MIDDLES *and* PERFECTS

A reinvestigation of the usage and function of the -*t*-infix
in the Old Babylonian Mari letters

+ a new proposition for the Akkadian T/A/M-*system*

Iris Kamil
iris.kamil@ed.ac.uk
iriskamil.com

Previously on *The Akkadian T/A/M-system* …

tense   **aspect**

Problem:
Either too vague or too detailed,
but *definitely*: <u>inconsistent</u>.

"simple past" ← ***iprus***

iparras

iptaras → "some sort of durative"

"some sort of perfect" ← ***paris***
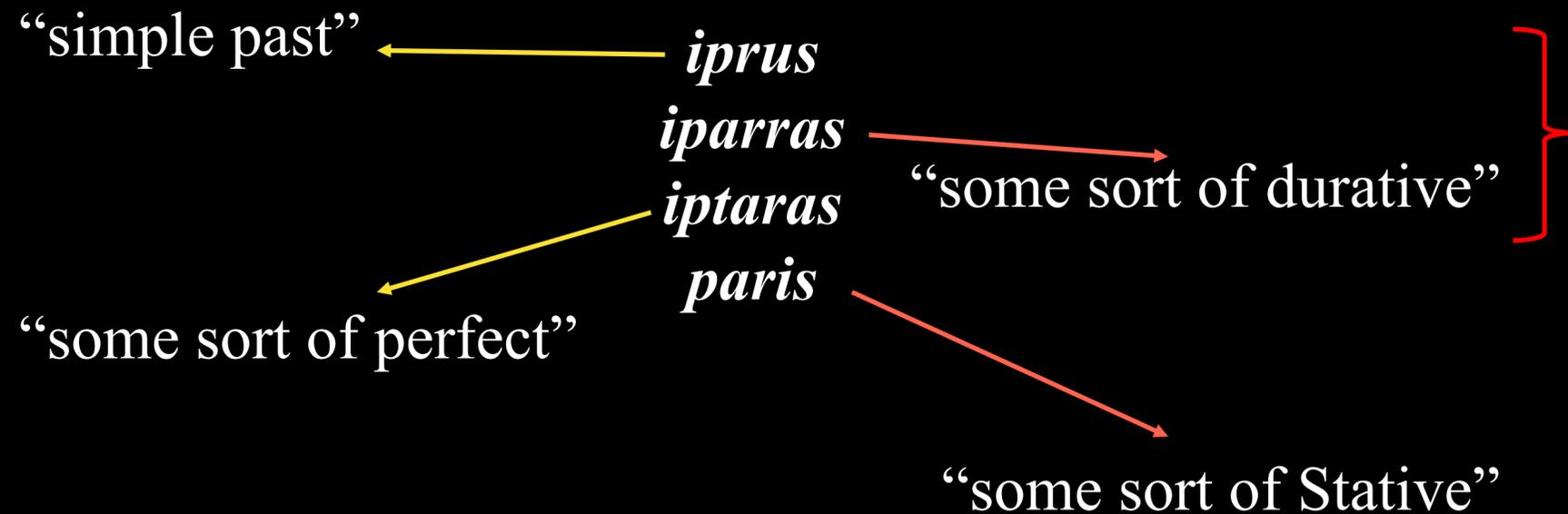
Disclaimer:
I am team *aspect*.

"some sort of Stative"

Let's look at how this could work,
using ARM 1-4!

Andrasson (2010a, 2010b, 2012); Arkhipov et al. (2021); Arkhipov & Loesov (2020); Brose (2020); Bubenik (2017); Kouwenberg (2010); Loesov (2005, 2006, 2007); Reiner (1966); Schilling (2017, 2019); Streck (1995, 1998, 2003); Streck & Nebes (1999); von Soden (1995); etc.

iprus – punctual-completed

(1) *ṭupp-a-ka*   *ša*   *tu-ša-bil-Ø-am*   *e-šmê*

tablet-obl-gen.2.sg.m   rel   2-caus-√wbl.pftv-sg.m-ven   1.sg-√šmʾ.pftv

"The tablet, which you have had brought to me, I have heard (read)." (ARM1 20:5)

(2) *inanna ana nihrār-im a-špur-ma*   *nihrār-um ana halaṣ*   *Terqa*   *i-kšud-Ø-am*

now   dat   help-obl   1.sg-√špr.pftv-conj   help-nom   dat   fort.cstr   Terqa   3-√kšd.pftv-sg.m-ven

"Now, I have written to you for help and the help for the fort of Terqa has arrived." (ARM 3 7:10-13)

(3) *adi*   *mūl-ê*   *qaqqad*   *āl-im*   *epir-ū*   *lā*   *i-kšud-ū*   *āl-am*   *ūl*   *i-ṣbat-Ø*

until   height-pl.gen   head.cstr   city-obl   earth-pl.nom   neg   3-√kšd.pftv-pl.m   city-acc   neg   3-√ṣbt.pftv-sg.m

"Until the soils have not reached the heights of the head of the city, he will not (be able to) have conquered the city." (ARM 1 4:9-13)

iparras – continuous-ongoing

(4) *ašrānum-ma ana gamr-im-ma*   *ta-š<ta>kan-Ø-šu*   *u*   *pān-am*   *šanimm-a*   *ta-šakkan-Ø*

there-conj   dat   totality-gen-conj   2-√škn<perf>.pftv-sg.m-acc.3.sg.m   and   face-acc   other-acc   2-√škn.impf-sg.m

"You have installed them there definitively and a second one you will be installing." (ARM 1 18:9-10)

(5) *assurri*   *10*   *līm-ī*   *u-ṣṣû-ma*   *10*   *līm-ī*   *ṣāb-am*   *i-ṭarrad-Ø-ma*

perchance   10   thousand-pl.obl   3.√wṣʾ.impfv.pl.m-conj   10   thousand-pl.obl   troops-obl   3-√ṭrd.impfv-sg.m-conj

ina Suh-īm   *sīh-am*   *i-naddi-Ø*

in   Suhaen-pl.gen   rebellion-acc   3-√ndʾ.impfv-sg.m

What if ten thousand men leave and he sends ten thousand men, and a rebellion throws up between the Suhaeans? (ARM 2 30: rev. 4'-5')

(6) *ištu*   *5*   *ûm-im*   *ina hadān-im*   *Hanê*   *u-qqâ*   *u*   *ṣāb-um*   *ūl*   *i-pahhur-Ø-am*

since 5   day-gen   in   designated time-gen   Hana.gen   1.sg-√qʾʾ.D.impfv   and   troops-nom   neg   3-√phr.impfv-sg.m-ven

"For five days, at the designated time, I have been awaiting the Hana, but the troops have not been assembling (yet). (ARM 2 48:5-6)

iptaras – middle and ...?

(7) *šanīt-am*   *tebibt-um*   *i-š-šakkan-Ø*   *ṣāb-um*   *ū-ta-bbab-Ø*

second-acc   census-nom   3-pass-√škn.impfv-sg.m   troops-nom   3-mid-√ʾbb.impfv-sg.m

"Another thing, the census is being put in place, the troops are being counted." (ARM 1 7:32-33)

(8) *annitam*   *i-qbû-nim-ma*   *abull-āt-im*   *u-š-t-edi-šunūti*

this matter 3-√qbʾ.pftv.pl.m-ven-conj   gate-pl.f-gen   3-caus-perf-√ydʾ.pftv-acc.3.pl.m

„Thus they have told me and I have confined them." (ARM 3 37:22-23)


(9) *umman-āt-um*   *šalm-ā*   *umman-āt-um*   *i-p<ta>ṭr-ā-nim*   *ana Hamšâ i-kšud-ā-nim*

troops-pl.f-nom   √šlm.stat-stat.3.pl.f   troops-pl.f-nom   3-√pṭr.<perf>.pftv-pl.f-ven   dat   Hamšâ 3-√kšd.pftv-pl.f-ven

"The troops are well, the troops have been liberated, they have arrived at Hamšâ." (ARM 1 4:18-21)

5

Let's look *at* the forms!

		G	D	Š
Active	iprus	$i\text{-}XYV_RZ$	$u\text{-}XaYYiZ$	$u\text{-}\check{s}a\text{-}XYiZ$
	iptaras	$i\text{-}X{<}ta{>}YV_TZ$	$u\text{-}X{<}ta{>}YYiZ$	$u\text{-}\check{s}\text{-}ta\text{-}XYiZ$
	iparras	$i\text{-}XaYYV_TZ$	$u\text{-}XaYYaZ$	$u\text{-}\check{s}a\text{-}XYaZ$
Middle	iprus	$i\text{-}X{<}ta{>}YV_RZ$	$u\text{-}X{<}ta{>}YYiZ$	$u\text{-}\check{s}\text{-}ta\text{-}XYiZ$
	iptaras	$i\text{-}X{<}ta\text{-}(t){>}YV_TZ$	$u\text{-}X{<}ta\text{-}(ta){>}YYiZ$	$u\text{-}\check{s}\text{-}ta\text{-}(ta\text{-})XYiZ$
	iparras	$i\text{-}X{<}t{>}aYYV_TZ$	$u\text{-}X{<}ta{>}YYaZ$	$u\text{-}\check{s}\text{-}ta\text{-}XYaZ$
Pluractional	iprus	$i\text{-}X{<}ta(Y){>}YV_RZ$	$u\text{-}X{<}ta{>}YYiZ$	$u\text{-}\check{s}\text{-}ta\text{-}XYiZ$
	iptaras	$i\text{-}X{<}ta\text{-}(taY){>}YV_TZ$	$u\text{-}X{<}ta\text{-}(ta){>}YYiZ$	$u\text{-}\check{s}\text{-}ta\text{-}(ta\text{-})XYiZ$
	iparras	$i\text{-}X{<}tan{>}aYYV_TZ$	$u\text{-}X{<}tan{>}aYYaZ$	$u\text{-}\check{s}\text{-}tan\text{-}XYaZ$

New approach: Morphosyntax & Morphosemantics.
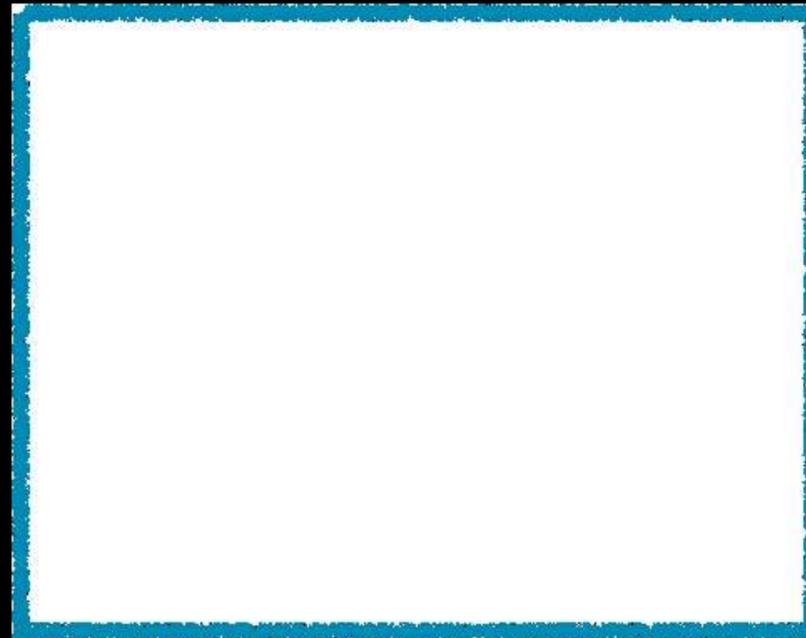
The 𝓑𝓐𝓔-Hypothesis

In the D and Š patterns, the only morpheme differentiating between *iprus* and *iparras* is the last templatic vowel.

/i/ vs. /a/
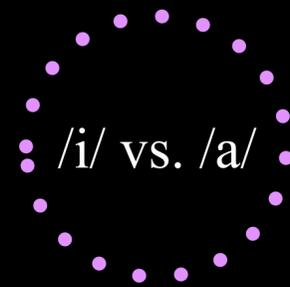
Crucially, the *iptaras* paradigms are also characterised by a final /i/. It almost seems as though we have the t-morpheme infixed into the *iprus* paradigm…

The Akkadian t/a/m system is founded on and thus encodes the binary differentiation between a perfective (punctual-completed) and imperfective (durative-continuous) ASPECT.

How?

Akkadian *morphologically marks* (viewpoint) aspect but can *make reference* to temporal reference points.

- **Adverbial Modification**
(temporal, place, manner, degree, etc.)
- **Pragmatics**
(context, discourse prominence)
- **Syntax**
(clause type, conjunctions, ordering)
- **Mood**
(subjunctive, Precative, generally: realis vs. irrealis)
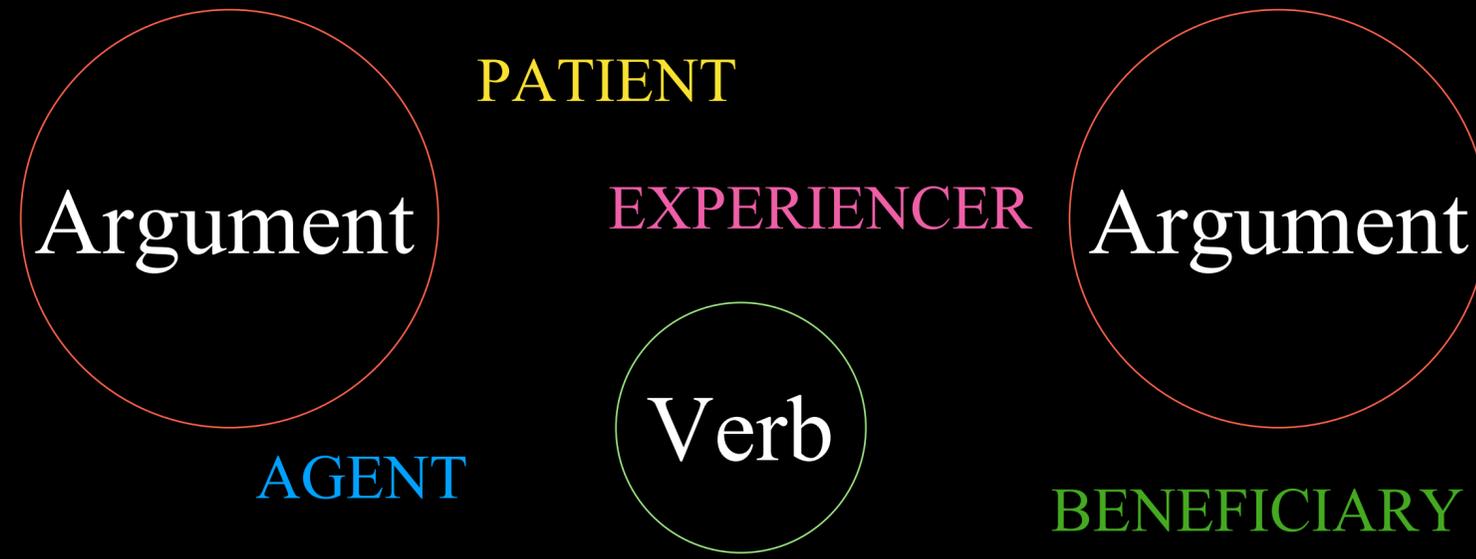- **Deixis**
(e.g., venitive)

So what does the *t*-morpheme actually do?

Argument Structure

1 Argument: intransitive
2 Arguments: transitive
3 Arguments: ditransitive

PATIENT

EXPERIENCER

Argument

Argument

Verb

AGENT

BENEFICIARY

THEME

GOAL

Argument

John$_i$ washed his dog$_j$.

AGENT   Verb   PATIENT

John$_i$ washed himself$_i$.

AGENT   Verb   PATIENT

Middles temper with Argument
Structure and rearrange
relationships between arguments.

also the
→ t-Middle !

But that was the Middle-*t*.
What about the Perfect-*t*?

Event Structure

The t-morpheme tempers with
Event Structure and relates
between events.

Discourse Configurational
Languages
(Kiss 1995)

Tying it all together

iprus
(punctual-completed)

iparras
(durative-continuous)

iptaras
(relating events)

BAE states and implies that Akkadian speakers morphologically marked aspect, making a binary distinction between

perfective (punctual-completed)

and imperfective (durative-continuous)

events.

Reichenbach (1947)

iptaras does not disturb this symmetry. It merely tempers with the event structure or discourse configuration.

Conclusion

While *iprus* and *iparras* mark the binary difference between punctual-completed vs. durative-ongoing actions, *iptaras* marks a sort of "middle" to *iprus*: it *relates* different events.

And the best part?

Table 1: Akkadian Template Patterns

	SIMPLE	INTENSIVE	CAUSATIVE
Active	iprus	uparris	ušapris
Middle	iptaras	uptarris	uštapris
Passive	naprus		

The templates are not morpheme units. They are made up of multiple morphemes themselves!

Assigning semantic value to morphemes and seeing how they interact with other morphemes and in different contexts?

+ root ⟶ u-šā-bil-ū-nim

Tense

Person

Mood

Voice

Number

Gender

Aspect

Argument structure

Agentivity

We can do this for every other morpheme, too!

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Thank you *kindly* for your attention!

Iris Kamil
iris.kamil@ed.ac.uk
iriskamil.com

Appendix: *Diachrony* of *t-*

Middle
> reflexive
> middle of possession
> change-of-state
> reference to preceding (completed) state
> reference to past

Middle
> reflexive
> middle of possession
> change-of-state
> reference to preceding (completed) state
> reference to other states/events

$$
\begin{array}{l}
\text{AspP} \\
\lambda x \lambda e.ask(e) \wedge Theme(PRO, e) \wedge Agent(PRO, e) \wedge Perfective(e)
\end{array}
$$

DP

PRO

$$
\lambda x \lambda e.ask(e) \wedge Theme(PRO, e) \wedge Agent(x, e) \wedge Perfective(e)
$$

$$
\begin{array}{l}
\text{VoiceP} \\
\lambda x \lambda e.ask(e) \wedge Theme(PRO, e) \wedge Agent(x, e)
\end{array}
$$

$$
\begin{array}{l}
\text{Asp} \\
\lambda e.Perfective(e)
\end{array}
$$

[ ]

$$
\begin{array}{l}
v\text{P} \\
\lambda e.ask \wedge Theme(\text{PRO}, e)
\end{array}
$$

$$
\begin{array}{l}
\text{Voice} \\
\lambda x \lambda e.Agent(x, e)
\end{array}
$$

$\sqrt{\text{AGENT}}$

v

$$
\lambda x \lambda e.ask(e) \wedge Theme(x, e)
$$

$\langle$DP$\rangle$

PRO

$\sqrt{\check{s}\text{ʔ}l}$ v

FP
$\lambda x \lambda e.ask(e) \wedge Theme(\text{MY LORD}, e) \wedge Agent(\text{PRO}, e) \wedge Perfective(e) \wedge Relation(e)$

[REL]
t

AspP
$\lambda x \lambda e.ask(e) \wedge Theme(\text{MY LORD}, e) \wedge Agent(\text{PRO}, e) \wedge Perfective(e)$

DP
PRO

$\lambda x \lambda e.ask(e) \wedge Theme(\text{MY LORD}, e) \wedge Agent(\text{PRO}, e) \wedge Perfective(e)$

VoiceP
$\lambda x \lambda e.ask(e) \wedge Theme(\text{MY LORD}, e) \wedge Agent(\text{PRO}, e)$

Asp
$\lambda e.Perfective(e)$

[ ]

DP
PRO

vP
$\lambda e.ask \wedge Theme(\text{MY LORD}, e)$

Voice
$\lambda x \lambda e.Agent(x, e)$

DP
my lord

v
$\lambda x \lambda e.ask(e) \wedge Theme(x, e)$

$\sqrt{\check{s}?l}$ v