A perfect mess:
Towards a typology of the "present perfect"

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1 Introduction[1]

- This talk is concerned with the meaning and use of cross-linguistic expressions that have been described as "present perfects."

- In English, we use the term "present perfect" to describe an expression with a present tense auxiliary and a past tense main verb, as in (1).

- The English present perfect makes different pragmatic contributions, and has a different distribution from, the English simple past in (2). The present perfect is typically described as referring to a "past event of current relevance" (Comrie 1976).

(1) Usain Bolt **has won** the race. PRESENT PERFECT

(2) Usain Bolt **won** the race. SIMPLE PAST

- The term "present perfect" is used to refer to a number of different expressions across a range of different languages.

    - Languages that are assumed to have present perfects include (but are not limited to) English (McCawley 1981), Dutch (Pancheva and von Stechow 2004), Norwegian (Izvorski 1997), German (Musan 2001), Bulgarian (Izvorski 1997), Greek (Iatridou et al. 2001), Kazakh (Straughn 2011), Turkish (Şener 2011), Tatar (Greed 2009), and Uzbek (Straughn 2011).

    - Dahl (1985) gives a survey of present perfects across languages, although (as we argue later) there are issues with his criteria for what qualifies as a present perfect.

- As we show in this talk, the distribution and use of the English present perfect is very different from the so-called "present perfect" expressions in the other languages in our survey.

- This is a problem for linguists studying the present perfect cross-linguistically, since the vast majority of semantic/pragmatic theories of the present perfect are based on the English data.

- In this talk, we show the distribution of the English present perfect, and test how its distribution compares to so-called "present perfect" expressions in four other languages: **Turkish** (Turkic), **Tatar** (Turkic), **Bulgarian** (Slavic), and **German** (Germanic).

2   What is the present perfect?: the view from English

- Conceptually speaking, the English present perfect is typically described as referring to a "past event of current relevance" (Comrie 1976).

- There are a number of well-described distributional differences between the English present perfect and simple past tense (Chomsky 1970, McCoard 1978, McCawley 1981, Klein 1992, Katz 2003, among many others). We show these in §2.1, and use these as the basis for our cross-linguistic questionnaire.

2.1   English present perfect data

- **Present perfect puzzle (Klein 1992):** Present perfect is ungrammatical with temporal adjuncts.

(3)   a.   * Usain Bolt **has run** yesterday.
      b.   Usain Bolt ran (yesterday).

- **Current salience requirement (McCoard 1978):** The described event must be salient at the utterance time.

(4)   a.   ?? Gutenberg **has discovered** the art of printing.
      b.   Gutenberg discovered the art of printing.

- **Perfect of result (Iatridou et al. 2001):** Result state of present perfect expressions must be true at the utterance time.

(5)   a.   Leroy **has lost** his keys (#but now he found them).
      b.   Leroy lost his keys (but now he found them).

- **Lifetime effects (Chomsky 1970):** Individuals in present perfect utterances must be alive at the utterance time.

(6)   a.   ?? Einstein **has visited** Princeton.
      b.   Einstein visited Princeton.

- **Universal perfect (McCawley 1981):** When the present perfect occurs with a stative verb, the state described by the verb must be true at the utterance time.[2]

(7)   Leroy **has lived** in Los Angeles since 2000 (#but he doesn't live there anymore).

- **Repeatability requirement (Katz 2003):** Events described by a present perfect utterance must be repeatable.

(8)   **Context:** The Monet exhibit is closed; the addressee can no longer go to it.
      a.   # **Have** you **been** to the Monet exhibit?
      b.   Did you go to the Monet exhibit?

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[2]We use the term "universal perfect" from Iatridou et al. (2001); McCawley (1981) and Portner (2003), among others, refer to these as continuative perfects.

- **Present perfect in questions:**

  - **Questions about specific past times:** The present perfect is infelicitous in questions about specific past times, unlike the simple past.

    (9) **Context:** Our mutual friend Leroy is a somewhat picky eater. I know that Leroy went to a Japanese restaurant last night, and that you talked to him after he went there. I ask you:
    - a. Did Leroy eat sushi?
    - b. # **Has** Leroy **eaten** sushi?

  - **Questions about the general past:** The present perfect is felicitous in questions about general past events, unlike the simple past.

    (10) **Context:** You are discussing foods you have tried with your co-workers. Your co-worker Leroy is notoriously picky. You ask your mutual friend Howard:
    - a. **Has** Leroy **eaten** sushi?
    - b. # Did Leroy eat sushi?

  - **Out of the blue questions:** Present perfect is felicitous in out of the blue questions, unlike the simple past.

    (11) **Context:** Leroy pokes his head in his co-worker's office and asks:
    - a. **Have** you **eaten** sushi?
    - b. # Did you eat sushi?

2.2   Brief review of theories of the (English) present perfect

- Theories of the present perfect attempt to account for some or all of the data in §2.1, and differ in what they assume is the most important data to account for.

  - **"Extended now" (XN) theories** (McCoard 1978, Dowty 1979, Bhatt and Pancheva 2005, Iatridou et al. 2001, among others):
    * Take the salience data in (4a) as a core property of the meaning of the present perfect.
    * Propose to treat the present perfect as extending the speaker's "now" to include times in the past as well as the utterance time.
    * We give a basic XN denotation for the perfect in (12):

      (12) $[\![\text{PERFECT}]\!] = \lambda p_{<i,t>} \lambda t_{<i>}. \exists t'_{<i>} [\text{XN}(t',t) \& p(t')]$
      (where XN(t',t) iff t is a final subinterval of t')
      (Bhatt and Pancheva 2005, 7, following Dowty 1979)

    * In (12), the perfect combines with an untensed proposition, *p*. The perfect introduces an interval that extends back from, and includes, the reference time *t*, and asserts that *p* is true in that interval. In this way, the speaker's reference time (their "now") is extended into the past.

- **"Definite times" constraint** (Klein 1992):
  * Takes the present perfect puzzle, i.e., the inability of the present perfect to co-occur with (most) past temporal adjuncts (3a) to be its most noteworthy property. (This is a primarily syntactic diagnosis of the present perfect.)
  * Roughly speaking, proposes a pragmatic constraint stating that an expression cannot have a topic time and event time that are both picked out as "definite times" relative to the utterance time.

  (13)   * John has left at six.
          Topic time = *at six* (definite)
          Event time = time picked out by *has left*; definite under Klein's theory

- **Modal theory** (Katz 2003):
  * Takes the repeatability data in (8a) as the core property of the present perfect, and argues that it motivates including a modal component in the semantics.

  (14) $[\![\text{PRES.PERF}]\!]^c = \lambda p: \exists t\ [t_c{<}t\ \&\ \text{POSS}(p,t,c)].\ \exists e\ [\tau(e) < t_c\ \&\ p(e)(w_c)]$
          (where $\tau(e)$ picks out the run time of the event)
          (Katz 2003, 154)

  * Roughly speaking, argues that present perfect expressions presuppose that it is possible for an event of the type denoted by the expression to occur in the future, and assert that one has occurred in the past.

3   Cross-linguistic comparison

- A number of authors have noted that the syntactic and pragmatic properties of the English present perfect in §2.1 do not occur in present perfects across all languages (Plungian 2011, Dahl 2000, Dahl 1985, among others).

  - Nonetheless, Dahl (1985) uses the distribution of the English present perfect in §2.1 as a diagnosis for the present perfect cross-linguistically.

- In the following sections, we compare the uses of the so-called "present perfect" in Turkish, Tatar, Bulgarian, and German to the English data in §2.1.

- For space reasons, we only show expressions that have been previously argued to express the present perfect. We do not compare these with the simple past.

- We show that these languages pattern very differently from English. We summarize our findings in §4.

  - Side note: Turkish, Tatar, and Bulgarian have all been described as having "perfect of evidentiality" (PE) (Izvorski 1997, Şener 2011).
    * In PE languages, "perfect" morphology also conveys that the speaker has indirect evidence for the embedded proposition.
    * To control for this, we give contexts in which the speaker has indirect evidence for the Turkish (§3.1), Tatar (§3.2), and Bulgarian (§3.3) expressions.

3.1   Comparison of Turkish and English

> **Turkish "present perfect"**: The Turkish verbal suffix *-mIş* is proposed to mark both indirect evidentiality and present perfect (Izvorski 1997, Şener 2011).[a]
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>
> [a]Following Turkicist tradition, we capitalize letters to indicate underspecified segments that are subject to vowel harmony or voice/place/manner assimilation.

- **Present perfect puzzle:** The present perfect puzzle does not apply to Turkish expressions with *-mIş*; *dün* 'yesterday' is grammatical in (15), contrary to the English example in (3a).

(15) **Present perfect puzzle context:** The speaker walks into the Olympic changing room the morning after a race and sees Usain Bolt's jersey in the laundry basket. She didn't witness the race, but has evidence that Usain Bolt ran yesterday. She says:

     *Usain Bolt dün   koş-**muş**-∅.*
     Usain Bolt yesterday run-MIS-3SG

     '[I have indirect evidence that] Usain Bolt ran yesterday.'

- **Current salience requirement:** Turkish expressions with *-mIş* do not require that the event described by the verb be salient at the utterance time, unlike English (4a).

(16) **Current salience context:** You have been studying the history of art of printing. You see Gutenberg's name everywhere in the resources and you make the inference that Gutenberg discovered the art of printing. You say:

     *Gutenberg basım   sanat-ın-ı   keşfet-**miş**-∅.*
     Gutenberg printing art-3S-ACC discover-MIS-3SG

     '[I have indirect evidence that] Gutenberg discovered the art of printing.'

- **Perfect of result:** The result state of perfect of result expressions do not need to be true at the utterance time in Turkish, unlike in English (5a).

(17) **Perfect of result context:** Your roommate Ali calls you and tells you that he has been rummaging through his pockets and he can't find his keys. You tell him you haven't seen them either. He calls you back later to tell you that he found them. Your officemate asks you what happened. You say:

     *Ali anahtar-lar-ın-ı kaybet-**miş**-∅ (ama şimdi bul-muş-∅).*
     Ali key-PL-3SG-ACC lose-MIS-3SG but   now   find-MIS-3SG

     '[I have indirect evidence that] Ali lost his keys (but now he found them).'

- **Lifetime effects:** Contrary to the lifetime effects observed in English (6a), the individuals in Turkish expressions with *-mIş* do not need to be alive, as in (18).

(18) **Lifetime effects context:** You visit Princeton and see Einstein's signature in the physics department guestbook. You say:

*Einstein Princeton-ı   ziyaret et-**miş**-∅.*
Einstein Princeton-ACC visit   do-MIS-3SG

'[I have indirect evidence that] Einstein visited Princeton.'

- **Universal perfect:** The state described by the verb in a Turkish "universal perfect" must be false at the utterance time, unlike in English (7). It is infelicitous to report (19) if Ali still lives in Istanbul at the utterance time, as shown by (19b).

(19) **Universal perfect context:** You have not heard from your friend Ali in a long time. You go on his Facebook page and see that he moved to Istanbul in 2010. Then, you see a newer post saying that he accepted a job in Ankara. You say:

*Ali 2010-dan beri   Istanbul-da   yaşa-**mış**-∅.*
Ali 2010-ABL since Istanbul-LOC live-MIS-3SG

   a. ✓'[I have indirect evidence that] Ali has lived in Istanbul since 2010 [but he doesn't live there anymore].'
   b. #'[I have indirect evidence that] Ali has lived in Istanbul since 2010 [and he still lives there today].'

- **Repeatability requirement:** Unlike the repeatability effects observed in English (8a), the event described by a Turkish expression including *-mIş* does not need to be repeatable.

(20) **Repeatability context:** You are discussing the Picasso exhibit at LACMA with your friend Ayşe. You are curious if your mutual friend Leyla went to see it. The Picasso exhibit is closed now; Leyla can no longer go to it. You ask:[3]

*Leyla Picasso sergi-sin-e   git-**miş**-∅   mi?*
Leyla Picasso exhibit-3SG-DAT go-MIS-3SG Q

'Did Leyla go to the Picasso exhibit?'

- **Questions about specific past times:** Unlike in English (9), *-mIş* is felicitous in questions about specific past times, as in (21).

(21) **Question about a specific past time:** Seren is a somewhat picky eater. I know that Seren went to a Japanese restaurant last night, and that you talked to her after she went there. I ask you:

*Seren suşi ye-**miş**-∅   mi?*
Seren sushi eat-MIS-3SG Q

'Did Seren eat sushi?'

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[3]In Turkish questions, the choice of evidential (*-DI* or *-mIş*) reflects the evidence that the speaker assumes the addressee has for the relevant proposition. This is termed interrogative flip (San Roque et al. 2015). (20) therefore requires that the speaker ask a question about a third party, rather than about the addressee, since the addressee presumably has direct evidence for their own actions (and therefore could not use *-mIş*). The same is true for (23).

- **Questions about the general past & out of the blue questions:** Out of the blue questions and questions about the general past both generally require the inclusion of *hiç* 'ever' to make the expression felicitous. Without *hiç*, the interpretation is that the speaker is referring to a specific time, as in (21).[4]

(22) **Question about the general past:** You are discussing food preferences with your co-workers. Your co- worker Ayşe is notoriously picky. You ask your mutual friend Leyla:

  *Ayşe hiç suşi ye-**miş**-∅   mi?*
  Ali   ever sushi eat-MIS-3SG Q

  'Has Ayşe ever eaten sushi?'

(23) **Out of the blue question context:** Your co-worker sticks their head in your office and asks:

  *Ali hiç suşi ye-**miş**-∅   mi?*
  Ali ever sushi eat-MIS-3SG Q

  'Has Ali ever eaten sushi?'

3.1.1   Recap: Turkish *-mIş* expressions

- None of the distributional diagnostics from the English data in §2.1 are observed in Turkish *-mIş* expressions. Turkish *-mIş* expressions do not show any English-type present perfect behavior.

- In universal perfect expressions like (19), *-mIş* patterns oppositely from the English present perfect: the proposition **must** be false at the utterance time.

- This contrasts with the behavior of *-mIş* in perfect of result expressions like (17), in which the proposition is optionally false at the utterance time. At present, we have no explanation as to why this is the case.

	Eng (PPF)	**Eng (SP)**	**Turkish *-mIş***
OK with past temporal adverbs	no	yes	yes
Event must be salient at UT	yes	no	no
Result must be true at UT	yes	no	no
Lifetime effects apply	yes	no	no
Universal perfect must be true at UT	yes	n/a	no (must not)
Event must be repeatable	yes	no	no
OK in questions about specific past	no	yes	yes
OK in questions about general past	yes	only w/ adv.	only w/ adv.
OK in out of the blue questions	yes	only w/ adv.	only w/ adv.

[4]We observe that English simple past tense utterances like (11b) are also improved in out of the blue questions with the inclusion of *ever*: *Did you ever eat sushi?* is better as an out of the blue question than *Did you eat sushi?*

3.2   Comparison of Tatar and English

> **Tatar "present perfect":** The Tatar verbal suffix *-GAn* is proposed to mark both indirect evidentiality and present perfect (Greed 2009, Tatevosov 2007).

- **Present perfect puzzle:** The present perfect puzzle does not apply to Tatar expressions with *-GAn*; *kiçä* 'yesterday' is grammatical in (24), contrary to the English example in (3a).

(24) **Present perfect puzzle context:** The speaker walks into an Olympic changing room the morning after a race and sees Usain Bolt's jersey in the laundry basket. She didn't witness the race, but has evidence that Usain Bolt ran yesterday. She says:

*Usain Bolt kiçä   yeger-**gän**.*
Usain Bolt yesterday run-GAN

'[I have indirect evidence that] Usain Bolt ran yesterday.'

- **Current salience requirement:** Tatar expressions with *-GAn* do not require that the event described by the verb be salient at the utterance time, unlike English (4a).

(25) **Current salience context:** You have been studying the history of art of printing. You see Gutenberg's name everywhere in the resources and you make the inference that Gutenberg invented the art of printing. You say:

*Gutenberg näşriyät sängät-e-n   uyl-ap   çığar-**ğan**.*
Gutenberg print   art-3SG.POSS-ACC think-YP invent-GAN

'[I have indirect evidence that] Gutenberg invented the art of printing.'

- **Perfect of result:** The result state of perfect of result expressions do not need to be true at the utterance time in Tatar, unlike in English (5a).

(26) **Perfect of result context:** Your husband Ali calls you and tells you that he can't find his keys. Later, he calls you back and says he found his keys. Your officemate asks what happened. You say:

*Ali açqıç-ın yuğalt-**qan** (läkin beraz-dan   soñ tap-**qan**).*
Ali key-ACC lose-GAN   but   short.time-ABL after find-GAN

'[I have indirect evidence that] Ali lost his keys (but after a little while he found them).'

- **Lifetime effects:** Contrary to the lifetime effects observed in English (6a), the individuals in Tatar expressions with *-GAn* do not need to be alive at the utterance time, as in (27).

(27) **Lifetime effects context:** You visit Princeton and see Einstein's signature in the physics department guestbook. You say:

*Enştein Prinston-ğa   bar-**ğan**.*
Einstein Princeton-DAT go-GAN

'[I have indirect evidence that] Einstein went to Princeton.'

- **Universal perfect:** Tatar patterns like Turkish, and unlike English, in that the state described by a Tatar "universal perfect" must be false at the utterance time. It is infelicitous to report (28) if Guzel still lives in Istanbul at the utterance time, as shown in (28b).

(28) **Universal perfect context:** You have not heard from your friend Guzel in a long time. You go on her Facebook page and see that he moved to Los Angeles in 2010. Then, you see a newer post saying that she accepted a job in Kazan. You say:

*Güzäl Los Angeles-ta   ike men   unöçençe yel-dan birle yäşä-**gän**.*
Guzel Los Angeles-LOC two thousand thirteenth year-ABL since live-GAN

    a. ✓ '[I have indirect evidence that] Guzel lived in Los Angeles since 2010 [but she doesn't live there anymore].'

    b. # '[I have indirect evidence that] Guzel lived in Los Angeles since 2010 [and she still lives there today].'

- **Repeatability requirement:** Unlike the repeatability effects observed in English (8a), the event described by a Tatar expression including *-GAn* does not need to be repeatable, as in (29).

(29) **Repeatability context:** You are discussing the Monet exhibit at LACMA. You are curious if our mutual friend Travis went to see it. The Monet exhibit is closed now; Travis can no longer go to it. You ask:

*Travis Monet kürgäzmä-se-nä   bar-**ğan** mı?*
Travis Monet exhibit-3SG.POSS-DAT go-GAN Q

'Did Travis go to the Monet exhibit?'

- **Questions about specific past times:** Unlike the English present perfect in (9), Tatar *-GAn* is felicitous in questions about specific past times, as in (30).

(30) **Question about a specific past time:** Aigel is a somewhat picky eater. I know that she went to a Japanese restaurant last night, and that you talked to her after she went there. I ask you:

*Aygöl suşi   aşa-**ğan** mı?*
Aigel sushi eat-GAN Q

'Did Aigel eat sushi?'

- **Questions about the general past & out of the blue questions:** Tatar expressions with *-GAn*, like (plain) Turkish expressions with *-mIş,* cannot occur in questions about the general past and out of the blue questions.

- Instead, Tatar speakers must use an expression containing a nominalized form of the verb and the existential *bar* 'EXIST.'[5] We show examples of this expression in (32b) and (33b).

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[5]This expression seems to pattern pragmatically more like the English present perfect data in §2.1. For instance, like the English data in (8a), the event described by a Tatar expression including *bar* + a verbal nominalization needs to be repeatable.

(31) **Repeatability context:** You are discussing the Monet exhibit at LACMA. You are curious if our mutual friend Travis went to see it. The Monet exhibit is closed now; Travis can no longer go to it. You ask:
*#Travis-nın Monet kürgäzmä-se-nä   bar-**ğan**-ı   bar   mı?*
Travis-GEN Monet exhibit-3SG.POSS-DAT go-PST.INDEF-ACC EXIST Q?
'Has Travis been to the Monet exhibit?'

(32) **Question about the general past:** You are discussing food preferences with your co-workers. Your co-worker Aigel is notoriously picky. You ask your mutual friend Leyla:

a. *# Aygöl suşi   aşa-**ğan** mı?*
    Aigel sushi eat-GAN Q
    'Did Aigel eat sushi?'

b. ✓ *Aygöl-nen suşi aşa-ğan-ı   bar   mı?*
    Aigel-GEN suşi eat-GAN-3SG.POSS EXIST Q
    'Has Aigel ever eaten sushi?'
    Literally: 'Does Aigel's eating sushi exist?'

(33) **Out of the blue question:** Your co-worker sticks their head in your office and asks:

a. *# Aygöl sushi aşa-**ğan** mı?*
    Aigel sushi eat-GAN Q
    'Did Aigel eat sushi?'

b. ✓ *Aygöl-nen suşi   aşa-ğan-ı   bar   mı?*
    Aigel-GEN sushi eat-GAN-3SG.POSS EXIST Q
    'Has Aigel ever eaten sushi?'
    Literally: 'Does Aigel's eating sushi exist?'

3.2.1 Recap: Tatar *-GAn* expressions

- Tatar *-GAn* patterns very similar to Turkish *-mIş* with respect to our questionnaire.

- Tatar diverges from only Turkish with respect to out of the blue questions and questions about the general past. Tatar speakers must use a verbal nominalization + *bar* 'EXIST' in these contexts.

- None of the distributional diagnostics from the English data in §2.1 are observed in Tatar *-GAn* expressions. We find no evidence supporting a proposal to treat Tatar *-GAn* expressions as encoding English-type present perfect.

	Eng (PPF)	Eng (SP)	Tatar *-GAn*
OK with past temporal adverbs	no	yes	yes
Event must be salient at UT	yes	no	no
Result must be true at UT	yes	no	no
Lifetime effects apply	yes	no	no
Universal perfect must be true at UT	yes	n/a	no (must not)
Event must be repeatable	yes	no	no
OK in questions about specific past	no	yes	yes
OK in questions about general past	yes	only w/ adv.	only w/ EXIST
OK in out of the blue questions	yes	only w/ adv.	only w/ EXIST

3.3   Comparison of Bulgarian and English

> **Bulgarian "present perfect":** In Bulgarian, present perfect is assumed to be contributed by a combination of a present tense auxiliary and main verb past participal (Izvorski 1997). We will refer to this construction as *be* + PP.

- **Present perfect puzzle:** The present perfect puzzle does not apply to Bulgarian *be* + PP expressions; *vchera* 'yesterday' is grammatical in (34), contrary to the English example in (3a).

(34)   **Present perfect puzzle context:** The speaker walks into an Olympic changing room the morning after a race and sees Usain Bolt's jersey in the laundry basket. She didn't witness the race, but has evidence that Usain Bolt ran yesterday. She says:

*Usain Bolt **e**   **byagal**   vchera.*
Usain Bolt be.PRES.3SG run.PP.MASC.SG yesterday

'[I have indirect evidence that] Usain Bolt ran yesterday.'

- **Current salience requirement:** Bulgarian *be* + PP expressions do not require that the event described by the verb be salient at the utterance time, unlike English (4a).

(35)   **Current salience context:** You have been studying the history of art of printing. You see Gutenberg's name everywhere in the resources and you make the inference that Gutenberg invented the art of printing. You say:

*Gutenberg **e**   **izobretil**   pechatnata   presa.*
Gutenberg be.PRES.3SG invent.PP.MASC.SG printing.DEF.FEM.SG press.FEM.SG

'[I have indirect evidence that] Gutenberg invented the printing press.'

- **Perfect of result:** The result state of perfect of result expressions needs to be true at the utterance time in Bulgarian *be* + PP expressions, similar to English (5a).

(36)   **Perfect of result context:** Your husband Ali calls you and tells you that he can't find his keys. Later, he calls you back and says he found his keys. Your officemate asks what happened. You say:

*Ali si   **e**   **zagubil**   klyuchovete, (#no sega gi   **e***
Ali REFL.POSS be.PRES.3SG lose.PP.MASC.SG key.DEF.PL   but   now 3PL.ACC be.PRES.3SG
nameril).
find.PP.MASC.SG

'[I have indirect evidence that] Ali lost his keys (#but now he found them).'

- **Lifetime effects:** Contrary to the lifetime effects observed in English (6a), the individuals in Bulgarian *be* + PP expressions do not need to be alive at the utterance time, as in (37).

(37)   **Lifetime effects context:** You visit Princeton and see Einstein's signature in the physics department guestbook. You say:

*Einstein **e**   **posetil**   Princeton.*
Einstein be.PRES.3SG visit.PP.MASC.SG Princeton

'[I have indirect evidence that] Einstein visited Princeton.'

- **Universal perfect:** The state described by the verb must be false at the utterance time in Bulgarian.

(38)　**Universal perfect context:** You have not heard from your friend Ali in a long time. You go on his Facebook page and see that he moved to Istanbul in 2010. Then, you see a newer post saying that he accepted a job in Ankara. You say:

*Ali **e**　　　　**zhivyal**　　　　v　Istanbul ot　2010 (no veche　ne　zhivee*
Ali be.PRES.3SG live.PP.3SG.MASC LOC Istanbul from 2010 but already not live.PRES.3SG
tam).
there

'[I have indirect evidence that] Ali lived in Istanbul since 2010 (but he doesn't live there any more).'

- **Repeatability effects:** Unlike the repeatability effects observed in English (8a), the event described by a Bulgarian *be* + PP expression does not need to be repeatable.

(39)　**Repeatability context:** You are discussing the Picasso exhibit at LACMA. You are curious if our mutual friend Leyla went to see it. The Picasso exhibit is closed now; Leyla can no longer go to it. You ask:

*Leyla **otishla**　　　li e　　　　na izlozhbata　　na Picasso?*
Leyla go.PP.FEM.SG Q be.PRES.3SG at exhibition.DEF at Picasso

'Did Leyla go to the Picasso exhibit?'

- **Questions about specific past times:** Like the English present perfect, Bulgarian *be* + PP expressions are infelicitous if the speaker is asking about a specific past time.

(40)　**Question about specific past time:** Our mutual friend Seren is a somewhat picky eater. I know that Seren went to a Japanese restaurant last night, and that you talked to her after she went there. I ask you:

　　a.　✓ *Seren yade　　　li sushi?*
　　　　Seren eat.PST.3SG Q sushi
　　　　'Did Seren eat sushi?'

　　b.　# *Seren **yala**　　　li e　　　　sushi?*
　　　　Seren eat.PP.FEM.SG Q be.PRES.3SG sushi

- **Questions about the general past & out of the blue questions:** Like English, and unlike Turkish and Tatar, Bulgarian *be* + PP expressions are felicitous in questions about the general past and in out of the blue questions.

(41)　**Question about the general past:** You are discussing food preferences with your co-workers. Your co-worker Ayse is notoriously picky. You ask your mutual friend Leyla:

*Ayse **yala**　　　li e　　　　(nyakoga) sushi?*
Ayse eat.PP.FEM.SG Q be.PRES.3SG ever　　　sushi

'Has Ayse (ever) eaten sushi?'

(42)　**Out of the blue question:** Your co-worker sticks their head in your office and asks out of the blue:

*Ali **yal**　　　li e　　　　sushi?*
Ali eat.PP.MASC.SG Q be.PRES.3SG sushi

'Has Ali eaten sushi?'

3.3.1   Recap: Bulgarian *be* + PP expressions

- Bulgarian *be* + PP expressions pattern similarly to Turkish *-mIş* and Tatar *-GAn* expressions, with the exception of their use in perfect of result and in questions.

    – Similar to English, the result state of perfect of result expressions must be true in Bulgarian.

    – Bulgarian is similar to English in that *be* + PP expressions are felicitous in out of the blue questions and questions about the general past.

    – The availability of *be* + PP in out of the blue questions and questions about the general past differentiates Bulgarian from Turkish and Tatar.

- The majority of the distributional diagnostics from the English data in §2.1 are not observed in Bulgarian *be* + PP expressions. The evidence supporting a proposal to treat Bulgarian *be* + PP expressions as encoding English-type present perfect is weak.

	Eng (PPF)	Eng (SP)	Bulgarian *be* + PP
OK with past temporal adverbs	no	yes	yes
Event must be salient at UT	yes	no	no
Result must be true at UT	yes	no	yes
Lifetime effects apply	yes	no	no
Universal perfect must be true at UT	yes	n/a	no (must not)
Event must be repeatable	yes	no	no
OK in questions about specific past	no	yes	no
OK in questions about general past	yes	only w/ adv.	yes
OK in out of the blue questions	yes	only w/ adv.	yes

3.4   Comparison of German and English

> **German "present perfect":** In German, the present perfect is assumed to be contributed by a combination of a present tense auxiliary and main verb past participal (Pancheva and von Stechow 2004, Musan 2001). We will refer to this construction as *have* + PP.

- **Present perfect puzzle:** The present perfect puzzle does not apply in German; *gestern* 'yesterday' is grammatical in (43), contrary to the English example in (3a).

(43)   **Present perfect puzzle context:** You watched the Olympics yesterday and saw Usain Bolt run a race. Today you're discussing the race that you saw yesterday.[6]

   *Usain Bolt **ist** gestern   **gelaufen**.*
   Usain Bolt is   yesterday run.PP

   'Usain Bolt ran yesterday.'

- **Current salience requirement:** German *have* + PP expressions do not require that the event described by the verb be salient at the utterance time, unlike English (4a).

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[6]In German expressions involving verbs of motion, the auxiliary is *sein* 'to be' rather than *haben* 'to have.'

(44) **Current salience context:** You have been studying the history of art of printing. You see Gutenberg's name everywhere in the resources and you make the inference that Gutenberg discovered the art of printing. You say:

Gutenberg **hat** *die Kunst des   Druckens* **erfunden**.
Gutenberg has the art   of.the printing discover.PP

'Gutenburg discovered the art of printing.'

- **Perfect of result:** The result state of perfect of result expressions do not need to be true at the utterance time in German *have* + PP expressions, unlike in English (5a).

(45) **Perfect of result context:** Your husband Ryan tells you that he can't find his keys. You haven't seen them either. Later, however, then, he checks a coat pocket he hadn't looked in before and finds them.

Ryan **hat** *seine Schlüssel* **verloren** *(aber jetzt* **hat** *er sie   gefunden)*.
Ryan has his   keys   lost.PP   but   now has he them find.PP

'Ryan lost his keys (but now he found them).'

- **Lifetime effects:** Contrary to the lifetime effects observed in English (6a), the individuals in German *have* + PP expressions do not need to be alive at the utterance time, as in (46).

(46) **Lifetime effects context:** You visit Princeton and see Einstein's signature in the physics department guestbook. You say:

Einstein **hat** *Princeton* **besucht**.
Einstein has Princeton visit.PP

'Einstein visited Princeton.'

- **Universal perfect:** Like Turkish, Tatar, and Bulgarian, and unlike English, the state described by a German "universal perfect" should be false at the utterance time. It is infelicitous to report (48) if Sarah still lives in Los Angeles at the utterance time, as shown in (47).[7]

(48) **Universal perfect context:** You are telling someone about your friend Sarah, who moved to Los Angeles in 2012.

Sarah **hat** *seit   zwei tausend   zwölf   in Los Angeles* **gelebt**.
Sarah has since two thousand twelve in Los Angeles live.PP

   a. ✓ 'Sarah lived in Los Angeles since 2012 [and she doesn't live there anymore].'
   b. # 'Sarah lived in Los Angeles since 2012 [and she still lives there today].'

- **Repeatability requirement:** Unlike the repeatability effects observed in English (8a), the event described by a German *have* + PP expression does not need to be repeatable, as in (49).

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[7]To express that Sarah still lives in LA at the utterance time, German speakers must use a present tense verb:

(47) *Sarah* **lebt**   *seit zwei tausend   zwölf   in Los Angeles*.
Sarah live.PRES since two thousand twelve in Los Angeles
'Sarah lives in Los Angeles since 2012 [and she still lives there today].'

(49) **Repeatability context:** You are discussing the Picasso exhibit at LACMA with your friend
      John. You are curious if he went to see it. The Picasso exhibit is closed now; he can no
      longer go to it. You ask:

      ***Hast** du   die Picasso Austellung **gesehen**?*
      have you the Picasso exhibit   see.PP

      'Did you see the Picasso exhibit?'

- **Questions about specific past times:** Unlike the English present perfect (9), German *have*
  + PP expressions are felicitous in questions about specific past times, as in (50).

(50) **Question about specific past time:** Our mutual friend John is a somewhat picky eater. I
      know that you and John went to a Japanese restaurant last night. I ask you:

      ***Hat**   John sushi **gegessen**?*
      have.3SG John sushi eat.PP

      'Did John eat sushi?'

- **Questions about the general past & out of the blue questions:** Similar to Turkish (22)
  and (23) and unlike English (10a) and (11a), questions about the general past and out of the
  blue questions in German also require the inclusion of an adverb. The expressions in (51) &
  (52) are only felicitous in the given contexts with *schon mal* 'already'.

(51) **Question about the general past:** You are discussing food preferences with your co-
      workers. Your co-worker Sarah is notoriously picky. You ask your mutual friend John:

      ***Hat**   Sarah schon   mal   sushi **gegessen**?*
      have.3SG Sarah already one.time sushi eat.PP

      'Has Sarah already eaten sushi?'

(52) **Out of the blue question:** Your co-worker sticks their head in your office and asks out of
      the blue:

      ***Hat**   Sarah schon   mal   sushi **gegessen**?*
      have.3SG Sarah already one.time sushi eat.PP

      'Has Sarah already eaten sushi?'

3.4.1 Recap: German *have* + PP expressions

- German *have* + PP expressions pattern identically to Turkish *-mIş* expressions.

- None of the distributional diagnostics from the English data in §2.1 are observed in German
  have + PP expressions. We find no evidence supporting a proposal to treat German *have* +
  PP expressions as encoding English-type present perfect.

- However, German patterns overall quite differently from English in that the German simple
  past tense is typically used only in written speech or in very formal contexts. German *have* +
  PP expressions are the primary strategy used to talk about past times.

	Eng (PPF)	Eng (SP)	German *have* + PP
OK with past temporal adverbs	no	yes	yes
Event must be salient at UT	yes	no	no
Result must be true at UT	yes	no	no
Lifetime effects apply	yes	no	no
Universal perfect must be true at UT	yes	n/a	no (must not)
Event must be repeatable	yes	no	no
OK in question about specific past	no	yes	yes
OK in question about general past	yes	only w/ adv.	only w/ adv.
OK in out of the blue question	yes	only w/ adv.	only w/ adv.

4   Conclusion

- See the following page for a table summarizing our data.

Main observations:

- Questions are the main locus of variation between the four languages in our survey.

  - Turkish and German require an additional adverb in out of the blue questions and in questions about the general past; Tatar requires an alternate construction in these contexts.

  - Only the Bulgarian expression can occur in out of the blue questions and in questions about the general past; however, it cannot occur in questions about specific past times.

- Interestingly, all of the languages in our survey require that the state described by a verb in a "universal perfect" expression be false at the utterance time.

Evaluation against existing theories of the (English) present perfect:

- **"Extended now" (XN) theories (McCoard 1978, Dowty 1979, among others):** XN theories fail to account for our observed data for a number of reasons. These include (i) the expressions' ability to combine with temporal adverbs denoting far past times; (ii) the lack of a salience requirement; and (iii) the lack of a requirement that result states hold at the utterance time.

- **"Definite times" constraint theory (Klein 1992):** A constraint on having more than one "definite time" relative to the utterance time is contradicted by the ability of the surveyed expressions to (i) combine with temporal adverbs denoting specific past times; and (ii) occur in questions about specific past times.

- **Modal theory (Katz 2003):** Katz (2003)'s modal theory of the present perfect cannot account for the ability of the surveyed expressions to occur in non-repeatable contexts (i.e., contexts in which it is impossible for the event to re-occur).

- <u>Bottom line:</u> Current theories of the (English) present perfect cannot account for the observed Turkish/Tatar/Bulgarian/German data.

Why not just call these simple pasts?

- As shown in the following table, the expressions in these languages pattern more like the English simple past than the English present perfect.

- At present, we refrain from giving an explicit semantics for these morphemes. Our main claim is that their distribution cannot be accounted for by current theories of the (English) present perfect.

- All of the languages in our survey also have other expressions marking past times (e.g. Turkish *-DI*, Tatar *-DI*). We are therefore hesitant to propose a simple past tense analysis for the data here without considering the pragmatic implications for the languages' tense systems as a whole.

	Eng (PPF)	Eng (SP)	Turkish	Tatar	Bulgarian	German
OK with past temporal adverbs	no	yes	yes	yes	yes	yes
Event must be salient at UT	yes	no	no	no	no	no
Result must be true at UT	yes	no	no	no	yes	no
Lifetime effects apply	yes	no	no	no	no	no
Universal perfect must be true at UT	yes	n/a	no (must not)	no (must not)	no (must not)	no (must not)
Event must be repeatable	yes	no	no	no	no	no
OK in questions about specific past	no	yes	yes	yes	no	yes
OK in questions about general past	yes	only w/ adv.	only w/ adv	only w/ EXIST	yes	only w/ adv.
OK in out of the blue questions	yes	only w/ adv.	only w/ adv.	only w/ EXIST	yes	only w/ adv.

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Appendix: Perfect versus perfective

- A note on terminology: **Perfect** and **perfective** are two different things.

  - **Perfective:** "Viewpoint aspect" that relates the runtime of an event to a time (following denotation modified from Bhatt and Pancheva 2005).

    (53) $[\![\text{PERFECTIVE}]\!] = \lambda p_{<v,t>}\lambda t_{<i>}. \exists e_{<v>}[\tau(e) \subseteq t \text{ \& } p(e) = 1]$
    e = event (of type v)
    $\tau(e)$ = the runtime of the event
    t = reference time; the time at which the proposition is taken to be true

    (54)   Leroy read the book in an hour.

  - **Perfect:** Relates times; the focus of this presentation.

    * Time terminology adapted from Reichenbach (1947):
      ET = event time
      RT = reference time
      ST = speaking time
      Present perfect: ET < ST,RT

    (55)   **Present perfect:** Leroy **has read** the book.
    (56)   **Past perfect:** Leroy **had read** the book by the time class finished.
    (57)   **Future perfect:** Leroy **will have read** the book by the time class finishes.