A Comparative Note on the Bangla Particle to
and the German Particle doch

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ABSTRACT. The Bangla discourse particle –to and the German discourse particle doch share a number of syntactic and semantic properties. Their phonetic similarity suggests a remote historical relation. While the latter part will only be mentioned and must remain for the specialists in Indo-European reconstruction, the present short study will highlight points of convergence between the two languages with respect to these particles along a series of concrete tests. The convergence appears to be more than accidental.

KEY WORDS. Discourse particles, Indo-Germanic, Indo-Aryan, interrogativity, word order, functional heads.

In this note, I would like to draw the attention to a number of parallels that can be found between the Bangla particle to and the German particle doch. Although appearing in very distant Indo-European languages, the parallels are surprising. Both elements have their roots in Indo-European (IE). Perhaps they have a common ancestor, perhaps not. But even if not, the comparison could still prove to be interesting for reasons of their function in grammar and discourse.

After a note on their respective etymologies in 1. I will begin in 2. with a common dichotomy of autonomy and boundedness, move to their semantic core in 3., then in 4. to common properties with regard to information structure, in 5. to their common restrictions in sentence mood, and in 6. to a common core in their distribution in complex clauses. Conclusions appear in 7.

1. Etymology

The immediate history of German doch is well documented. The modern conjunctive adverb doch relates immediately to Old High German thoh, thō, Middle High German doch, Old Saxon thō, Dutch toch, Old English þēah, English though, Old Norse þō, and Gothic þauh. Its first part is said to be related to Old Indic tū, tū, which had an adversative meaning and has according to certain researchers developed out of the IE 2nd person singular *tū-; alternatively, a development out of the pronominal stem *te-, *to- is considered, see Kluge (2011: 208) and Lühr (1976: 77-79). The second part relates to the Gothic strengthening particle -uh, -h ("and"), see also Latin que, from Indo-European *kue-.

It is less clear where exactly to in modern Indo-Aryan (e.g. in Bangla and Hindi) comes from. According to Sen (1971), it comes from tad-u, which is a ‘tadbhava’ and originates from
the Sanskrit *tad* followed by *u, tad* being the third person neuter pronoun while *u* is a widely used particle. Montaut (2016) locates the etymology of Hindi *to* in an ancient pronominal basis (*Sanskrit ta-*) referring to third person (“that”, “he”), which is still used as such in certain Indo-Aryan languages such as Marathi (*to* “he”). According to Dunkel (2014: vol II, 776f.), the oldest function of IE * tô* was prosecutive, sequential, continuvative; the adversative form * tô* should be considered to be an ancient Aryan innovation.

2. Free versus clitic usage

Whatever the etymological status of Bangla *to* is, it is interesting to see that both interpretations that Dunkel refers to can be found in the modern language. The non-adversative, sequential interpretation can be found in Bangla examples in which *to* starts the sentence.

(1) *to* tumi dilli jabe na bole Thik korecho!
   TO you Delhi go.fut.2 not COMP right make.pst.2
   “Then you have decided that you will not be going Delhi!”

A related usage appears also in final position as in (2) or as a stand-alone in B’s response in (3).

(2) ritar dilipke bhalo lage na, *to?*
   Rita.gen Dilip.obj like.3 not TO?
   “Rita doesn’t like Dilip, so what?”

(3) A: baire khub briSTī hocche
   outside much rain occur.3
   “It’s heavily raining outside”

   B: *to?*
   TO
   “So what?”

The same holds for Hindi, as the following examples from Montaut (2016) show:

(4) a. *to* kyâ huā?
   TO what be.aor
   "And then, what happened?"

   b. *to?*
   TO
   "And then?"

In these cases, *to* should not be confused with an interrogative element as the translation may suggest. It simply means “(and) then”. The interrogative impact follows only in a second step, namely by rising intonation and the challenge of the preceding proposition. “Rita doesn’t like
Dilip, so what?” The conversational implicature of this sequencing is question-like (“So what?”, "Who cares?” etc.) but to as such has no interrogative impact.

In all these cases, to is a free standing temporal adverb. Things change when we consider the usage of to as an enclitic element, or what Dasgupta (1984; 1987) calls an "anchor".²

(5) a. dilip to kal aSbe
   Dilip TO tomorrow come.fut.3
   "Dilip will come tomorrow, won't he?"

b. Dilip kal to aSbe

c. Dilip kal aSbe to

We see a variety of options. The common denominator is that to as a weak clitic-like anchor needs a phonological host to its immediate left which it can lean on. As Dasgupta (1987) argues, to in its incarnation as an anchor can never occur in initial position. There is good evidence that the material to the left of to must be a major syntactic constituent. In (5a) it is the subject, in (5b) the adverb, and in (5c) the entire clause.

The clause linker to and the clitic to can obviously not be identified semantically. In its free appearance, to is simply a temporal adverb meaning "then". As a clitic, it communicates that the speaker takes the hearer to believe that p is true and conveys the additional expectation that the hearer should acknowledge that p is true.³ Thus, -to triggers a reading according to which the addressee is reminded that p holds. Almost certainly, the clitic to lacks interrogativity in the same way that the clause linker to does. Emphasis of the truth of p gives rise to potential adversativity.

Adversativity plays a role in German doch. Maybe the clearest case is its use as an answering particle. A negative statement like (6) is not corrected with nein ("no") but with doch.

(6) A: Du bist heute nicht in die Uni gegangen.
   you are today not in the university gone
   "You didn't go to university today"

B. Doch / *Nein
   DOCH NO
   "No, I DID (go to university)"

Doch signals rejection of the previous proposition. It comes across as adversative because it is in fact the focalization of the truth of the proposition that has been denied in a previous speech act.⁴ Something similar is found when doch appears as a clause linker.

(7) Klaus ist intelligent, doch er ist unmotiviert
    Klaus is intelligent DOCH he is unmotivated
    "Klaus is intelligent {but/however} he is unmotivated"
The second clause does not challenge the truth of the former as such but challenges one aspect of it, here the positive properties of Klaus. One can be both intelligent and unmotivated, but the latter property may hamper one's general success. Various authors have suggested that *doch* \( p \) corrects a salient \( q \) that entails \( \neg p \); see Abraham (1991), Doherty (1985), Grosz (2010), Karagjosova (2004), Ormelius-Sandblom (1997) and others.

Interestingly, we find in German *doch* also in a role that resembles –*to* in its function as an anchor. It is a central property of German discourse particles that they have a clause-medial fixed position from which they cannot be moved to the front or to the right of the clause.\(^5\) *Doch* is such a particle. Imagine the following discourse:

\[(8)\] A: Ich fahre morgen ans Meer.  
I go tomorrow to the sea  
"I'll go to the sea tomorrow"

B. Aber du musst doch arbeiten!  
but you must DOCH work  
"But you must go to work!"

Here B reminds A of something that A is supposed to know, namely that he has to go to work and therefore can most likely not take a day off at the sea. One can see that an adversative clause linker, namely *aber* ("but") introduces B's utterance. Thus, *doch* cannot be identified with *aber*. It must by all means make an additional semantic contribution. It functions as a reminder that \( p (=B \text{ must go to work}) \) is true and should be known to B. This is compatible with adversativity as already expressed by *aber*, but it adds a presupposition about the assumed mental state of the addressee. Interestingly, in this function, *doch* must remain in a fixed pre-VP position, and it must find a focused element in its scope, which in (8) is *arbeiten*. The alternative in (9a) lacks the "reminder"-meaning of the discourse particle, and (9b) is downright ungrammatical.

\[(9)\] a. Doch du musst arbeiten!  
b. *Aber du musst arbeiten doch!*

In its role as a discourse particle, *doch* is a functional element on a par with negation and other grammatical elements. Although it is not a clitic like Bangla -*to*, it is not a phrasal element either. Various researchers have argued that it is a functional head.\(^6\)

### 3. Semantics

As already indicated in section 2, -*to* and *doch* are semantically similar. We can distinguish the use as a clause linker and the use as a discourse particle. Obviously both hang together as is especially clear in German *doch.*
3.1 Clause linker

As a clause linker, the function of \textit{doch} is like the logical connective $\land$, enriched with the property that the simultaneous truth of the propositions $p$ and $q$ which are linked with $\land$ is unexpected, unusual etc. This is the source of their adverstative semantics. In Bangla, one would use the connective \textit{kintu} but not \textit{to}.

\begin{equation}
\text{dilip iSkule jay \{kintu/*to\} Sipra baRite thake}
\end{equation}

Dilip school.loc go.3 but/then Sipra home.loc stay.3

"Dilip goes to school but Sipra stays at home"

3.2 Discourse particle

In their usage as discourse particles, \textit{doch} and \textit{-to} are quite similar. The clause linker meaning of \textit{doch} reappears in its use as a discourse particle. Karagjosova (2004:183) suggests that in \textit{doch}(p) the speaker's belief is that $p$ is explicit but inactive common knowledge. To the extent that $p$ is situationally relevant, this amounts to the implicature that the speaker has reason to believe that the hearer has 'forgotten' $p$ and needs to be 'reminded' of it.

The Bangla clitic particle \textit{-to} has much in common with this characterization. Again, the speaker assumes that $p$ is known to the hearer, and that there is reason to believe that $p$ is not in the hearer's focus of attention; \textit{-to} is then actually a signal to the hearer to acknowledge $p$ and react in a way that is consistent with subscribing to the truth of $p$. This must be the reason why sentences with \textit{-to} are often interpreted as quasi interrogatives. The addressee is expected to show that he or she acknowledges the truth of $p$. (5c) - \textit{dilip kal aSbe to} – is then interpreted in such a way that the speaker claims that $p$ holds ($p = \text{Dilip will come tomorrow}$), that he assumes that the hearer already knows that $p$ but that it is worthwhile to ask him to acknowledge that the truth of $p$ should still be assumed. Of course, this brings the speech act quite close to the interrogative speech act that involves the enclitic interrogative particle \textit{ki}. (11a) shows an explicit polar question; (11b) shows that the particle \textit{ki} may be missing. The latter is possible if the question is a main clause with rising intonation.

\begin{equation}
\text{(11) a. dilip kal aSbe ki?}
\end{equation}

dilip tomorrow come.fut.3 Q

"Will Dilip come tomorrow?"

b. dilip kal aSbe? [with rising intonation]
4. Information structure

When -to is used as a discourse particle, it can be found in different places as has been shown in (5). In (5a), dilip to kal aSbe, the speaker wants the hearer to confirm that it is Dilip who will come tomorrow. In (5b), dilip kal to aSbe, the speaker wants the hearer to confirm that it is tomorrow that Dilip will come. The most straightforward syntactic solution says that -to is a functional head. Functional heads do not float around in the clause. They hold a fixed position in the grid of other such positions in clause structure. Functional heads may give rise to a specifier position. Constituents which match the respective head in feature structure can move to its specifier position; –to can attract elements if they qualify a) as constituents in Bangla, and b) are drawn from a set of semantic competitors, say, Dilip in comparison with Hiren or Projit or Mukul, or tomorrow in comparison with next week or next month or next year. (5c) would then be the neutral form in which the entire proposition has been moved to the specifier of -to. In this case, the speaker assumes that p is common ground between himself and the hearer, and that it is worth reminding the hearer of p.⁹ We see that, due to its clitic nature, -to is able to express different pragmatically relevant focalizations.

The German particle doch seems to be a functional head, but it is clearly not a clitic; following Diesing (1992) and following work, our assumptions is that doch is merged in a pre-VP position, and that VP-internal constituents may move out of the scope of doch.¹⁰

(12) a. Damals hat doch [dein Bruder] [dem Professor] [seine Dissertation] gezeigt.
   shown
   "In those days your brother has shown his dissertation to the professor, didn't he?"
   c. Damals hat [dein Bruder] [dem Professor] doch __ __ seine Dissertation gezeigt.
   d. Damals hat [dein Bruder] [dem Professor] [seine Dissertation] doch __ __ __ gezeigt.

Given that VP is the natural place for focal information, and that German allows reordering of arguments ("scrambling"), different options emerge as to which constituent is highlighted by doch. In (12a) it is the entire proposition SHOW(x,y,z). Here the speaker asks the hearer for confirmation that this proposition is true. Once the subject has been scrambled out of VP, as in (12b), the proposition remains what it is but confirmation is asked for showing the professor his dissertation; the subject is outside the focus domain. In (12d) we see that doch can scope over a VP all of whose arguments have been evacuated; only the verb remains. Here the speaker asks for confirmation about the predicate "show" in comparison with competitors such as "send" or "take-away" etc. We see that despite their syntactic differences, -to and doch achieve very similar pragmatic effects. While -to attracts focal elements to its left, doch uses scrambling in order to narrow down the domain in which it associates with a focal constituent.
5. Mood

Given what we have seen so far, it may not be too surprising to see that Bangla -to and German doch attend to the same core restrictions on sentence mood. Both appear in declarative and imperative clauses, and they are strictly impossible in questions. Consider imperatives.

(13) a. edike eSo to this.direction come.2 TO “Please come here!”

b. Komm doch her!
come.2 DOCH toward.the.speaker “Please come to me!”

In both cases, the use of the particle turns the imperative into a friendly invitation. The semantics is not as straightforward as in declaratives. Nevertheless, it may be possible to argue that the particle's adversative potential adds to the speech act in such a way that the speaker invites the hearer to make the underlying proposition true, and that he/she should do so in spite of reasons that may suggest otherwise.

Karagjosova (2004:169), who offers a formal speech-act theoretic account of doch, speaks of a "contrast between desire and reality". The speaker's positive attitude seems to be the result of an enhanced effort to invite the addressee to act in the sense of making the underlying proposition true.

To the extent that non-finite fragments of speech exist and are interpreted as imperatives, both Bangla and German show that their respective particle cannot be used in such constructions. For German see Gärtner (2017)

(14) a. matha uMcu!
head up "Keep your head up!”

b. *matha-to uMcu!

c. *matha uMcu-to!

(15) a. Kopf hoch!
head up "Keep your head up!”

b. *Kopf doch hoch!
(16) a. Alles aussteigen!
all out.step
"Get off (the vehicle)!"

b. *Alles doch aussteigen!

Obviously, fragmentary imperatives of this sort lack functional vocabulary; if in their usage as discourse particle both Bangla -*to and German *doch are proper part of the respective language's functional vocabulary, these facts follow straightforwardly.

Interrogative sentences exclude -*to*doch in both languages.

(17) Polar question
a. tui ki aSbi? / tui aSbi ki?
you Q come.2 / you come.2 Q
"Will you come?"

b. *tui ki aSbi to? / *tui aSbi to ki? / *tui aSbi ki to?

(18) Constituent question
a. tui kObe aSbi?
you when come.2
"When will you come?"

b. *tui-to kObe aSbi? / *tui kObe aSbi-to?

(19) Polar question
a. Wirst du kommen?
will.2 you come
"Will you come?"

b. *Wirst du doch kommen?

(20) Constituent question
a. Wann kommst du?
when come.2 you
"When will you come?"

b. *Wann kommst du doch?

Given that both particles have roughly the same semantic function, the ban in interrogatives is expected. Since the speaker desires information from the hearer, the true answer cannot be
common ground between the interlocutors. As a consequence, the speaker cannot ask the hearer for confirmation of the underlying proposition.¹²

Let me finally return to the question whether the Bangla discourse particle -to, which we have seen is incompatible with interrogative mood, may itself be a question particle. As such –to would be a competitor of –ki. Intuitions appear to be a bit unreliable. As I said before, –to sentences are often pronounced with the rising intonation that is typical for questions. Without doubt, -to sentences can also be "answered" by acknowledging or denying that p holds. Therefore, it is advisable to employ more formal testing. Such formal testing is provided by the use of negative polarity items (NPIs). We know that some NPIs are not only licensed by negation but also by interrogativity. As seen in (21), one such NPI is Bangla ekTu-o (little-even).

(21) dilip ki ekTu-o Sahajjo koreche?
   Dilip KI little-even help do.past.3
   “Did Dilip help at all?”

The question is whether the use of –to provides a relevant licenser as well. If –to is equivalent to –ki, it should. The result of my little research revealed that examples such as (22) are deviant.¹³

(22) *dilip to ekTu-o Sahajjo koreche?
   Dilip TO little-even help do.past.3

In German questions, one can use the NPI überhaupt ("at all") among others as seen in (23a); non-inversion (alias failure of movement to C) as in (23b) leaves the NPI in limbo.

(23) a. Hast du überhaupt das Licht ausgeschaltet?
   have you at.all the light off.switched
   "Have you switched off the light at all?"

   b. *Du hast überhaupt das Licht ausgeschaltet
      you have at.all the light off.switched

When we consider the particle doch, one could argue that it turns a declarative sentence into a request which would make it indistinguishably similar to an interrogative. (24) would be a typical check-question for which an affirmative answer is strongly expected.¹⁴

(24) Du hast doch das Licht ausgeschaltet?
   you have DOCH the light off.switched
   "Have you switched off the light? I hope you have."

In spite of this pragmatic nearness to real questions, such speech acts must not be confused with real questions. They can never license an NPI. (25) is as deviant as a pure declarative such as (23b).
*Du hast doch überhaupt das Licht ausgeschaltet?

you have DOCH at.all the light off.switched

Thus, to the extent that our comparison between Bangla -to and German *doch* looks promising so far, the failure of NPI-licensing by -to seems to converge with this result from German.

6. Islandhood

Particles like Bangla -to and German *doch* are classical root clause phenomena. The reason must be that they tap into the epistemic system of the speaker and his/her evaluation of the common ground with the addressee. Thus, it is not sufficient for them to be hosted in a proposition; they must be hosted in a speech act which is formally typed according to the mood system of the language. Bangla is a good example for this generalization. According to my joint research with Probal Dasgupta, the discourse particles of Bangla can hardly ever be found in embedded clauses (clausal complements, relative clauses, adjunct clauses). Normally, if a particle like -to is in such an "island", it cannot reach the domain of the root clause, which is according to standard assumptions the grammatical layer in which illocutionary force is implemented.

The situation in German is less clear. There are various particle which can arise in *bona fide* islands: *ja* (lit. "yes") is a notorious example. The situation with *doch* is somewhat clearer. It can arise in attributive but not in restrictive relative clauses, see (26a). The former are something like separate ("parenthetical") speech acts; the latter are not. *Doch* cannot arise in clausal complements unless they are in the scope of verbs of speaking and thus count as reported speech; this is seen in (26b).

(26) a. Klaus/*jeder, [der doch gerade in Indien ist], hat angerufen
Klaus / every who DOCH right.now in India is has called
"Klaus/everyone who is right now in India has called"

b. Jeder sagt/??glaubt, [dass die Regierung doch versagt hat].
every says/ believes that the government DOCH failed has
"Everyone says/believes that the government has failed"

Islandhood holds for most adjunct sentences. There is, however, an exception: reason clauses. Reason clauses which are initiated with *weil* in German and with *karon* in Bangla are certainly embedded clauses. But both of them can host the respective particles under discussion.

(27) Max geht jetzt ins Bett, [weil er doch morgen einen anstrengenden Tag hat]
Max goes now in.the bed because he DOCH tomorrow a strenuous day has
"Max goes to bed now because he will have a strenuous day tomorrow."
(28) a. dilip aj khub SOkale uTheche [karon o to aj SOhor-e EkTa dilip today very early rise.past.3 because he TO today city-loc one.cl mEla dekhte jabe] fair see go.fut.3
   “Dilip got up early today because he will go to see a fair in the city.”

b. dilip aj khub SOkale utheche [karon o aj SOhore EkTa mEla dekhte jabe to]

According to Frey (2012), reason clauses belong to a class of what he calls *Peripheral Adverbiacl Clauses (PACs)*. These clauses show signs of non-integration. Unlike integrated adverbial clauses, PACs have their own illocutionary force. Since they are nevertheless dependent clauses, their force relies on the speaker who utters the root clause. For detailed discussion see Haegeman (2012). It would be worth exploring to what extent Bangla *-to* is licit in other clause types that have been subsumed under the PAC-generalization, and to what extent other tests concerning the theoretical isolation of PACs could be applied to Bangla.

7. Conclusions

The comparative exploration of the particles *–to* and *doch* in Bangla and German respectively reveals a surprising convergence in terms of their syntactic and semantic/pragmatic properties. This convergence may be due to linguistic universality or to large-scale parametric properties. If so, we would expect to find more languages, and in particular also genetically unrelated languages, with similar lexical elements in the service of similar functions and distributions. Given that little attention has so far been paid to “little words” with “fuzzy meaning”, such findings could indeed be possible. The other expectation could be that the two elements under discussion emerge from a common Indo-European ancestral language. Their phonetic similarity and the few historical records we have access to suggest that this possibility exists. If so, it would be highly interesting to see that the features that are shared by Bangla *-to* and German *doch* have survived 2000 years or so.
Acknowledgments

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References


I will throughout represent the examples in the transcription found in the source texts.

2 The difference between a free form of to and an enclitic form of to has also been described for Hindi in Lakshmi Bai (1977).
Working on to in Hindi, Lakshmi Bai (1977) came to a similar conclusion. According to her, the conjunctive to in Hindi must be distinguished from what she calls the "emphatic" to. The former is a clause linker, while the second is a clitic element that attaches to major sub-constituents of the clause.

Thus, it would be worthwhile to explore to what extent there is a use of doch that relates it to the familiar notion of "verum" focus, i.e. focusing the truth value.

See Thurmair (1989) among various others.

This is the reason why weakly contrastable properties give rise to awkward interpretations as seen in ??Mary is tall but intelligent, ??2+2=4 but 4-1=3.

Some researchers may assume that (11b) is equipped with a zero interrogative particle. I would be hesitant to accept such a conclusion. One could in the same way argue that dilip kal aShe is a -to sentence with a zero particle corresponding to -to. In my view it is more reasonable to assume that (11b) is syntactically a declarative clause which is pronounced with interrogative intonation as in English You are married?

This is in a much abbreviated form what Bayer, Dasgupta, Mukhopadhyay & Ghosh (2014) have suggested.

Diesing often uses the combination ja doch. Discourse particles can be stacked. But stacking makes no difference. Her main intention is to make the semantic difference between indefinites visible. In the present examples, definite DPs are being used. In this case, a semantic difference is only noticeable in terms of information structure. In general, topical DPs are to the left of the particle, rhematic ones stay in VP.

Notice that not all wh-clauses are alike. There are for example wh-exclamatives of the style What a shame!, How beautiful! or How good your son can already swim! Here the proposition p = P(x), e.g. x can swim, is presupposed, and the new contribution is roughly that the speaker exclaims that property P holds to a surprising degree. German exclamatives of that kind permit doch.

(i) Wie gut dein Sohn doch schon schwimmen kann!
   how good your son  DOCH already swim can

With doch the speaker reminds the hearer of the fact that his son is for his young age a very good swimmer. Interestingly, corresponding wh-exclamatives in Bangla like tomar meye ki Sundor nac-che! ("How beautifully your daughter is dancing!") do not permit -to, as pointed out to me by Probal Dasgupta and Jogamaya Bayer. I have no explanation for this discrepancy.

Probal Dasgupta (p.c.) informs me that in Bangla NPIs may also be licensed by bare interrogative intonation. Unlike in various languages in which the NPI must be licensed by an overt lexeme or by a change in word order as is the case in inversion, (i) is an option in Bangla.

(i) dilip ekTu-o Sahajjo koreche?
   how good your son  interrogative marker

If so, -to may be added to such an interrogative clause in the sense of a tag. (ii), in fact, is possible if intoned with dripping sarcasm and 'not p' is strongly implicated.

(ii) ora rakar almari theke EkTa-o gOena curi korte parbe to?
     they Raka's cupboard from one-even. ornament steal  will be able.FUT3 TO
     'I bet they won't be able to steal a single ornament from Raka's cupboard!'
15 See Kratzer (1999). Extensive work by Yvonne Viesel has explored the use of *ja*. See Viesel (2017) and ongoing dissertation work.