Towards the typology of indirect question markers[*]

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The paper is aimed at providing a typological survey of indirect question (IQ) markers in languages of the world. The sample of 30 languages has been examined, and 89 IQ markers have been identified and classified into the following groups: null strategy (asyndetic construction); quotative markers; subordinators, including complementizers, relativizers and adverbial clause markers (conditionals and concessives); question particles; disjunctive particles and conjunctions; two-predicate complexes; oblique mood markers and focus marking devices. Based on this data, we formulate preliminary typological implications and provide a list of relevant typological parameters.

Keywords: typology, argument clauses, complementation, complement clauses, question, interrogative clause, indirect question, embedded question, subordination

К типологии маркеров косвенного вопроса[*]

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Работа представляет типологическое исследование конструкций с косвенным вопросом в языках мира. Проанализировано 30 языков и выявлено 89 маркеров косвенного вопроса. Маркеры классифицируются по следующим группам: нулевая стратегия (без специального маркера); цитативы; подчинительные союзы и союзные слова, включая комплементайзеры, релятивизаторы и обстоятельственные средства подчинения (показатели условия и уступки); вопросительные частицы, разделительные союзы и частицы; двухпредикатные комплексы; показатели косвенного наклонения и средства маркирования фокуса. Полученные данные позволяют сформулировать предварительные типологические обобщения и представить список типологических параметров, релевантных для описания косвенного вопроса.

Ключевые слова: типология, сентенциальные актанты, вопрос, косвенный вопрос, косвенная речь, полипредикация, вопросительное предложение

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1. Introduction

Indirect questions (IQs) have been defined as complex sentences containing a dependent clause with interrogative semantics [Testelets 2001: 246–247]. [Kroeger 2005: 239] singles out complement clauses (with a complementizer) "typically referring to a proposition that would answer the embedded question":

(1)   *I don't know where he lives.*

Thus, in (1) the complement clause has interrogative semantics, and refers to a proposition 'He lives in New York' that is a felicitous answer to the embedded question.

These definitions are based on the semantic notions of proposition, interrogative semantics, and argument clause, thus they can be used as a comparative concept in terms of [Haspelmath 2010].

Despite the growing interest in the typology of complex sentences, IQs have received little attention in the typological literature. Although they are traditionally described as a type of complement clauses, they are usually left out of research scope or very briefly described both in studies of complementation and studies of direct speech in languages of the world (see, for example, [Noonan 1985; Dixon, Aikhenvald 2006]). Therefore, theoretical works on IQs are constrained to the material of well-studied languages.

A typological study of IQs has been proposed in [Kahrel 1985] in the vein of cross-linguistic word order studies [Dik 1978, 1980]. Based on the sample of 30 languages, [Kahrel 1985] analyses the relative order of clause + linker (subordinator or other device introducing indirect questions), on the one hand, and the order of the main and the dependent clause, on the other hand. He shows that the two parameters are correlated in the following way: the preferred order is the one where the linker is located between the main and the dependent clause. In case of violation of this rule the language develops a new "secondary" linker that occupies the preferred position. The exceptions are not numerous, namely, three constructions among 54 (25 polar IQs and 29 IQs).

Unlike [Kahrel 1985] the present study is aimed at identifying the inventory of morphosyntactic devices used to encode IQs in languages of the world. [Kahrel 1985] mentions the following strategies: quotatives, case affixes, question words, conditionals, dubitative particles and relativizers. We are going to complete this list and try to measure the frequency of each strategy in our language sample. As well as [Kahrel 1985], we take the sample of 30 languages. However, our sample is different, with one intersection only (Basque), and the number of IQ markers is larger (89 database entries).

Another goals are to identify the strategies specific for polar and constituent IQs and to identify the "preferences" of IQ markers for polar/constituent question type.

The literature on root questions propose a number of relevant typological parameters, which we are going to check for IQs. Thus, this pilot study will allow to figure out the set of parameters relevant for the analysis of IQs, to adjust the direction of the further research and identify the potential problems. Indeed, the sample size is not very large, and all the conclusions and implications we formulate are preliminary. However, they can be used as a start for an in-depth typological research.

2. The database

Our study is based on the language diversity value sampling method [Bakker, Miestamo 2016: 244] aimed at identifying the maximum set of different types of the phenomenon of interest. Our goal is to reveal the limits of variation of the discussed phenomenon in the languages of the world, taking

into account the genetic and areal diversity of languages. Therefore, we included one or two languages from 20 language families (in case of large families two languages from different sub-families were included) and two isolates. The choice of languages is partly based on the size and quality of relevant parts of grammatical descriptions (the so-called bibliographic bias, see [Bakker 2010]).

We use reference grammars as a source of the data (95 grammars have been consulted). For Chuvash, we rely upon the field trip notes taken by Anastasiia Egorova (partly presented in [Egorova 2020]). For English and Russian we have made a corpora search, and for some languages we have consulted small collections of texts in reference grammars.

Polar and constituent (wh) questions are described in detail in many grammars. As for alternative IQs, this information is most often scarce, and it is not possible to draw any solid generalizations. Thus, we only describe here some interesting features of alternative questions.

The analysis is presented in a database format in Google Sheets. If a language has more than one way to express indirect questions, they are all documented in a database. Therefore, we have 89 IQ markers for 30 languages.

Based on typological works on independent questions, we have elaborated a list of parameters relevant for the description of IQs in a given language:
- types of questions (polar, wh, alternative)
- synchronous polysemy of IQ markers (adverbial clauses, citations etc.)
- the make-up of the IQ constructions with the marker under examination
- the use of IQ markers in root questions
- types of questions: focused vs. non-focused
- word order (comparing to word order in independent clauses and in embedded clauses)
- semantic type of the embedding predicate (speech vs. mental predicates etc.).

In the course of the study, the first four parameters turned out to be the most relevant, and we concentrated our attention upon them. The focused vs. non-focused distinction, word order and semantic type of the embedding predicate proved to be complicated features that require an in-depth study. Thus, in what follows they are not going to be considered.

3. Cross-linguistic types of IQ markers

3.1. IQ markers and constructions

It is important to distinguish between markers used in IQ constructions and the constructions themselves. For example, in Basque polar IQs can be formed with a special non-finite suffix *-en* plus an emphatic prefix *ba-* and a question particle *al*. All the three make an IQ construction.

Basque (Isolate)

(2) errege-ak [zerbait egiten **ba** **al** zeki**en**] galdetu
    king-ERG something do.IMPF FOC Q knew.REL ask
    zion
    AUX
    'The king asked him whether he knew [how] to do anything.' [Hualde, Ortiz de Urbina 2011: 483]

However, an IQ can be formed without the particle *al* and without the prefix:

(3) ez dakit [zure laguna etorri-ko d-**en**].
    NEG know your friend come-FUT AUX-**REL**

'I don't know whether your friend will come.' [ibid.: 482]

IQs can also include the particle *ea* meaning 'let us see if, I wonder' [King 1994: 400]:

(4) [**ea** diru-rik falta ote **zen**] galdetu zion
     Q money.PRTT miss maybe AUX.REL ask AUX
     etxekoandre-ari detektibe-ak
     house.owner-DAT detective-ERG
     The detective asked the lady of the house if any money happened to be missing. [de Rijk
2008: 448]

The particle *ea* and the prefix *ba* can cooccur in one and the same clause to form an IQ:

(5) Bidrios-ek [**ea** **ba**-zu-**en** Institutu-ko berry-rik] galdetu zion
     Bidrios-ERG Q FOC-AUX-REL school-ATTR news-PRTT ask AUX
     'Bidrios asked him whether he had any news from the school.' [Hualde, Ortiz de Urbina
2011: 483]

Thus, there are four morphosyntactic means of making IQs (the prefix *ba-*, the particles *-al* and *ea*, the non-finite *-en*), and there are four constructions, 1) *ba al* V-*en*, 2) V-*en*, 3) *ea* -*en*, 4) *ea ba*-V-*en* (omitting two other dialectal and substandard constructions considered in [Hualde, Ortiz de Urbina 2011] and [de Rijk 2018]). However, the markers are distributed among constructions in a peculiar way. There are markers that co-occur to make an IQ construction, and there are markers that are used in more than one construction. There seems to be only one obligatory marker, i.e. the non-finite suffix *-en* (which may also be absent in some substandard variants).

Our paper aims to present a typology of IQ markers, which means that the number of available constructions for each language would differ.

The inventory of IQ markers includes the following:

A. Null strategy, i.e. no specific marking – the null strategy, or asyndetic subordinates.
B. Quotatives.
C. Subordinators, including complementizers, relativizers and adverbial clause markers (conditionals and concessives).
D. Question particles.
E. Disjunctive particles and conjunctions.
F. Two-predicate complexes (e.g. lit. "I don't know he comes (or) not" / "…he comes (or) doesn't come" / "…he comes (or) what-he-does" / "…he will come (or) won't").
G. Oblique mood markers.
H. Focus marking devices (particles/constructions).

3.2. Null strategy (19 cases)

The "null" strategy does not involve any specific markers of IQ. The interrogative semantics is defined contextually or intonationally, as in Russian alternative IQs (*YA ne znayu, svoboden on ili zanyat* 'I don't know if he is free or busy') and in the following example from Ossetic (Iranian > Indo-European):

(6) *nəwwaj* *=šɜm* *ɜmɜ* *Baraštər-ə* *a-fɜrš* *bənat*
     ride[IMP.2SG] they.ALL and Barastyr-GEN PV-ask[IMP.2SG] place
     =ma *=jɜm* *iš*

more   he.ALL   EXST
'Ride to them and ask Barastyr[1] whether he has a place [for you].'

The root question corresponding to the IQ in (6) would be (7). Note that (6) involves the indexical shift of the pronoun: the speaker uses a 3^d person pronoun to refer to the main clause dative argument, while in direct speech he would use the 2^d person pronoun, as in the following:

(7)   *bynat   ma   =dзm   iš?*
       place   more   you.ALL   EXST
       'Do you have a place [for me]?'

Ossetic does not use any special marking to encode neither root polar questions, or IQs, with the reservation that we do not take prosody into account. Thus, it is an example of a "true" null strategy that indeed does not have any specific markers indicating that it is an IQ. As far as it concerns wh- and alternative questions, they include wh-words and disjunctive conjunctions (as in the Russian example above) that mark the examined sentence as having interrogative semantics. We have only one example of the true null strategy in our sample (Ossetic), all other examples including alternative or wh-IQs (Hebrew, Tamashek, Russian, Udihe and others).

In the "true null" type the interrogative semantics of a complement clause is not explicitly expressed, and the embeddedness of the interrogative clause is only manifested by the indexical shift of pronouns and other deictics (like the 3^d person pronoun in the Ossetic sentence). Whenever it is possible, we use the indexical shift as a criterion for distinguishing between direct and indirect speech, see 3.4 for details.

In some languages, the dependent status of the interrogative clause is signaled by a specific word order, e.g.:

(8)   Where is he going? I don't know where he is going.

In English, IQs differ from root questions by having wh-word fronting, and they differ from root questions by the absence of subject-verb inversion. This leads to a question whether such structures should be termed as null strategy given that the word order is different. At present, we are unable to answer this question, because for most of the languages of our sample we only have scarce information about the basic word order in root and IQs.

Obviously, the null strategy occurs much rarer in polar question than in wh-questions. The tentative typological implication would then be that if polar IQs are marked with the null strategy then it is also possible for wh-questions. A more solid implication may be formulated on the basis of the 17 languages that have null strategy in wh-questions:

(i) if IQs are marked with the null strategy then it is also possible for root questions of the same type (polar, wh, alternative).

Thus, the null strategy "inherits" semantic restrictions on null root questions, even if involves changes in prosody pattern and morphosyntax (including indexical shift and word order).

3.3. Question particles (16 cases)

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[1]   The deity of the underworld in Ossetian mythology.

The question particles are widely used both in root in IQs. Most often, root and IQs are introduced by the same question particles, as *yɛ* in Supyire:

Supyire (Atlantic-Congo > Niger-Congo)
(9) a. Dì fanŋké màha n-tuga à jwu **yɛ**?
         how grave.DEF HAB INTR-dig SC say Q
         'How is the grave dug?' [Carlson 2011: 304]

     b. U a cè jò u sí m̀-pà **yɛ**.
         he PERF know who s/he FUT FP-come Q
         'He knows who will come.' [ibid.: 456]

However, some languages possess specialized IQ particles, as Chuvash *şi* and Basque *ea* (used in both polar and wh-questions). Such particles are characterized by specific complicated semantics, which makes their use restricted even in IQs. An interesting case is observed in Russian, where the IQ particle *li* is possible both in root and IQs; however, in root questions its use is restricted to specific contexts of doubt.

Question particles are most often restricted to either polar or wh-questions. However, Chuvash, Jamsay and Basque have particles that occur unspecified in both of these question types.

The data permits us to formulate the following generalization:
(ii) if a question particle is used both in root and IQs, it usually covers the same questions types.

3.4. Quotatives (2)

In some languages quotatives introducing direct speech are used to introduce IQs:

Mian (Ok > Trans-New Guinea)
(10) [kwĕit=e hei-b-ne
       sugar_cane=SG.N1 cut.PFV-give.PFV-1SG.IO.PFV
       lowon-nab-e=**a**=**ba**?] ge baa-n-o=ta
       eat.PFV-NRPST-3SG.M-S=Q=QUOT say.PFV say.PFV-SEQ-3SG.F.S=MED
       "Did he cut and eat my sugar cane a short while ago?" she asked and then…' [Fedden 2011: 449]

As well as [Kahrel 1985] we included quotatives in our sample. However, as we aim at limiting our research to indirect questions only, we have tried to use the indexical shift (*He said: "**I'm** broke" – He said **he was** broke*) as a criterion for distinguishing direct and indirect speech. Direct speech is not taken into account[2]. However, it seems that for some languages this approach is not justified, as they seem to lack the indirect speech at all. For example, in Hup the indirect speech is a simple sentence marked by the special reportative mood marker (reportive evidential). By contrast, direct quotes are complex sentences (see [Epps 2005: 685–687]). K. J. Olawsky states that "Urarina has no formal strategy to create indirect questions. In constructions that involve two clauses where one is a question, the two are simply juxtaposed. Thus, the question is not actually "indirect" or dependent from another clause… However, the position before the main clause is preferred, as with dependent clauses except subordinate clause with purposive function." [Olawsky 2006: 836]

[Noonan 1985: 72] reports that Agta, Punjabi and Shina lack or hardly ever make use of indirect

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[2] It has been largely claimed that direct speech is distinguished from indirect speech both structurally and semantically, see [Partee 1973; Munro 1982] and the overview in [Aikhenvald Dixon 2011: 309].

quote constructions. Presumably, such cases must be included in our sample, with the reservation that direct quote structures are included only for languages lacking the indexical shift. However, even this decision is problematic for some languages, since the indexical shift can be observed in case of coreference of the arguments of the main clause and the IQ clause, and the sources often lack such examples.

A solution to this problem would be an in-depth work with the experts. At present, we suggest that the following parameters must be included into the database: 1) the presence of indexical shift in the given language; and 2) the presence of indexical shift in the context of the discussed marker. Possibly, some conclusions must only be based on languages that do have indexical shift (the generalizations about markers used both in root and IQs, for example, the null strategy and question particles), while others can be based on the whole sample.

3.5. Subordinators (28)

Among 28 subordinators used in IQ, 11 cases include adverbial clause markers (9 conditionals and 2 concessive clause markers), 12 are complementizers and 5 relativizers.

The conditionals are rather frequently used to encode polar IQs (e.g. *He asked if I was frightened*); in some languages they can encode both polar and wh-IQs (Lezgian). Adyghe and English (*I don't know **whether** I am right or I am wrong* / *You will pay **whether** you want it or not*) also use concessive clause markers to encode IQs:

Adyghe (Northwest Caucasian)
(11) a. se   s-ŝe-r-ep   we   wǝ-qǝ-z-ʁe-š'ta-ʁe-**m-jǝ**
          I   1SG-know-DYN-NEG   you   2SG-DIR-1SG-CAUS-fear-PST-COND-COH
          'I don't know, whether I frightened you.' [Gerasimov, Lander 2008: 9]

      b. marat   tje.k̰ʷa-ʁe-**m-jǝ**,   se   sǝ-gʷ
          Marat   win-PST-COND-ADD   I   1SG.PR-heart
          r-jǝ-hǝ-r-ep   a-r   zer-je-ŝa-ʁe-r
          LOC-3SG.A-carry-DYN-NEG   DEM-ABS   MNR-OBL-do-PST-ABS
          'Although Marat won, I didn't like the way he played'. [Arkadiev et al. 2009: 101]

So far, we can say that languages using concession clause markers to encode IQs, also use conditionals in the same function. However, this implication has to be verified on a larger language sample.

Complementizers may well be used to mark IQs, although they are not as frequent as it could have been expected (less than 15%), given that IQs are traditionally considered to be a type of complement clauses. Out of these 12 markers, 5 involve nominalizers. There are IQ markers that are better represented in our sample (e.g. question particles).

Complementizers are unlikely to introduce polar IQs only (only one example from Urarina, Peru). They either take both polar and wh-questions, or only wh-questions.

One language has a specific complementizer for polar IQs, apparently, not used anywhere else, *yélà* in Humburi Senni (Nilo-Saharan)[3].

Relativizers are used to encode both wh- and polar questions. In Humburi Senni (Songhay > Nilo-Saharan) the questioned constituent is replaced with indefinite noun phrase *bòr* 'person' with a relative morpheme, so according to [Heath 2014: section 8.2.5] literally the example is translated as

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[3]   This marker can also encode factive complements of the verb 'know'; however, it is not listed among the basic complementizers in the grammar and seems to be marginal in such contexts.

'I don't know the person who came' (see also 3.9 below):

(12)   ì   sù   béy   [**bòr**↓   **ká**   kà]
        1SG.S   IMPF.NEG   know   [person   REL   come]
        'I don't know who came.' [Heath 2014: ex. 433a]

3.6. Disjunctives (2)

Two languages of the sample use disjunctive conjunctions to encode polar IQs:

Supyire (Atlantic-Congo > Niger-Congo):

(13)   Kà   uru   nàɲi   <...>   mìì   yígé   na   uru   ù
        and   this(EMPH)   man.DEF   <...>   me   ask   that   he(EMPH)   he
        Ø   sá   mìì   yàha mobílíge   e   **làa**.
        SBJV go   me   leave truck.DEF   in   or
        'Then that man <...> asked me if he should go take (lit. leave) me in the truck.' [Carlson 2011: 454]

    Note that we took into account the cases where there is only one alternative expressed (in case two alternatives are explicitly stated, the question should be interpreted as an alternative question taking the disjunctive).
    These constructions are only used to mark polar questions.

3.7. Two-predicate complexes (14)

[König, Siemund 2007] note that Mandarin Chinese and some Papuan languages (Amele, Kobon) make use of a specific 'disjunctive-negative construction' to mark root polar questions, lit. "he came or didn't come". It can also be used in IQs, with or without the disjunctive. For example, in Chinese it is the main strategy of forming polar questions, root or IQs [Kondrashevskii, Rumyantseva, Frolova 2010]:

(14)   tā   wèn   wǒ   tā   māmā   **máng bù máng**?
        he   ask   I   his   mother   busy not busy
        'He asks me, whether his mother is busy.'

    There are languages that form similar constructions with a question particle and/or with a subordinator (Chuvash, Adyghe, Tundra Nenets). It can be used on a par with a simple one-predicate structure:

Chuvash
(15)   maṣə   **kil-ed=i**   **kil-mest=i**   te-ze
        Masha   come-NPST[3SG]=Q   come-NEG.NPST[3SG]=Q   QUOT-CVB_SIM
        vaɕə   it-rʲ-ë
        Vasya   asked-PST-3SG
        'Vasya asked, whether Masha would come.' [Egorova 2020] (*kilmesti* may be omitted)

    In some languages such sentences are stylistically marked and have a clear 'colloquial' meaning,

as in Russian *Ya ne znayu, pridet on, ne pridet...* 'I don't know whether he would come' (see English *I don't know whether he will like it or not* and also *I don't know whether or not he will like it*). The stylistic restrictions are not clear for languages that do not have a long tradition of standardization. At least, it can be claimed that the speakers are prompt to give such examples during their interview with the linguist when translating polar questions (without the second alternative "or not" explicitly stated in the stimulus), which means that they are not as marked as the Russian example.

The two predicates may take subordinators of various kind, including conditionals, concessives, complementizers and nominalizations. In some languages they show a lot of variation:

Udihe
(16) Nua-ni   xauntasi-e-ni Sonia skola-du   **bi:-we-n-de**
      he-3SG   ask-PST-3SG   Sonia school-DAT   be.PTCP.PRS-ACC-3SG-DIS
      e-i-we-n-de
      NEG-PTCP.PRS-ACC-3SG-DIS
      'He asked whether Sonia was at school or not.' [Nikolaeva, Tolskaya 2011: 50]

For example, in Udihe the two predicates occur with and without negation, they can include the auxiliary or the proverb (placeholder verb). Thus, it is unclear whether we deal with one and the same 'loose' construction or with a number of constructions with different morphosyntactic properties and (possibly) semantic restrictions. Obviously, the answers to these questions require the extension of the language database.

Another problem is the differentiation of polar and alternative questions within this type. For example, L. Berghäll states about Mauwake that "polar questions, when indirect, have to be alternative questions." [Berghäll 2015: 365]. For Udihe, Nikolaeva and Tolskaya describe (16) as an example of an alternative question. However, the second alternative is actually the negation of the first, which makes the discussed example semantically close to polar questions ("…whether Sonia was at school"), unlike alternative questions of the type "whether Sonia was at school or at home". Such ambiguous examples are given in many sources, which makes it difficult to distinguish between polar and alternative questions in case of two-predicate complexes[4]. The adequate description of this type requires further research.

Our data permits us to formulate the following preliminary implication:

(iii)   If a two-predicate complex is possible in root questions, then it is also possible in IQs (while the opposite is not true).

3.8. Oblique mood markers (3 markers in one language)

There are languages that use oblique moods in IQs, see also [Kahrel 1985]. For example, in Tundra Nenets one of the oblique moods must be used if the dependent verb is in the past tense (17), and with the verb 'ignore' in the present or in the past (18).

(17)   n′anaq   ma-s′°,   xən′ana   Wera   yil′e-sa
           DAT.1PL   say-PST   where   Wera   live-INTER
           'He told us where Wera lived.' [Nikolaeva 2014: 306]

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  [4]   The semantic distinction between polar and alternative questions in concrete examples is also obscure, since polar questions may either have the polar or the alternative semantics (Krifka 2013).

(18)   mən′° yexaraə-d°m, xən′ana   yil′e-naki°
                I   ignore-1SG   where   live-PROB
                'I don't know where he lives.' [ibid.: 307]

See (17) with the interrogative mood marker and (18) with the probabilitive.

    The use of oblique moods in IQs is a problematic issue, since the context of an embedded question ("I don't know if P"; "I doubt if P"; "I asked if P") often makes the statement about a proposition which is only true with a degree of probability. Thus, in languages with elaborated irrealis mood system such clauses are expected to take oblique mood markers, as dubitative in Tundra Nenets:

(19)   mən′° yexaraə-d°m, tūt°-bə-ta=w°h
                I   ignore-1SG   come.FUT-COND-3SG-DUB
                'I don't know if he is coming or not'. [ibid.: 308 (shortened)]

    [Nikolaeva 2014] does not explicitly mention the dubitative mood among IQ markers; however, all the six two-predicate examples on page 308 include either the dubitative, or the inferential, or the conditional (the latter being listed among IQ markers). See also J. Barbour's comment on Neverver: "The category of utterance predicates is the only CTP category with independent mood marking in the complement. All others involve dependent mood marking of some sort." [Barbour 2012: 386]

    To disambiguate between irrealis mood as an IQ marker vs. a side-effect of the semantics of the dependent clause we need to find specific context of the type "I don't doubt if P", and such examples are most often absent from reference grammars.

3.9. Focus marking devices (5 focus particles/constructions).

Udihe makes use of the focus particle *-dA* to make polar question with the finite verb, cf.:

(20)   omo   kusige-we-de   xebu-je
        one   knife-ACC-FOC   take-IMP.2SG
        'Take (at least) one knife.' [Nikolaeva, Tolskaya 2011: 443]

(21)   čai   xekui-we-ni-de   amtala-ja.
        tea   hot-ACC-3SG-FOC   try-IMP.2SG
        'Try whether the tea is hot.' [ibid.: 818]

    This particle is a clitic introducing emphatic focus, the meanings "even", "too, as well", and also used to form indefinite pronouns. It can also introduce concessive clauses, which makes it close to the "subordination" type illustrated in 3.5. Similar to *-dA* in Udihe, all the focus markers attested in our sample show large polysemy. For example, the particle *ba-* in Basque, apart from IQs and predicate focus, can introduce conditional clauses [de Rijk 172–183; 413].

    For Humburi Senni the author states that "the particle *gâ* (*the IQ marker – N.S.*) is a workhorse in Humburi Senni grammar. It is the relative morpheme (§8.3), a kind of adverbial conjunction (§8.3.11), and the focus morpheme (§8.1). It is also the 'that' conjunction in factive complements." [Heath 2014: 398]. There is evidence for different analysis of focus and relative constructions; however, the author himself is not sure whether they should be treated as different or the same. Minor syntactic differences between relativization (which is used to make focus constructions and root questions, see [Sumbatova 2009: 569]) and IQ are also observed in Adyghe [Lander 2014: 253–254]; however, the author explicitly states that "IQs are a subtype of relative constructions" [Lander
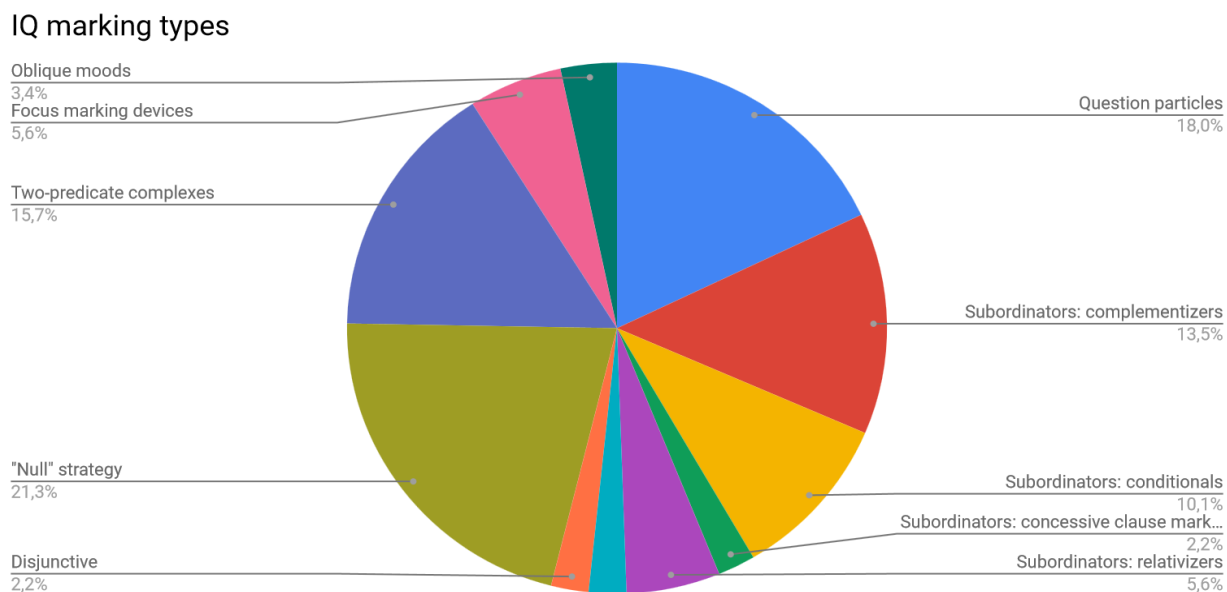
2014: 253].

Thus, the focus markers/constructions attested in our sample are counted twice (except for Udihe, for the reason that the discussed particle seems to be a secondary means of introducing concession, the infinitive being the main means [Nikolaeva, Tolskaya 2011: 727–728]).

3.10. Distribution of IQ markers

The distribution of 89 IQ markers is illustrated in Figure 1.

Figure 1. Distribution of IQ markers in languages of the sample.

IQ marking types

Oblique moods
3,4%
Focus marking devices
5,6%

Two-predicate complexes
15,7%

"Null" strategy
21,3%

Disjunctive
2,2%

Question particles
18,0%

Subordinators: complementizers
13,5%

Subordinators: conditionals
10,1%
Subordinators: concessive clause mark…
2,2%
Subordinators: relativizers
5,6%

4. Preliminary typological implications

Comparing IQs to root questions, we can formulate the following preliminary implications:

1) If IQs are marked with the null strategy then it is also possible for root questions of the same type (polar, wh, alternative).

2) If a two-predicate complex is possible in root questions, then it is also possible in IQs (the opposite is not true).

3) If a question particle is used both in root and IQs, it usually covers the same questions types.

The present study has shown the relevance of the following typological parameters: types of questions (polar, wh, alternative); semantic restrictions of the examined markers in root questions; synchronous polysemy: the functions of IQ markers in root and subordinate clauses (adverbial clauses, citations etc.). Whenever possible, we have used deictic shift as a criterion for distinguishing between direct and indirect speech. However, our data shows that the presence of the deictic shift per se must be analyzed as a separate parameter (as it is not attested in a number of languages [Noonan 1985]), and another relevant parameter is the presence of the deictic shift in the context of the particular IQ marker.

We have hypothesized that the semantics of embedding predicate could be a significant parameter (e.g. speech vs. mental predicates). Indeed, there are quite a few languages, where the concrete predicates have restrictions on IQ markers; however, the distribution has idiosyncratic, rather than systematic character.

Thus, this pilot study has enabled us to test the parameters relevant for description of IQs in languages of the world; the next step is to expand our sample and provide an in-depth study of the complicated parameters.

Appendix: List of languages.

Adyghe > Circassian > Northwest Caucasian
Alaskan Yupik > Eskimo > Eskimo-Aleut
Bardi > Nyulnyulan
Basque (Isolate)
Chuvash > Oghur > Turkic
Domari > Indo-Aryan > Indo-European
English > Germanic > Indo-European
Hdi > Chadic > Afro-Asiatic
Hebrew (Modern) > Semitic > Afro-Asiatic
Hindi > Indo-Iranian > Indo-European
Humburi Senni > Songhay > Nilo-Saharan
Jamsay > Dogon > Niger-Congo
Kayardild > Tangkic > Macro-Pama-Nyungan
Ket > Nothern Yeniseian > Dené-Yeniseian
Lango > Nilotic > Nilo-Saharan
Lezgian > Lezgic > Northeast Caucasian
Mauwake > Trans-New Guinea
Mian > Ok > Trans-New Guinea
Momu > Fas
Mongsen Ao > Ao > Sino-Tibetan
Mosetén > Moseten-Chonan
Neverver > Malayo-Polynesian > Austronesian
Ossetic > Iranian > Indo-European
Russian > Slavic > Indo-European
Saamáka (English based creole)
Supyire > Atlantic-Congo > Niger-Congo
Tamashek > Berber
Tundra Nenets > Samoyedic > Uralic
Udihe > Tungusic
Urarina > Macro-Jibaro

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