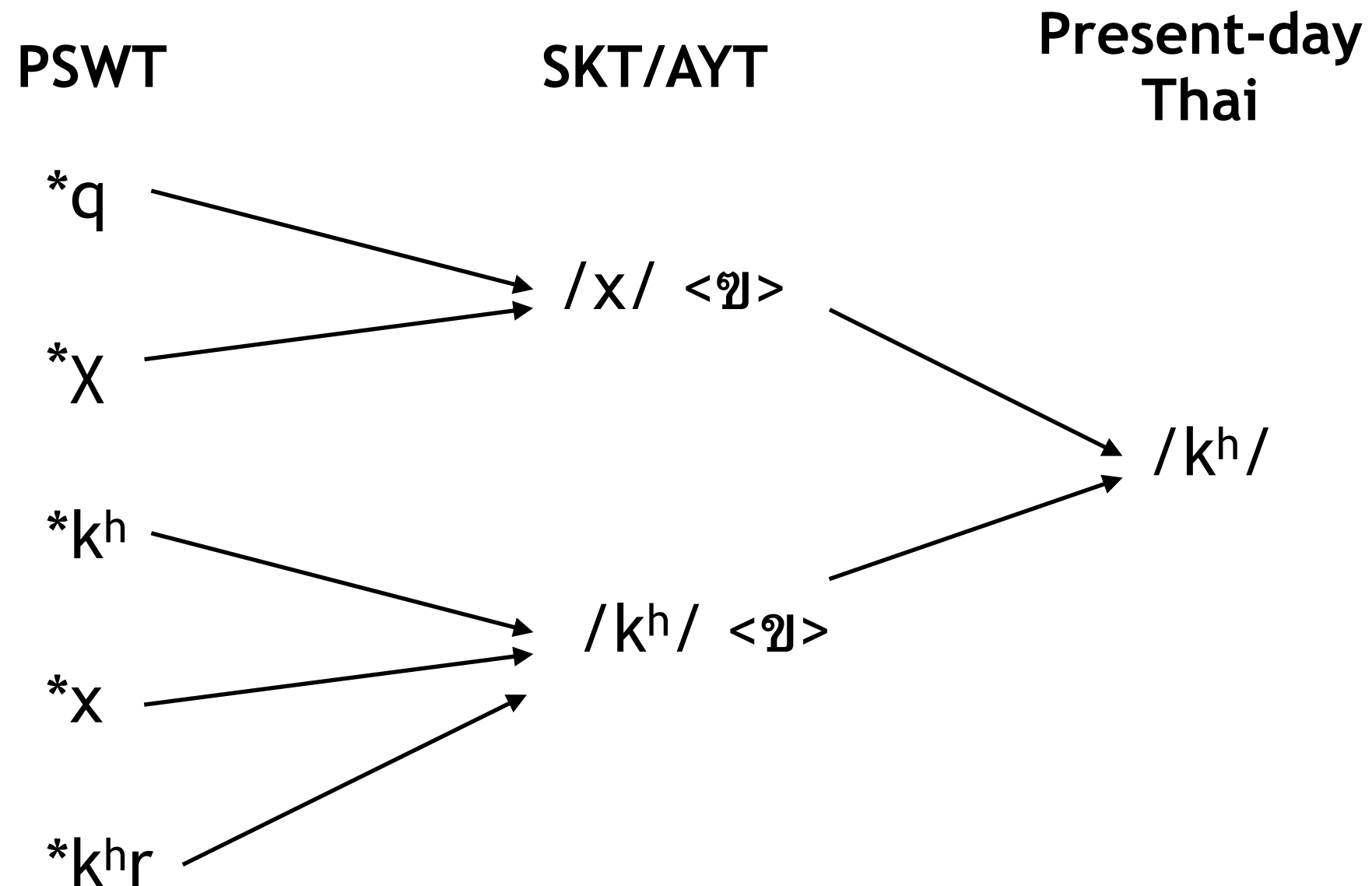
- The secondary /x/ that resulted from the merger between PSWT \*q- and \*χ are written as <kh> or <x> interchangeably in later inscriptions
- SKT and AYT share \*x > k<sup>h</sup>-
  - Secondary /x/ started to be spelled with <kh> in the early 14th century
  - First attested in Sukhothai inscriptions in Chedi Phihan Inscription (1307 - 1357)
  - First attested in Ayutthaya inscriptions in Wat Songkhop Inscription I (1408)

# \*q- and \*χ-

|              | PSWT   | SKT                         | AYT               | Modern Thai                                  |
|--------------|--------|-----------------------------|-------------------|--|
| ‘to enter’   | *χawC  | <kh’au><br><khau>           | -                 | <khau><br>/k <sup>h</sup> aw <sup>3</sup> /  |
| ‘to ascend’  | *χw:nC | <kh’īn><br><khīn><br><khin> | <kh’īn><br><khīn> | <khin><br>/k <sup>h</sup> wn <sup>3</sup> /  |
| ‘to be torn’ | *qa:tD | <kh’āt><br><khāt>           | -                 | <khāt><br>/k <sup>h</sup> a:t <sup>2</sup> / |

# Development of dorsal obstruents

- Very similar to the pathway proposed by Diller (1988)



# Later phonological innovation

# Later phonological innovations

- Second occlusivization of x-
- Denasalization of \*ɲ-
- Deglottalization of \*ʔj-
- Merger of \*aj and \*aw



# Denasalization of \*ɲ-

- In general, PSWT \*j-, and \*ɲ- are represented by <y>, and <ñ> respectively, esp. in Inscription I (Suwattee & Kullavanij 1976)
- SKT and AYT share \*ɲ- > \*j
  - PSWT \*ɲ- started to be spelled with <y-> in the mid 14th century
  - First attested in Sukhothai inscriptions in Phokhun Ramphon Inscription (1347 - 1357)
  - First attested in Ayutthaya inscriptions in Tin Inscription of Wat Maha That (1374)

\*j-

|               | PSWT               | SKT   | AYT   | Modern Thai                   |
|---------------|--------------------|-------|-------|-------------------------------|
| ‘grandmother’ | *ja: <sup>B</sup>  | <yā>  | <yā>  | <yā><br>/ja: <sup>3</sup> /   |
| ‘difficult’   | *ja:k <sup>D</sup> | <yāk> | <yāk> | <yāk><br>/ja:k <sup>3</sup> / |

**\*ɲ-**

|   |                    | SKT            | AYT            | Modern Thai                   |
|---|--------------------|----------------|----------------|-------------------------------|
| ‘two’<br><br>‘highest point,<br>tip; bud’ | *ɲiː <sup>B</sup>  | <ñī><br><yī>   | <yī><br><yī>   | <yī><br>/jɨː <sup>3</sup> /   |
|   | *ɲoːt <sup>D</sup> | <ñat><br><yat> | <ñat><br><yat> | <yat><br>/joːt <sup>3</sup> / |

# Deglottalization of \*ʔj-

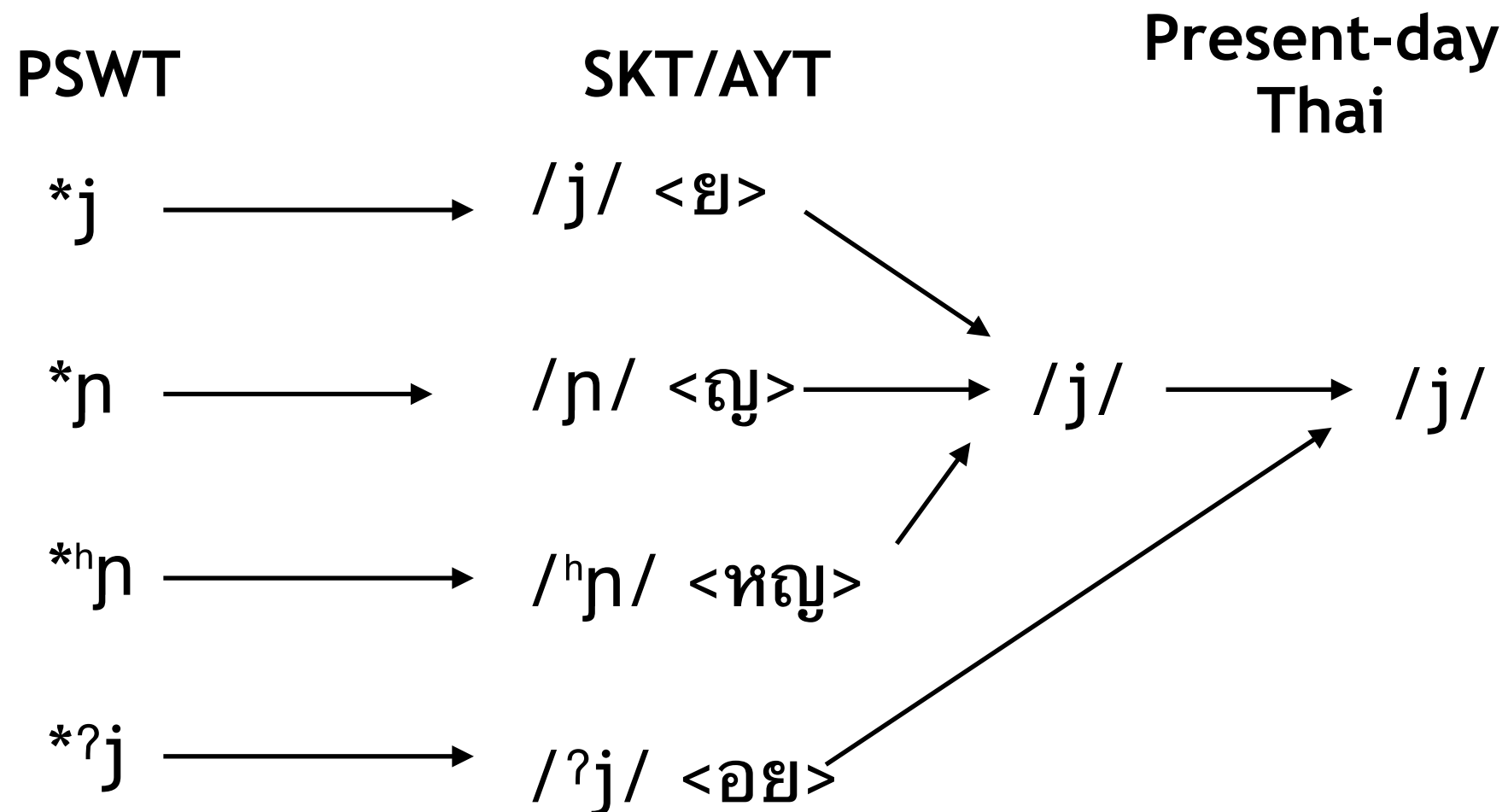
- In general, PSWT \*ʔj- is represented by <ḥy>, esp. in Inscription I (Suwattee & Kullavanij 1976)
- Confusions of <ḥy-> with <y-> and <ñ->
  - PSWT \*ʔj- started to be spelled with <y-> and <ñ-> in the early 15th century
  - First attested in Sukhothai inscriptions in Nakorn Chum Inscription (1457)
  - First attested in Ayutthaya inscriptions in Wat Songkhop Inscription III (1433)

\*?j-

|            | SKT     | AYT             | Modern Thai |                  |
|------------|---------|-----------------|-------------|------------------|
| medicine'  | *ʔja:A  | <ḥyā>           | <ñā>        | <yā><br>/ja:¹/   |
| 'to stand' | *ʔjɯ:nA | <ḥyīn><br><yīn> | <ñin>       | <yīn><br>/jɯ:n¹/ |
| 'to stay'  | *ʔju:B  | <ḥyū><br><yū>   | <ḥyū>       | <ḥyū><br>/ju:²/  |

# Known Sukhothai developments

- More refined pathway than Suwattee and Kullavanijaya (1976)





# Merger of \*-aj and \*-aɯ

- In general, PSWT \*-aj and \*-aɯ are represented by <ai> and <ɛi> respectively (Bickner 1992)
- Confusions between <ai> and <ɛi>
  - <ai> and <ɛi> started to be used interchangeably in the mid 14th century
  - First attested in Sukhothai inscriptions in Wat Bang Sanuk Inscription (~1340)
  - First attested in Ayutthaya inscriptions in an inscription behind a buddha statue in National Museum in Wang Chankasem (1375)

# \*-aj

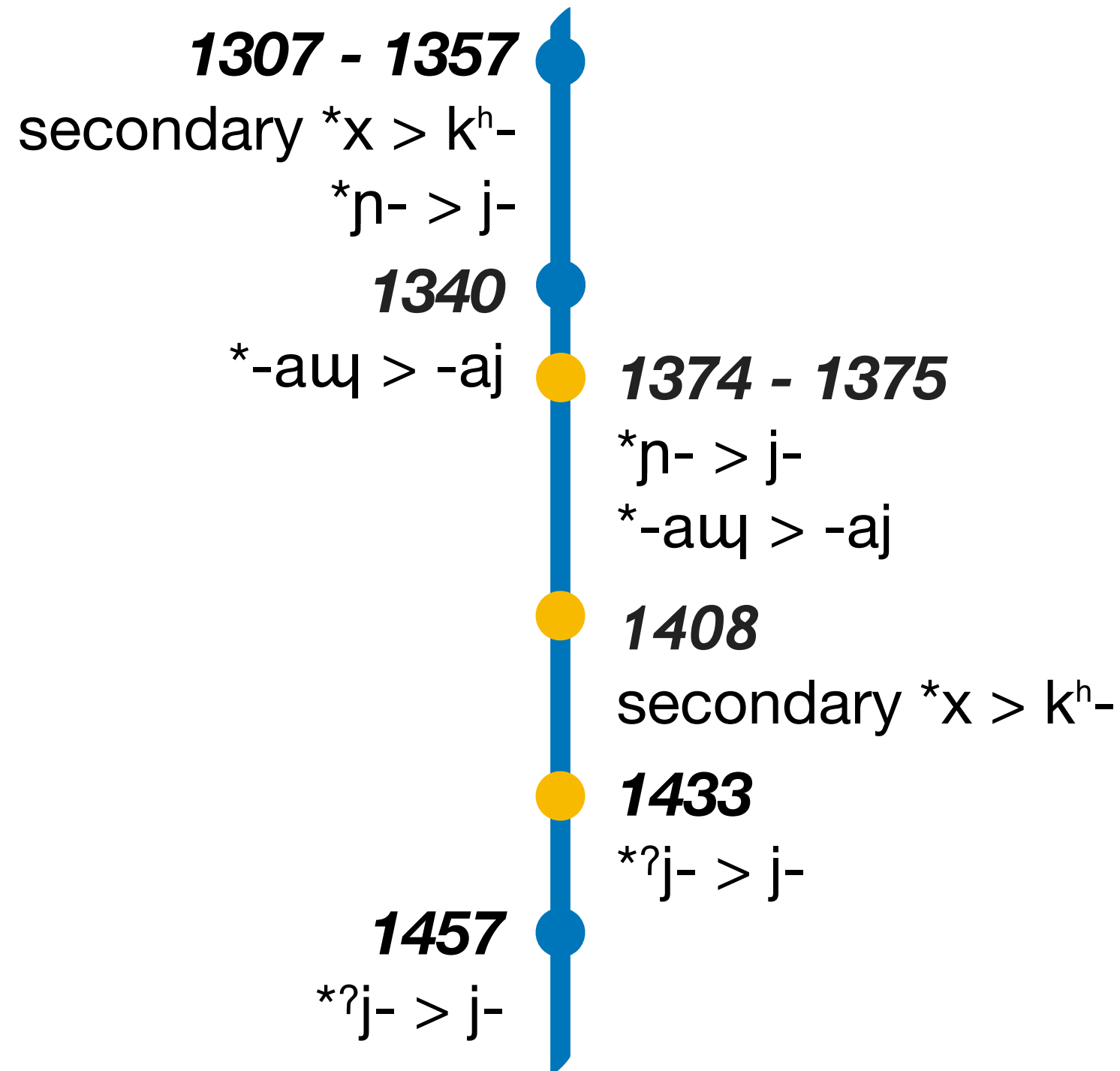
|  | SKT                      | AYT                      | Modern Thai                        |
|--|--------------------------|--------------------------|------------------------------------|
| *ʔdaj <sup>C</sup><br>'can; to obtain' | <tai> <ไต><br><тай> <ไต> | <tai> <ไต><br><тай> <ไต> | <tai> <ไต้><br>/daj <sup>3</sup> / |
| *waj <sup>C</sup><br>'to put away'     | <wai> <ไว><br><вай> <ไว> | <wai> <ไว><br><вай> <ไว> | <wai> <ไว้><br>/waj <sup>3</sup> / |

# \*-aɰ

|  |          | SKT               | AYT            | Modern Thai                  |
|--|----------|-------------------|----------------|------------------------------|
|  | ‘in’     | *daɰ <sup>A</sup> | <nai><br><nai> | <nai><br>/naj <sup>1</sup> / |
|  | ‘to put’ | *saɰ <sup>B</sup> | <sai><br><sai> | <sai><br>/saj <sup>2</sup> / |

**SKT and AYT as Old  
Thai**

# Chronology



# Shared history

- SKT and AYT share nine phonological innovations
- Each innovation is attested at roughly the same time period in SKT and AYT
- Additional shared “aberrancies”
  - <hen> for /hen<sup>A</sup>/ ‘to see’ instead of /han<sup>A</sup>/ from \*<sup>h</sup>ran<sup>A</sup>
  - <hñiñ> for /<sup>h</sup>ɲiŋ<sup>A</sup>/ ‘woman’ instead of /ɲiŋ<sup>A</sup>/ from \*ɲiŋ<sup>A</sup>
  - <daṃ> or <kadaṃ> for ‘to do’

# Old Thai

- From the point of view of phonological history, AKT and AYT are extremely closely-related dialects of the same language, namely Old Thai (OT)
- OT belongs to the Southern group of SWT with Lao and Southern Thai
- It was spoken in the Chao Phraya River basin from the 13th century to mid 15th century
- Devoicing of the PSWT voiced obstruents is taken to be its lower limit
- The only literary work that may have been composed in OT is *Ongkan Chaeng Nam*



# Conclusion

# Conclusion

- The Thai dialects of Sukhothai and Ayutthaya had identical phonological history
- They are neither mother and daughter, or cousins as has been previously assumed
- They are best characterised as extremely closely-related the same language
- The Thai language of the 13th to the mid 15th century can be labeled as “Old Thai”

# References