

Adding meaning to Indo-Aryan aspectual adverbials “then” and “again” (with comparison to Hungarian)

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- 1 Aspectual particles
- 2 *Phir/Pheri*
- 3 Additive particles & *phir/pheri*
- 4 Crosslinguistic comparisons - Hungarian &c.
- 5 Historical developments
- 6 Other accounts
- 7 Conclusion & refs
- 8 Additional materials
 - Additional Hungarian Diachronic data
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Overview

- Discuss various meanings of Hindi *phir* & Nepali *pheri* 'then', 'again', ['(concessive) still']
- Propose a template definition shared by the meanings
- comparison with Hungarian (and beyond)

Hindi *phir*, Nepali *pheri*

Hindi

- (1) Rām **phir** so gayā.
 Ram **then/again** sleep went
 “Ram slept **then/again**.”

Nepali

- (2) Birendra **pheri** sutyo.
 Birendra **then/again** slept
 “Birendra slept **then/again**.”

Hindi *phir bhī*, Nepali *pheri pani*

Hindi

- (3) Shyām guṇḍā hai; **phir** **bhī** merā dost hai.
 Shyam villain is, **then/again too** my friend is
 “Shyam’s a villain; **still_{conc}** he’s my friend.”

Nepali

- (4) **Pheri** **pani** timro tasbir ākha.mā āe.rahancha.
then/again too your image eye.in come.continues
 “**Still_{conc}** your image keeps coming into my eyes.”

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Some Adverbials in Hindi & Nepali

HINDI	NEPALI	MEANING
tab	tab(a) taile	“then (at that time)”
phir	pheri tab(a) pachi	“then (after that)”
phir phir se (dobārā)	pheri	“again” (repetitive, restitutive)
abhī bhī ab tak	aile samma ajha(i) (pani) aile pani	temporal/continuity “still”
phir bhī	pheri pani tai pani tarai pani ra pani	concessive/adversative “still”
bhī	pani	additive & scalar(-additive) particle “also”/“even”

Table: Hindi & Nepali “pieces”

(Ordering) *phir/pheri* “then”

Hindi

- (5) Rām-ne khānā khā liyā. Vah **phir** so gayā.
 Ram-ERG food eat took. He/she **then** sleep went
 “Ram ate food. **Then** he slept.”

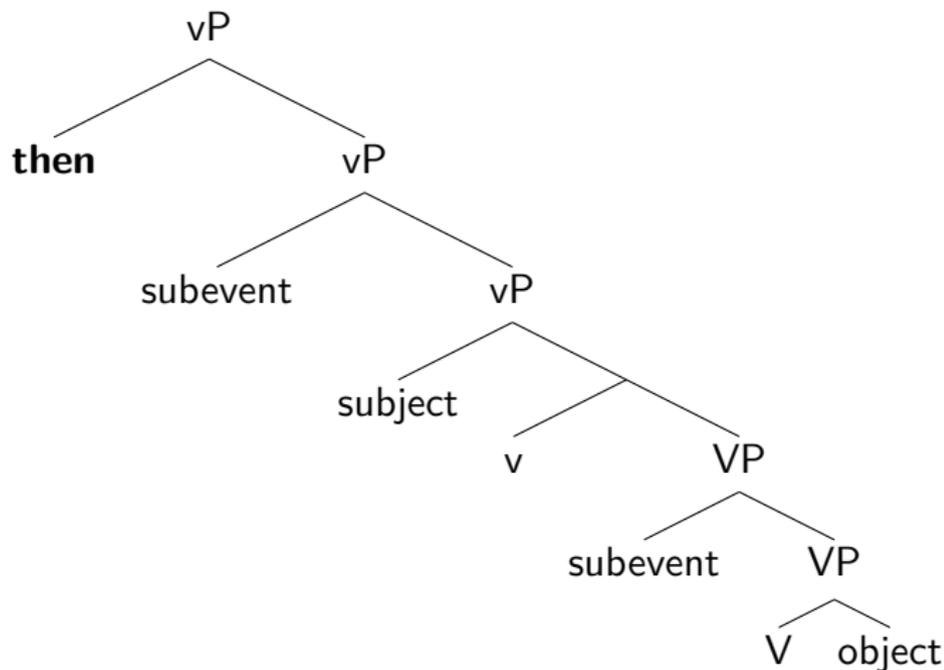
Nepali

- (6) Birendra-le bhāt khā-i-diyō. U **pheri** sutyo.
 Birendra-ERG food eat-ABS-gave. He/she **then** slept
 “Birendra ate food. **Then** he slept.”

(Ordering) *phir/pheri* “then” defined*phir* “then”:

$$\lambda T \lambda t \lambda e \lambda \mathcal{P} : \begin{array}{l} \exists t^* \\ \exists e^* \\ \exists Q \end{array} \left[\begin{array}{l} Q(e^*, t^*, \dots) \ \& \\ Q(e^*, t^*, \dots) \in FA(\mathcal{P}(e, t, \dots)) \ \& \\ t^* \prec t \ \& \\ t, t^* \in T \end{array} \right] . \mathcal{P}(e, t, \dots)$$

- *phir/pheri* combines with an ordered scale of times T , a time t , an eventuality e , and a saturated predicate \mathcal{P} , and asserts that there is a \mathcal{P} eventuality e at time t
- \mathcal{P} inherits the specifications of saturated predicate, so might appear in fuller form as e.g. **sleep**(e^* , t^* , *John*) & **in**(e^* , *kitchen*)
- presupposes that there is another eventuality e^* of Q which occurs at time t^* , and that t^* precedes t
- alternatives will vary depending on exactly what subconstituent is focussed (e.g. the VP); e.g. = { **John snored**, **John drooled**, **John walked about**, **John slept**, ... }

(Ordering) *phir/pheri* “then” tree

Relational adverbials and focus

- The focus alternatives are of course determined by what is focussed (see Rooth 1985, 1992)
- E.g. John [woke up]^F, Then he [got dressed]^F, Then he [had a shower]^F, Then [Mary]^F had one, . . .

(Repetitive) *phir/pheri* “again”

Hindi

- (7) Rām-ne baṭan-ko dabā diyā. Kuch nahī huā. Us-ne
 Ram-ERG button-DAT push gave. Something not became. he/she-ERG
 phir (se) baṭan-ko dabā diyā.
again button-DAT push gave.
 “Ram pushed the button. Nothing happened. He pushed the button
 again.”

Nepali

- (8) Birendra-le baṭan-lāī dabā-i-diyō. Ke pani bhaena.
 Birendra-ERG button-DAT push-ABS-gave. What also/even became.NEG.
 Us-le **pheri** baṭan-lāī dabā-i-diyō.
 he/she-ERG **again** button-DAT push-ABS-gave.
 “Birendra pushed the button. Nothing happened. He pushed the button
 again.”

Repetitives

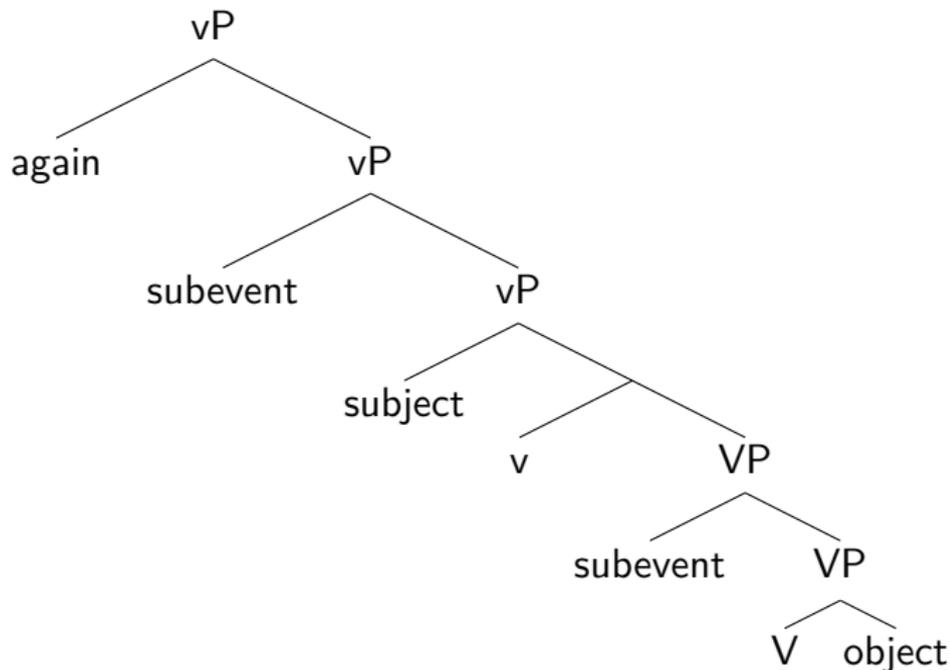
phir (se), pheri:

$$\lambda T \lambda t \lambda e \lambda \mathcal{P} : \begin{array}{l} \exists t^* \\ \exists e^* \\ \exists Q \end{array} \left[\begin{array}{l} Q(e^*, t^*, \dots) \ \& \\ Q(e^*, t^*, \dots) \in FA(\mathcal{P}(e, t, \dots)) \ \& \\ t^* \prec t \ \& \\ t, t^* \in T \end{array} \right] .\mathcal{P}(e, t, \dots)$$

- Identical to temporal ordering “then”, except that the time variable (rather than some other constituent) is under focus, and so the alternatives will vary in terms of temporal specification
- e.g. FAs might include { **John woke at t_1 , John woke at t_2 , John woke at t_3 , ...** }

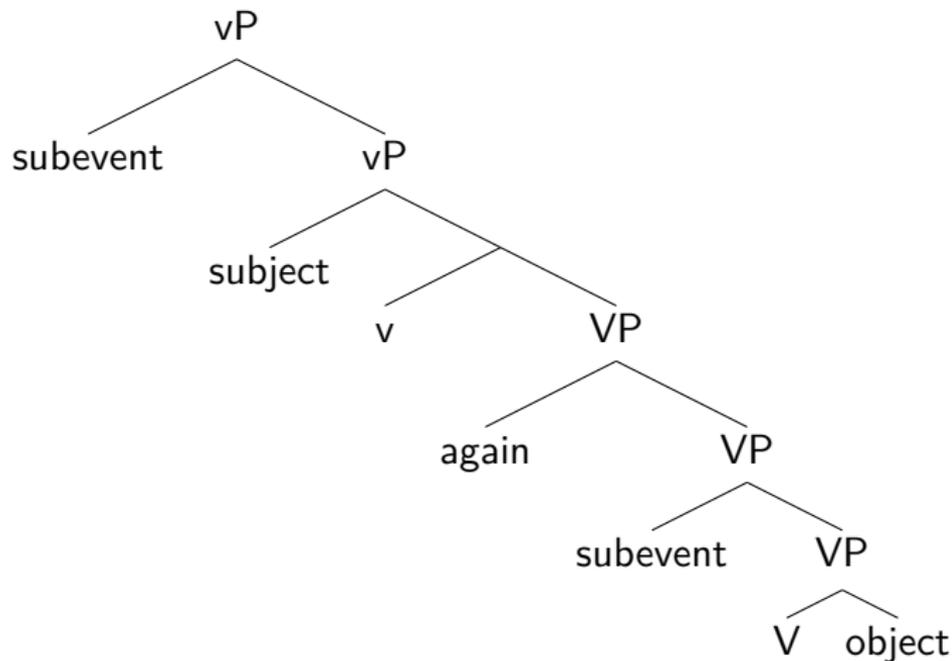
(Repetitive) *phir/pheri* “then” trees 1

Again, repetitive



(Repetitive) *phir/pheri* “then” trees 2

Again, restitutive



Generalised template for *phir/pheri*

Template

$$\lambda S \lambda x \lambda e \lambda P : \begin{array}{l} \exists x^* \\ \exists e^* \\ \exists Q \end{array} \left[\begin{array}{l} Q(e^*, x^*, \dots) \ \& \\ Q(e^*, x^*, \dots) \in FA(P(e, x, \dots)) \ \& \\ x^* \mathcal{R} x \ \& \\ x, x^* \in S \end{array} \right] .P(e, x, \dots)$$

- \mathcal{P}, \mathcal{Q} are (saturated) predicates
- x, x^* are scalar entities (times, degrees, &c.)
- e, e^* are eventuality variables
- \mathcal{R} is a relation (e.g. \prec, \succ, α , &c.)
- S is a scale
- FA is a set of focus alternatives to $\mathcal{P}(e, x)$ which differ in terms of variation of elements under focus, which may include times, degrees, or constituents &c. (assuming 'transparency' of the event variable)

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Concessive “still”

Recall from above: for the “concessive still” sense, both Hindi & Nepali combine the temporal *phir/pheri* with a particle, Hindi *bhī*, Nepali *pani*

Hindi

- (9) Shyām guṇḍā hai; **phir** **bhī** merā dost hai.
 Shyam villain is, **then/again too** my friend is
 “Shyam’s a villain; **still_{conc}** he’s my friend.”

Nepali

- (10) **Pheri** **pani** timro tasbir ākha.mā āe.rahamcha.
then/again too your image eye.in come.continues
 “**Still_{temp}** your image keeps coming into my eyes.”

Additive particles in Hindi and Nepali

The particles which show up in the “concessive still” in Hindi & Nepali, *bhī* & *pani*, are members of the μ -type (< Japanese *mo*) which appear in UNIVERSAL & CONJUNCTIVE environments (see Szabolcsi 2010,2015, Slade 2011, Mitrović 2014, amongst other; cf. Reichenbach 1947)

	Japanese	Dravidian	Sinhala	Nepali	Hindi	Hungarian
μ -series	mo	um	t	pani	bhī	is, mind

Table: μ series in select languages

Examples of *bhī* and *pani* as μ

Hindi

- (11) Rām **bhī** mar gayā
 Ram **also/even** die went
 “Ram died too.”/“Even Ram died.”
- (12) Rām **bhī** Shyām **bhī** ...
 Ram **also** Shyam **also** ...
 “Both Ram and Shyam”

Nepali

- (13) Rām **pani** maryo
 Ram **even/also** died
 “Ram died too.”/“Even Ram died.”
- (14) Rām **pani** Shyām **pani** ...
 Ram **also** Shyam **also** ...
 “**Both** Ram **and** Shyam”

Examples of *bhī* and *pani* as μ (cont.)

Hindi

- (15) Koī **bhī** nahī āyā.
 Someone **also/even** not came.
 “No-one came.”
- (16) Jo **bhī** laṛkī vahā̃ khaṛī hai, vah merī dost hogī
 REL.PRO **also/even** girl there standing is, he/she my friend be.FUT
 “Whichever girl is standing there will be my friend.”

Nepali

- (17) Ma kahile **pani** raksi piūdina
 I sometimes **even/also** alcohol drink.NEG
 “I never drink alcohol.”
- (18) Jo āe **pani** huncha
 who.REL.PRO came **even/also** is
 “Whoever comes, it is all right.”

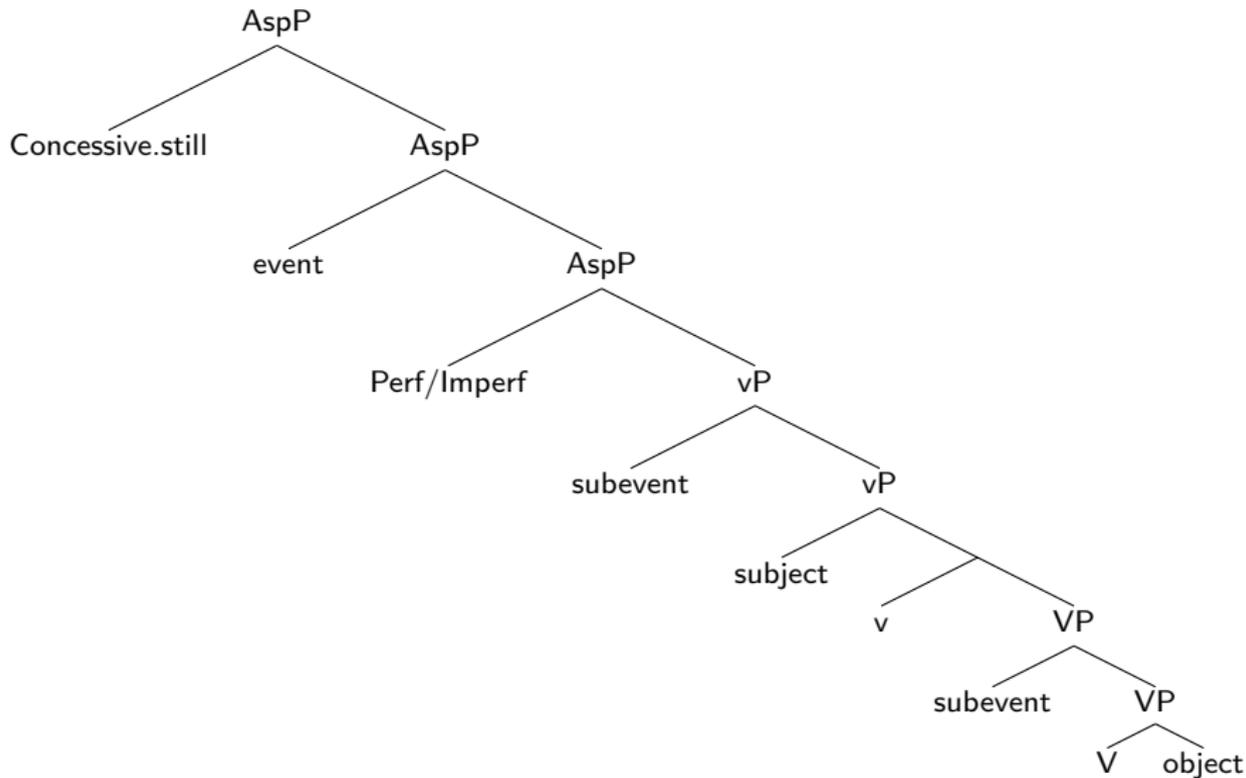
'Concessive/adversative' *phir bhī/pheri pani*

Concessive

$$\lambda S \lambda w \lambda e \lambda \mathcal{P}: \left[\begin{array}{l} \exists e^* \\ \exists Q \\ \exists e' \\ \exists R \\ \exists W^{cg} \subseteq W \end{array} \left[\begin{array}{l} \mathcal{R}(e', w, \dots) \ \& \\ Q(e^*, \dots) \in FA(\mathcal{P}(e, \dots)) \ \& \\ \Sigma(\{\Lambda(w') | R(e^*, w') \wedge \mathcal{P}(e, w') \wedge w' \in W^{cg}\}) < \\ \Sigma(\{\Lambda(w'') | R(e^*, w'') \wedge Q(e, w'') \wedge w'' \in W^{cg}\}) \\ \Sigma(\{\Lambda(w') | R(e^*, w') \wedge \mathcal{P}(e, w') \wedge w' \in W^{cg}\}), \\ \Sigma(\{\Lambda(w'') | R(e^*, w'') \wedge Q(e, w'') \wedge w'' \in W^{cg}\}) \in S \end{array} \right] \right] \cdot \mathcal{P}(e, w, \dots)$$

- W^{cg} is the set of world consistent with the common ground
- because VERUM is focussed, $FA(\mathcal{P}(e)) = \{\mathcal{P}(e), \neg \mathcal{P}(e)\}$
- $\Lambda(w') =$ likelihood of w'
- $\Sigma(\{\Lambda(w') | \dots\})$ is the aggregate of the likelihood of every world in a particular set. Thus both the number of worlds in the set and the individual likelihood of each particular world affects the result.
- S is an ordering of real numbers
- So here the overall likeliness of the worlds in which both the presupposed 'frame-setting' eventuality and the eventuality in question both occur is lower than the overall likeliness of the worlds in which the 'frame-setting' eventuality occurs but the eventuality in question does not

Concessive tree



Concessive

- This sense is rather different from the “templatic” *phir/pheri*
- Unsurprising given the additional element *bhī, pani*
- The additive *bhī/pani* seems to correlate with the additional presupposition of a “framing” eventuality
- Also note the complexity of scalar elements (summation of likelihood over sets of worlds)

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Comparison of (a subset of) Hungarian, Hindi, Nepali temporal adverbials

Hungarian	Hindi	Nepali	Meaning
megint ismét	phir phir se	pheri	repetitive, restitutive
még (mindig)	abhī bhī ab tak	aile samma ajha(i) (pani) aile pani	temporal/continuity “still”
mégis akkor is	phir bhī	pheri pani tai pani	concessive/adversative “still”
is	bhī	pani	additive particle “also”

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Repetitives in Hungarian

- The Hungarian repetitives are etymologically connected to *még* via *meg*:

(19) Feri **megint** / **ismét** ivott egy pálinkát.
 F-NOM **again** / **again** drank one palinka-ACC
 'Feri drank a palinka again.'

Concessive *mégis*

- Concessive interpretation

(20) Bár fogyókúrázott, Feri **mégis** evett zsíroskenyeret.
 though diet.V.PAST,3SG F-NOM **still** ate lard-ADJ.bread-ACC
 'Even though he was on a diet, Feri still ate some bread with lard.'

Additives in Hungarian

- Like Hindi *phir* ***bhī***, Nepali *pheri* ***pani***, Hungarian *mégis* contains an additive particle

(21) János **is** jött.

J. **also** came.

“John came too.”

(22) János **is** (és) Mari **is** ...

J. **also** (and) M. **also** ...

“Both John and Mary”

Scalar additive

- Scalar component from 'még', additive from 'is'.

(23) Mindenki zsíroskenyeret kért. **Még** Feri ***(is)**
 everyone-NOM lard-ADJ.bread-ACC asked. **still** F-NOM **too**
 zsíroskenyeret kért.
 lard-ADJ.bread-ACC asked
 'Everyone asked for some bread with lard. **Even** Feri asked for
 some bread with lard.'

Another ordering relation in Hungarian

- Hungarian *még* has (amongst other uses) a temporal ordering use, which interestingly is the inverse of the relation in the Indo-Aryan ordering *phir, pheri*
- Event e associated with \mathcal{P} precedes another event e^*

(24) **Még** épített egy házat (mielőtt meg halt)
still built one house-acc before meg died
 'He built a house (before he died)'

Hungarian inverse ordering

még “(inverse) then; before that”:

$$\lambda T \lambda t \lambda e \lambda \mathcal{P} : \begin{array}{l} \exists t^* \\ \exists e^* \\ \exists Q \end{array} \left[\begin{array}{l} Q(e^*, t^*, \dots) \& \\ Q(e^*, t^*, \dots) \in FA(\mathcal{P}(e, t, \dots)) \& \\ t^* \prec t \& \\ t, t^* \in T \end{array} \right] .\mathcal{P}(e, t, \dots)$$

- FAs, e.g. = {**He built a cabin, He sneezed, He walked about, He died...**}

Other *stills* in Hungarian

comparative

- (25) Ez egy nagy labda. (Az nagyobb.) És az még nagyobb.
 this one big ball that bigger and that still bigger
 'This is a big ball. (That one is bigger.) And that one is still bigger.'

S-marginality [standard-marginality] (vs. "comparative" C-marginality)

- (26) Sopron még Magyarországon van.
 Sopron-nom still Hungary-on is
 'Sopron is still in Hungary.' ('true' marginality)
- (27) Ez a ruha drága. Az a ruha is / #még drága.
 this the dress expensive that the dress too / still expensive
 'This dress is expensive. That dress is expensive too / still expensive.' (comparative marginality, only ok if temporal *még*)

Comparison of Hungarian, Hindi, Nepali, German

Hungarian	Hindi	Nepali	German	Meaning
akkor	tab	tab(a) taile	da	“then (at that time)”
az (u)tán	phir	pheri tab(a) pachi	dann	“then (after that)”
még	—	—	—	“before that”
megint ismét újra ...	phir phir se (dobārā)	pheri	wieder	repetitive, restitutive
még (mindig)	abhī bhī ab tak	aile samma ajha(i) (pani) aile pani	noch	temporal/continuity “still”
mégis akkor is	phir bhī	pheri pani tai pani tarai pani ra pani	noch	concessive/adversative “still”
még ... is	bhī	pani	sogar	scalar(-additive) particle “even”
is	bhī	pani	auch	additive particle “also”

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Historical developments

Hindi

- Hindi *phir* “then, again” is related to Hindi *phirnā* “to turn”, which derives from a reconstructed Old Indo-Aryan **phirati* “moves, wanders, turns”, cp. Prakrit *phirāi* “goes, returns” (Turner 1966: #9078)

Kutchi Gujarati (Patel-Grosz & Beck 2014)

- *Pacho* “again (repet. & restit.) & back” < OIA. **paśca-* “hinder part” (much like English *back*) [Turner 1966: #7990]
- cp. Hindi *vāpas* “back” (no repetitive senses (yet)), loanword from Persian, with the *pās* part being cognate with **paśca-* [Platts 1884:1171]

Cp. English *again*

Again originally meant “back, in the opposite direction” OE *ongean*: “He sceaf þa mid ðam scylde, ðæt se sceaft tobærst, and þæt spere sprengde, þæt hit sprang **ongean**.” [“He shoved then with shield so the shaft burst — the spear broke and sprang **back**.”] (*Battle of Maldon* 137)

Sanskrit *punar api*

Nepali *pani*

derives from Sanskrit *punar api* “even again; again too; moreover; also” (Turner 1966:#8274)

Sanskrit *punar api*

(28) kṣipto 'yam mandarādriḥ **punar api** bhavatā veṣṭyatām
 thrown this Mandara **again even/also** lord.INSTR suitable-be-whirled
 vāsuke 'bdhāu
 Vasuki.VOC ocean.LOC

“Let this Mount Mandara, thrown into the ocean, **again** be twirled by thee, O Vasuki.” [*Caṇḍīśataka of Bāṇa* 59.1]

Sanskrit *púnar*

Skt. *púnar* polysemous consistent with templatic analysis:

- (29) hitváya avadyám **púnar** ástam á ihi
 abandon.CONV imperfection.ACC **again** home.ACC to come.IMPV
 “Having cast off imperfection, come home **again**.” [*Rgveda* X.14.8c]
- (30) **Punar** āgamyā niṣadhān nale sarvaṁ nyavedayat
again/back come.CONV Nishadha Nala.LOC all.ACC know.CAUS.IMPV.PAST.3SG
 “Having returned **back** to Nishadha, [the goose] made all known to Nala.” [*Nala* I.32]
- (31) śṛṇu **punaḥ**
 listen.IMPV **again/back**
 “Listen still/further!”
- (32) Punar ca ramaṇīyeṣu vaneṣu upavaneṣu ca Damayantī sāha
again and pleasant.LOC.PL forests.LOC.PL groves.LOC.PL and Damayanti.INSTR with
 Nalo vijahāra amaropamaḥ.
 Nala.NOM wandering-for-pleasure like-immortals.
 “**Moreover** (?), Nala with Damayanti, like immortals, was always wandering about for pleasure in pleasant forests and groves.” [*Nala* V.44]
- (33) arthaiḥ sañcayavān arthān prāpnoti kiyad adbhutam,
 wealth.INSTR accumulated-wealth-person wealth.ACC obtains little wonder,
 mayā **punar** vinā eva artham lakṣmīḥ āsāditā purā
 me.INSTR **still** without EMPH wealth Laxmi sit.CAUS.IMPV.FEM formerly
 “It is little wonder that someone who has inherited wealth should obtain wealth by using wealth; **still** I achieved prosperity long ago without any wealth to start with.”

Old English

Old English *eft*

Similar “polysemy” is also found in earlier English *eft*:

- (34) Efterward me ssel þerne mete **eft** chywe ase þe oxe þet...
 afterward one shall this food **again** chew as the ox that...
 “Afterward one shall chew this food **again** like the ox
 that... (CMAYENBI111.2146 — from Gergel et al. 2016)
 [repetitive reading]
- (35) þone mon **eft** on Cent forbærnde.
 that.ACC man **afterwards** in Kent **burned**.
 “That man was afterwards burned in Kent.” [Anglo-Saxon Chron.
 ann. 685 (Parker MS.)]

Origins of Repetitives in Hungarian

- Hungarian *még* appears in a number of different senses (temporal “still”, additive “still”, &c.)
- *még* derives from the particle *meg* (Zaicz 2006), which could mean “again”:

(36) (Müncheni kódex, 1466)

és tőn **meg** úgy
and did **again** like.that
“and he did again like that” (?)

- Both *megint*, *ismét* are derived from *meg* (with an additional additive for *ismét*)
- *Meg* originally had the interpretation of ‘back’ (Zaicz 2006)

(37) ‘Back’ (Müncheni kódex, 1466)

ne mennének **meg** Heródeshez, más úton fordulának **meg** ő
not went.3PL **meg** Herod-TO different road-ON turned.3PL **meg** they
országukba
country.POS.3PL-TO
“They didn’t return to Herod, they returned on a different road to their
country.”

Further echoes of additives:

- Even in German, the form *noch* “still” historically contains an additive particle (as Hungarian *is*, Hindi *bhī*, Nepali *pani*):
 - German *noch* < PGmc. **nuh* < PIE **nū-* “now” plus the PIE additive particle **-k^we* (Pokorny 1959)

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Other accounts

- Michaelis 1993, Ippolito 2007, Beck 2016 on various senses of *still* (among others)
- Focus of papers: no morphological relevance, no templatic definition
- Concern (Michaelis 1993): aspectual restrictions

- Morphological facts (also later), role of additive particles

Other accounts: abutment

- Abutment in temporal interpretation
- For others, abutment survives in other interpretations, e.g. the marginality sense
- No necessary abutment relation (e.g. comparative, C-marginality, perhaps also just an implicature in S-marginality)

Other accounts: temporal implicature

- Beck 2016: temporal implicature with temporal *still*
It's still raining implicates that it won't be raining in the future (Beck)
This dress is still expensive: no necessary entailment, presupposition or entailment that it will be cheaper at a later time

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Temporal Adverbials - Different Scales, Relations, Foci

ITEM	SCALE	RELATION	FOCUS	IDENTITY OF SCALE/FOCUS
"temporal" STILL	time	\propto	time	yes
"temporal additive" STILL	time	\prec	time	yes
"marginality" STILL	degrees	\succ	individuals	no
"concessive" STILL	likelihood	\prec	verum	no
AGAIN	time	\prec	time	yes
THEN	time	\prec	non-time element	no

Summary

- templatic relation between various senses of temporal/relational adverbs
- overtly manifested in morphology in some languages
- use of templatic definitions elsewhere
 - P elements fluid between spatial, temporal realms, &c., e.g.:
 - “30 and **above**”, “**above** average”, “X is **above** Y” (in hierarchy/organisation), “see **above**” (ordering in a text), &c.
 - “**under** the table”, “**under** 30 inches”, “**under** 2 hours”, “**under** contract”, &c.
- can explain historical relationships (e.g. in Hungarian), or morphologically-connected paradigms of adverbs

Remaining problems

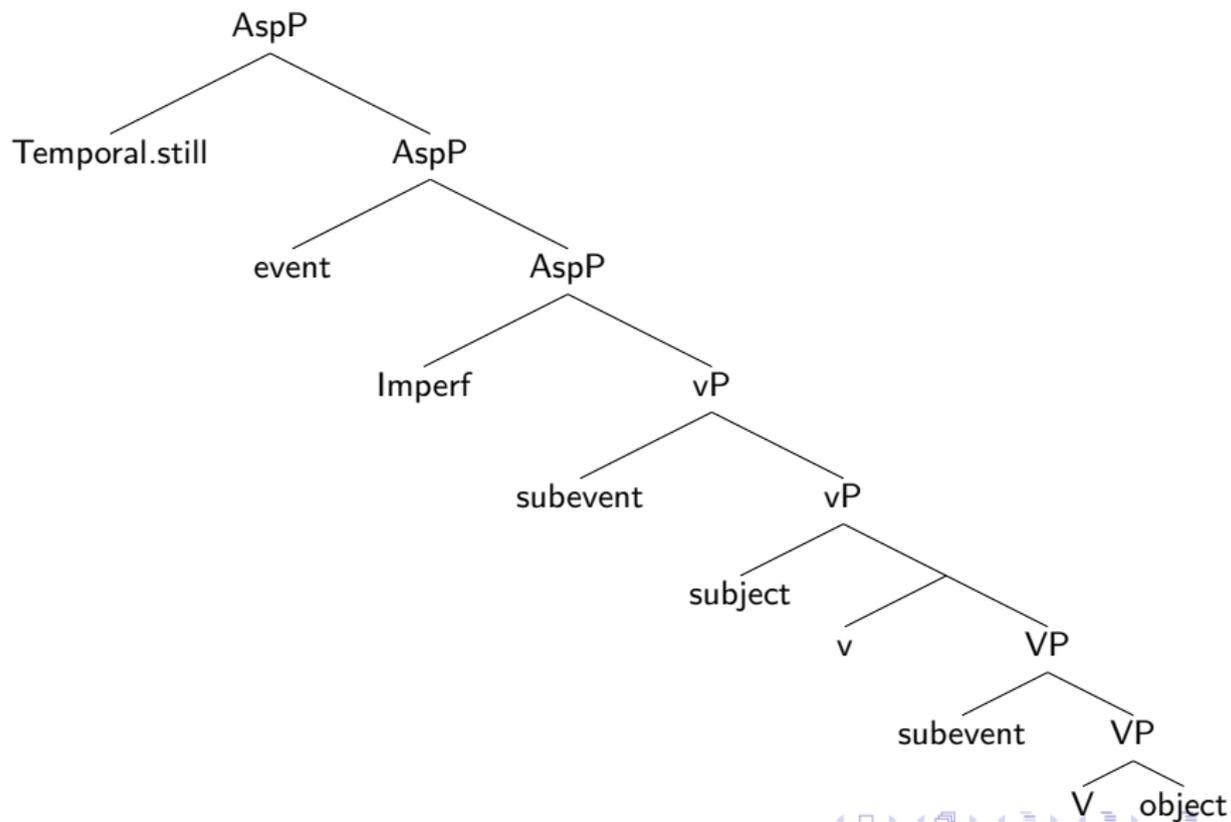
- more fully work out syntax and compositional account
- e.g. explain precise contribution of additives in forming “concessive STILL”
 - for *bhī/pani*, ambiguous between additive, and scalar-additive, possible explanation is clearer (scalar additives typical rank according to likelihood)
 - but Hungarian *is* seems to be a plain additive (unless it was similarly ambiguous at an earlier stage)

References

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- 1 Aspectual particles
- 2 *Phir/Pheri*
- 3 Additive particles & *phir/pheri*
- 4 Crosslinguistic comparisons - Hungarian &c.
- 5 Historical developments
- 6 Other accounts
- 7 Conclusion & refs
- 8 Additional materials**
 - Additional Hungarian Diachronic data
 - More on other treatments

Temporal/aspectual STILL tree



meg as repetitive

(38) (Müncheni kódex, 1466)

és tőn **meg** úgy
and did **again** like.that

“and he did again like that” (?)

(39) (Szabolcs Viadala 1476)

nagy bús jonhhal **meg**-visszatérének
big sad ?-with **again**-back.returned

“they returned again with big sad ?”

(40) *esmé*g (Jakob kódex, 1440)

adjad **esmeg** (=ismét) ennekem
give.IMP **again** me

“give it to me again”

Other repetitives

(41) *ismét* (Müncheni kódex, 1466)

ismét mondom tinektek

ismét say.1sg you.pl-to

'I say to you again'

(42) *megint* (Jordánszky kódex, 1516-19)

és ki szent, szenteltessek **megint**

and who saint blessed.imp **megint**

'and that who is a saint should be blessed again'

Még as STILL

- (43) Temporal *még* (Bécsi kódex, 1430-60)

Még negyven napok vannak
még forty days are

‘There are still forty days’

- (44) Concessive *mégis* (Bod kódex, first half of 16th c)

de **mégis** többet akar vala bírnia
 but *mégis* more-acc want had have.inf

‘but still he wanted to have more’

Additives

- (45) Additive (Birk kódex, 1474)

Ő rajta **is** könyörültök
 he on **is** mercy.V.2pl
 'You(pl) have mercy on him as well'

- (46) Scalar additive (Müncheni kódex, 1466)

még ti **is** értelem nélkül vagytok-e
még you.pl **is** reason without are.2pl Q
 'Whether even you are without reason'

- (47) Additive (Birk kódex, 1474)

ne csak szátok étket, de **még** fületek **is** bevegye
 not only mouth.poss.2pl food-acc but **még** ear.poss.2pl **too** in.take.imp
 hallgassa istennek igéjét
 hear.imp god-dat word.poss-acc
 'Let not only your mouth take in food, but also your ears take in and hear
 God's word'

Misc. Remarks on Previous Accounts

- Michaelis (1993)
 - Examines three senses of English *still* with reference to diachronic development (temporal, marginality, concessive)
 - Posits for each of the 3 that *still* denotes the existence of effectively identical elements at two contiguous scalar loci
 - The more advanced locus is asserted, the less advanced presupposed
 - Scales may differ (times, worlds, rankings along property scale)
 - **Nb:** problematic claim about homogeneity of CONTIGUITY requirement

Misc. Remarks on Previous Accounts (cont.)

- Ippolito (2007)
 - Examines English *still* and *already*, discussing aspectual/temporal, marginality, concessive uses (relating these to additive particles, scalar particles, and exclusive particles), also investigating *again*
 - Also notes focussing of time variable for (temporal) *still* & *again*
 - Complex interactions of adverbials with aspectual heads
 - In some cases definitions perhaps overspecified
 - Concessive *still*: requires worlds considered to be maximally similar to evaluation world
 - Argues that concessive involves presupposition that the set of worlds in which the framing proposition (*John studied all night*) and the proposition at issue (*(still) he failed the exam*) are both true are less likely the worlds in which the framing proposition is not true but the proposition at issue is true - which seems incorrect

Misc. Remarks on Previous Accounts (cont.)

- Beck (2016)
 - Focuses on German *noch* & English *still*, in various senses, including temporal, marginal, and various “discourse”-related (though not concessive)
 - Also posits common core/template, but which like Michaelis’s problematically posits CONTIGUITY (=abutment) for all senses
 - Also explores implicatures
 - Beck suggests that temporal *noch/still* carries implicature that P will hold in future (explain oddity of *John’s still dead*)
 - In actuality, implicature seems to involve P being true in some accessible world (*John is still annoying*)

Vietnamese

- (48) Tân **thì thậm chí** 1.7m **cũng** nhảy qua
 Tân.TOP,1 PRT SCAL 1.7m ADD jump
 'Tan can even jump 1.7m.' [Zimmermann 2017: 141]

- *thậm chí... cũng* is reminiscent of the *még... is* of Hungarian
- Zimmerman (2017) argues that *thậm chí* is a scalar(-additive) particle and *cũng* is an additive
- However, the contexts for the Vietnamese examples seem to largely involve a contrastive topic in addition to the scalar-additive and thus apparently differ from Hungarian
- Further, Zimmermann (2017: 140) notes that *cũng* sometimes also appears to bear a scalar reading even without the scalar *thậm chí*