The internal and external syntax of quotative indexes and its implications for the nature of reported discourse

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1 Introduction

1.1 Theoretical preliminaries

+ definition of reported discourse (= reported speech and thought), henceforth just **RD**:

Reported discourse (RD) is the representation of a spoken or mental text from which the reporter distances him-/herself by indicating to the audience that it is produced by a source of consciousness in a pragmatic and deictic setting that is different from that of the immediate discourse.

> RD not tied to externalized speech but includes internal cognition and perception
> "text" refers to the requirement of potential speech act force of reported part
> RD viewed as a continuum instead of involving clear-cut categories like "direct speech" and "indirect speech" according to irrelevant verbatim criterion, subcategories defined by different degree and type of reporter interference (cf. Roncador 1988)

+ present terminology used for components of a canonical bipartite RD construction:

(1) *He said to me, {Come back tomorrow!}* = "RD construction"
> *Come back tomorrow!* = "Quote", henceforth signaled by {...}
> *He said to me* = "Quotative index"
> *He* = "Speaker"
> *said* = QI nucleus, not necessarily a verb
> *(to) me* = "Addressee"

+ definition of quotative index, henceforth just **QI**:

A quotative index (QI) is a segmentally discrete linguistic expression that is used by the reporter for the orientation of the audience to signal in his/her discourse the occurrence of an adjacent representation of reported discourse.

> includes also expressions not based on verbs with utterance meaning

(2) *and uh **and he's** {oh oh what does that have to do with it}* (Clark and Gerrig 1990: 772-FN9)

(3) *So George comes at Louis with the knife, **and Louis goes,** {...}* (Butters 1980: 305)

(4) ***This is them** {what area are you from . what part?} **This is me** {I'm from (inner London)}* (Cheshire and Fox 2007)

1.2 Analysis and data base of Güldemann (2008)

+ global cross-linguistic literature survey on reported discourse and "complementation" but first of all a detailed synchronic morphosyntactic (as well as diachronic grammaticalization) analysis of RD constructions in a controlled African language sample (see Appendix 1)
> focus on direct RD, but non-direct RD taken into account; quote not analysed further
> focus on QIs regarding internal structure and external relationship within RD and context
> QIs analysed according to tokens (based on text corpora) as well as types (based on text corpora and language descriptions)

+ data corpus (see Appendix 1) comprises:

39	sample languages
290	texts
3709	tokens of direct RD
4063	tokens of QIs (including non-direct RD)
139	types of language-specific QIs (including non-direct RD)

2 The internal morphosyntax of QIs

2.1 Occurrence of expected and encountered components of QIs

+ components of a QI vis-à-vis state-of-affairs expression of speech event:

(i)	predicative assertion	If QI is state-of-affairs expression, **Expected**
(ii)	reference to speech event	
(iii)	reference to speaker	
(iv)	reference to addressee	
(v)	quote orientation	**Unexpected**

(5)
a. *He_3 $said_{1,2}$ to me_4 ($that_5$) {I should come back tomorrow}.*
b. *He_3 $said_{1,2}$ to me_4 ($like_5$) {Come back tomorrow!}.*

+ QIs recurrently have marked predicativity or none at all (cf. columns 6+7 of Appendix 1)

(6) Mwaghavul (Chadic, Afroasiatic)
a. *ɓe* *wuri* *sat* *nee* {...}
then 3M.S say Q
and then he said that ...
b. *ɓe* *mo* ***Ø*** *nee* {...}
then 3P Q
and then [they] that ... (Longacre 1990: 156)

+ QIs recurrently do not contain a speech-event reference but use instead **non-speech** or dedicated **quotative verbs** without utterance meaning (cf. columns 8-10 of Appendix 1)

(7) Lamba (Benue-Kwa, Niger-Congo)
aŵa-ku-mushi *ka-ŵ**ema*** *ŵonse* {*tukalipile*}
2-LOC-village THET-2:**start** 2:all {let us pay ...}
All the people of the village started off (saying), 'Let us pay ... (Madan 1908: 62)

(8) Tonga-Inhambane (Benue-Kwa, Niger-Congo)
si-rengo *si-ngu-**kh**-iso* {...}
8-animal 8-PRS-**QV**-8DEM
the animals say, "... (Lanham 1955: 139)

+ QIs most consistently, and sometimes exclusively, contain a participant reference, especially to the speaker as the source of the quote (cf. columns 11/12 of Appendix 1)

(9) Kunama (Isolate)
báddi *ína* *ṅoṅéna* *gàmba-sī* {...}
then DEM frog:DET lizard-OBJ
Nun sprach der Frosch zur Eidechse [lit.: then the frog to lizard]: '... (Reinisch 1881-90,1: 172)

+ QIs recurrently contain a quote orienter like a grammaticalized quotative, quote proform, or verb copy, and then can become bipartite (cf. columns 13/14 of Appendix 1)

(10) Namibian Khoekhoe (Khoe-Kwadi)
o-s *ge* {...} ***ti*** *mî*
then-3F.S.SBJ DECL Q say
Und sie sagte [and she said]: "... (Schmidt 1994: 134)

(11) Murle (Surmic, Nilotic-Surmic)
odoma *dorooŋ* *i-jinun* *nyɛl* *ŋina* ***gi*** ***co*** {...}
then tiang PFV-ask:? frog here thing this
The tiang asked the frog, "... (Arensen 1992: 310)

(12) Yoruba (Benue-Kwa, Niger-Congo)
Adé *takú* ***ó*** ***ní*** {*èmi ò lo*}
PN refuse 3S QV {I won't go}
Ade refused and (he) said, "I won't go" (Bamgboṣe 1986: 90)

+ overall frequency hierarchy of QI elements contradicts expected event representation:

(i)	Grammatical or lexical reference to the speaker	92%
(ii)	Grammatical device realizing quote orientation	71%
(iii)	**Lexical reference to the encoded (speech) event**	**50%**
(iv)	Grammatical or lexical reference to the addressee	31%

2.2 A morphosyntactic typology of QIs

+ diversity of QIs in and across languages but possible typology according to such factors as structural complexity, clausehood, and functional orientation

Code	Elaboration	Partition	Clausehood	Orientation	Examples
3a	truncated	no	non-clausal	participant-oriented	(4), (9)
3b		no	non-clausal	quote-oriented	(6)b., (16)
1a	simple	no	monoclausal	event-oriented	(1)
1b		no	monoclausal	quote-oriented	(8)
2a	complex	**bipartite**	monoclausal	quote-oriented	(10), (11)
2b		bipartite	**biclausal**	quote-oriented	(12)

Note: **bold** = short reference

Table 1: Structural QI-typology

(13)

1a	*Peter said*	{...}
1b	*Peter is like*	{...}
2a	*Peter said that*	{...}
2b	*Peter tells him, he says*	{...}
3a	*this is Peter*	{...}
3b	*Peter like*	{...}

(14) Koromfe (Gur, Niger-Congo)

a. *kɔ* *jemdi* *mɔ̃* ***bole*** {...} = type 1a
then hippo also say:PST
Alors hippopotame dit aussi: "... (Rennison 1986: 44)

b. *kɔ* *a* *jemdi* ***bole*** ***ke*** {...} = type 2a
then DET hippo say:PST Q
Puis l'hippopotame dit: "... (Rennison 1986: 48)

c. **Ø** **Ø** ***ke*** {*ba bɛ jere*} = type 3b
COMP {they should come here}
Let them come here! (lit.: That they come here!) [non-DRD] (Rennison 1997: 39)

d. *ṃba* *jemdi* *mɔ̃* **Ø** {...} = type 3a
brother hippo also
Maître hippopotame dit aussi: "... (Rennison 1986: 46)

+ different QI-types with notable bias toward basic RD-categories, non-clausal and biclausal QIs strongly preferred for direct RD

Type	Direct	Both	Non-direct	Total
Non-clausal	9	6	1	16
Monoclausal	22	27	2	51
Bipartite	4	26	27	57
Biclausal	14	1	0	15
Total	49	60	30	139

Table 2: Distribution of morphosyntactic types over RD-categories

2.3 Summary

+ QIs have two basic functions, namely to:

A **represent a RD-referring event within the immediate discourse BUT MORE SO**

B **orient the audience to the presence of the quote and, concomitantly, to a necessary change of perspective regarding its deictic-pragmatic interpretation**

+ QIs are primarily conventionalized constructions in function B

(i) Generalization of unmarked categories for predication operators and participant type

(ii) Frequent lack of semantically explicit and/or specific predicative lexemes

(iii) Reduction of morphological and phonetic substance

(iv) Use of construction-specific function elements that develop to grams

(v) Existence of regular subpatterns, i.e. QI-types

(vi) Further grammaticalization into other domains (see Güldemann 2008)

3 The relation of QI and quote within RD constructions

3.1 QI-quote order

+ order pattern defined by position of QI segment(s) (“on-quote”, “off-quote”, “intra-quote”) vis-à-via quote

> basic distinction between **compact** QI with single segment and **discontinuous** QI with multiple segments, types 1-4 (3 compact, 1 discontinuous) cross-linguistically recurrent

Pattern	QI constituency	QI-segment(s)	QI order pattern
1	Compact	ON-QUOTE only	**PREPOSED**
2		OFF-QUOTE only	**POSTPOSED**
3		INTRA-QUOTE only	**INTRAPOSED**
4	Discontinuous	ON/OFF-QUOTE combination	**CIRCUMPOSED**
5		ON/INTRA-QUOTE combination	no common term
6		INTRA/OFF-QUOTE combination	no common term
7		ON/INTRA/OFF-QUOTE combination	no common term

Table 3: Logical QI-quote order patterns

+ language-specific **QI-order types** may subsume different QI-quote order patterns

(15) Kanuri (Saharan)

a. {...} *wono* = pattern 2
QV:3S:PST
She said "... (Geider ms.)

b. *kúrà-nzá-yè* *shí-gà* *cúgórò* {...} *wònò* = pattern 4
leader-their-SBJ 3S-OBJ 3S:PST:ask QV:3S:PST
Ihr Führer fragte ihn: "... [lit.: their leader asked him, '...', he said] (Cyffer 1974: 209)

c. {...} *sə̀* {...} *wònò* = pattern 6
QV:3S:MED QV:3S:PST
...," sagte er "..." [lit.: ...' he said and '...' he said] (Cyffer 1974: 203)

(16) Lamang (Chadic, Afroasiatic)

a. *ká* *yághè* *ḿ* *mbàlò* *búwó* {...} = pattern 1
Q squirrel in bag PF
Squirrel said in the bag, "... (Wolff 1994: 336)

b. {...} *ká* *kárámá* *ŋ* *márkwá* *ŋgùzàk* = pattern 2
Q crocodile GOA woman old
...", said Crocodile to the old woman. (Wolff 1994: 335)

(17)

a. *"I'm fine, but how are you?" said John.* = pattern 2

b. *"I'm fine." said John. "But how are you?"* = pattern 3

+ different, simplified QI-quote order typology according to orientation of QI nucleus
> subtypes of four basic types may render identical surface order patterns

(i) Other QI-nucleus > {...} = **Preposed cataphoric**

(ii) {...} < QI-nucleus Other = **Postposed anaphoric**

(iii) Other {...} < QI-nucleus = **Circumposed anaphoric** cf. (15)b.

(iv) (QI-nucleus) {...} (QI-nucleus) = **Transposable~ "floating"** cf. (16)

Constituent order type of language	No. of languages	Preposed QI types	Postposed QI types	Circumposed QI types	Total
1 Head-final with OBJ-V	11	17	3	25	45
2 Head-initial with OBJ-V	8	21	-	-	21
3 Head-initial with V-OBJ	20	65	8	-	73
Total	39	103	11	25	139

Table 4: QI order types across three basic African constituent order patterns

+ QI-quote order not depending strongly on general language-specific syntax > **Table 4**
- postposed QI types recurrent in consistent head-initial languages with **V-OBJ** order **row 3**
- preposed QI types universal in head-initial languages with normal **OBJ-V** order **row 2**
- preposed QI types recurrent in consistent head-final languages with **OBJ-V** order **row 1**
> in general, preposed QIs clearly preferred independent of constituent order elsewhere

3.1 QI-quote relationship

+ despite long-established criticism, traditional analysis of RD constructions: syntactic link between QI-nucleus and quote analysed as that between transitive speech verb and its object
> such a syntactic relation defined by certain language-specific morpho-syntactic properties of the entire construction as well as its subparts:

(i) coherent, internally structured higher constituent ("verb phrase") comprising

(ii) two separate constituents defined in terms of their category status

> VERBAL constituent as head with valency slot for another constituent

> NOMINAL constituent as "object complement" filling the valency slot

(iii) potential marking of this specific relation on both constituents (e.g., transitive marker or agreement on verb, object marker on complement, etc.)

3.1.1 The entire RD construction as involving a "verb phrase"

(i) QI is semantically "modification (the dependent indicates the kind of the head)" (McGregor 1994: 67) of quote with respect to its source and context
> if anything, head status for quote rather than QI

(ii) quote with "privilege of free occurrence" (McGregor 1994: 66): "free direct reported discourse", i.e. without QI, frequent (cf. Appendix 1, column 2), which is impossible the other way around (quote as "complement" of zero-head???)

(iii) frequent phonetic~intonation break between QI-nucleus and quote, which has no precedent in verb phrases

(iv) recurrent interruption of QI-nucleus and quote by other linguistic material: addressee, quote orienter (including "complementizer")

(v) linear QI-quote order often does not fit expected quote-as-object pattern (see §3.1)
> intra-quote produces "complement" frame around QI as "internal head"???
> quote-as-object order principle rare and only under specific circumstances

3.1.2 The quote as the assumed noun-like "object complement"

(i) no marking of nominal(ized) status and/or alleged grammatical relation of quote to QI nucleus; cf. Longacre (1968,2: 166), Munro (1982: 302-4): a single case of non-shifted quote marked by object suffix in the sample with 2 verbs in Dongolese

(18) Dongolese (Nubian, ?Wadi Howar)

As a general rule, the direct object of a verb of *saying*, i.e. what is said, does not bear the objective suffix, but the indirect object, i.e. the person addressed, does bear it:

a. *ékki sámil* {***súttɛ tấr!***} ***ɛ-n*** ****súttɛ tấr-gi***
2S:OBJ sheikh {come quickly!} QV-IPFV:3S
the sheikh says to you 'come quickly' (Armbruster 1960: §4676)

This is the usage so long as the direct object is reproduced speech, or speech to be reproduced, a sentence, in fact; but when it is some word representing a sentence, e.g. a pronoun, then it bears the objective suffix:

b. *sámil* ***iŋ-g*** ***ɛ-gó***
sheikh DEM-OBJ QV-PFV:3S
the sheikh said this. (Armbruster 1960: §4677)

(ii) rather greater semantic and syntactic autonomy of quote than in "canonical" adverbial and relative subordination, which regularly excludes morphosyntactic features of main clauses due to their reduced assertive and illocutionary force

3.1.3 The QI-nucleus as the assumed “complement-taking” predicate

(i) tendency toward restricted clausehood (see §2) and a formulaic grammatical structure rather than a fully grown main clause

(ii) not verbal (Munro 1982: 313-4): attested in 24 of 39 languages, often highly frequent

(iii) if verbal, not canonically transitive even outside RD (Munro 1982: 305-6); rather defectively transitive, transitive to addressee only, or intransitive

(19) Shona (Benue-Kwa, Niger-Congo)

a. **ndi-cha-**chi-ti***
1S-FUT-7IA.OBJ-QV
I will say it.

b. **waka-**a-ti*** *ma-zita* *aya*
2S:REM.PST-6OBJ-QV 6-name 6:DEM
You said these names.

c. *a-no-**ti*** *chi-Shona*
3S-PRS-QV 7-PN
He says, “Chishona”. (*He speaks in Shona/ the Shona language.)

d. *aka-**ti*** *zvikuru*
3S:REM.PST-QV much/extensively
He said, “Zvikuru”. (*He said/spoke a lot/extensively.) (personal knowledge)

(20) Koromfe (Gur, Niger-Congo)

gɷ ***bo*** *a* *tife* *mɔ̃* *nɛ* ***lɛ*** {...}
3S say DET elephant also to thus
Il dit la même (chose) à l'éléphant aussi (Rennison 1986a: 40-1)

(iv) if transitive verb, no bound agreement to quote or transitive marking, despite its requirement elsewhere in language (Munro 1982: 306-7)

(v) if transitive verb, syntactically and semantically saturated by true object constituent

(21) Supyire (Senufo, Niger-Congo)

> ... some verbs [in RD constructions] ... require "anticipatory" pronouns in the main clause. ... With most verbs, the anticipatory pronoun, which in some sense refers to the "extraposed" complement, is put in direct object position. (Carlson 1994: 450)

kà *u* *ú* ***yí*** ***jwó*** *u* *ɲyii* *na* *na* {...}
DS 3S NAR ATC.PRO say 3S eye LOC Q
Then he said to him "... (Carlson 1994: 446)

4 Direct RD and linguistic mimesis

+ recurrent isomorphism of (components of) QIs with constructions used for non-RD functions (attested in 20 of 39 sample languages, see Appendix 2), comprising:

(i) Enacted human verbal behavior (= Direct RD)

(ii) Non-linguistic sound imitated by human speech organs

(iii) Ideophones, onomatopoeia, and similar linguistic signs

(iv) Representational gesture produced by (parts of) the human body

(22) Xhosa variety of Nguni (Benue-Kwa, Niger-Congo)

a. ***i-thi*** *i-Bhayibhile* {*mthande ummelwane wakho*}
9-QV 9-Bible {love your neighbor!}
the Bible says love thy neighbour (Pahl et al. (eds.) 1989: 294)

b. *in-komo* ***i-thi*** {*mhu-u-u*} *xa* *i-khala-yo*
9-cattle 9-QV {ON} when 9-bellow-REL
a cow says moo when it bellows (ibid.: 294)

c. *lo* *m-hlaba* ***u-the*** {*tyaba:*}
DEM:3 3-ground 3-QV:PFV {ID:be.flat}
this ground is perfectly flat (ibid.: 296)

d. *in-doda* *en-kulu* ***i-thi*** *xa* *i-hamba-yo* {imitation of manner of walking}
9-man REL:9-old 9-QV when 9-walk-REL
the old man walks like this (ibid.: 295)

(23) Zulu variety of Nguni (Benue-Kwa, Niger-Congo)

ama-doda ***ma-thi*** {counting hand gesture}
6-man 6-QV
Die mans is ... (getal) ... [the men are ... in number] (Eeden 1956: 748)

+ all four categories to be subsumed under the unitary concept of **mimesis** as a pre-linguistic representational mode in language that is partly opposed and parallel to the canonical **descriptive** mode relying on arbitrary speech signs, in line with Paivio's (1986) general "dual coding theory" - cf. Donald’s (1998: 49) narrow mimesis definition, which can accommodate mimetic expressions that regularly pertain (also) to language by broadening it from exclusively bodily kinesis to wider mimesis that includes human vocal sound signals:

> Mimesis is a **non-verbal [?]** representational skill rooted in **kinematic [?]** imagination - that is, in an ability to model the whole **body [?]**, including all its voluntary action-systems, in **three-dimensional space [?]**. This ability underlies a variety of distinctively human capabilities, including imitation, pantomime, iconic gesture, imaginative play and the rehearsal of skills. My hypothesis is that mimesis led to the first fully intentional representations early in hominid evolution, and set the stage for the later evolution of language.

5 RD and sentential complementation as a macro-domain

+ RD traditionally linked to “sentential complementation” based on a crude analogy with a simple pattern of transitive verb that co-occurs with a constituent and controls it
> however, heterogeneous nature of constituent types (noun, reduced complement clause, RD) and structural patterns across languages and lexemes call for two major revisions

(24)

a.	*Suddenly he noticed, 'She's kissing the frog!'*	**different types**
b.	*He suddenly noticed, she was kissing the frog.*	**of wide RD**
c.	*He suddenly noticed that she was kissing the frog.*	as opposed to
d.	*He suddenly noticed her kissing of the frog/her kissing the frog.*	**clausal complement**

(i) traditional “sentential complementation” is not a unitary domain but a disparate group of syntactic structures with a robust binary opposition of:
(1) desententialized “reduced” clauses, as in (24)d., as a more typical case of the syntactic “complementation” of a clause-like-unit that resembles/is analogous to a nominal object
(2) sentential “propositional” clauses, as in (24)a.-c., as non-nominal constituents

> The big surprise in these data was the polarization between 'Reduced' and 'Proposition'-type Complement Clauses. Since *all* Complement Clauses function as arguments, they should all presumably manifest the EVENT = OBJECT metaphor even more directly than Relative Clauses (which modify arguments), or than Adverbial Clauses (which modify events). Consequently, we should expect to find Complement Clauses particularly susceptible to nominalization.
>
> Instead, we find a systematic formal differentiation in the 29 languages which allow both nominalized and verbal strategies for subordination. In these languages, one type of Complement Clause is never obligatorily nominalized, while the other must be nominalized in 28 out of 29 languages ... This differentiation splits the Complement Clause category. It relegates 'Reduced' and 'Propositional' Clauses to opposite ends of the preference hierarchy for nominalization ... as if they were categorially more distinct from each other than from Adverbial or Relative Clauses. (O’Dowd 1992: 65-6, 71-2)

(ii) traditional “sentential complementation” minus reduced clausal complements (= “propositional” clauses) as a more robust unitary domain > **“Macro-RD”**
- organized semantic-functionally on a scale of different RD categories
- organized structurally by unitary or at least gradiently different encoding, e.g.:
- recurrent lack of strict distinction between direct RD and “sentential complementation” - evident at overall uniform syntactic structure of diverse RD categories
> e.g., many QI types are cross-linguistically not dedicated to either direct or non-direct quotes: more than 40% in the African sample (cf. Table 2 above)

- single language-specific verbs can span the entire meaning range of “Macro-RD” from direct speech on one end of the scale to visual perception on its other end

(25) Telefol (Ok, Trans-New-Guinea)

a.	{*unoón*}	*oó*	*akeeta*	*koo*
	{I'll go}	Q	AKANKALIN:NONFINITE	IND
	I must go			
b.	{*unoón*}	*oó*	*akeéla*	*koo*
	{I'll go}	Q	AKANKALIN:3S	IND
	He wanted to go			
c.	*boómi win* {*Fuúmeen*}	*oó*	*akeéla*	*koo*
	her name {PN}	Q	AKANKALIN:3S	IND
	He called her Fuumeen			
d.	{*unbí*}	*yoó*	*akeéla*	*koo*
	{I went}	Q	AKANKALIN:3S	IND
	He said [that] he went			
e.	{*únbú*}	*kalaá*	*akeéla*	*koo*
	{he went}	Q	AKANKALIN:3S	IND
	He saw her go [a.k.a. he saw that she went]			(Healey 1972: 217)

+ “Macro-RD” nevertheless syntactically diverse (cf., e.g., Collins and Branigan 1997) - correlates with functional scale of RD categories
> no attempt here to account completely for the syntactic diversity within “Macro-RD”, instead assessment of (direct) RD toward the “mimetic” end of the scale

6 A syntactic and functional account of (direct) RD

+ several syntactic approaches to RD - two older ones within clause linkage domain:
(i) Subordination (traditional approach): untenable (see §3)

(ii) Parataxis (Longacre 1985: 251-63, Halliday 1985, Everett 2005): also incompatible with various empirical facts (McGregor 1994: 67-8, Güldemann 2008: 230-1):
- QI as one of the alleged paratactic clauses absent, not clause-like, and intraposed in quote
- no important semantic effect of connecting QI and quote and changing their order
- frequent imbalance of QI and quote in terms of structural complexity

+ semanto-syntactic scope of quote often with higher textual scope, which is anchored by QI in ongoing discourse - direct quotes “like raisins in a pudding” (Haiman 1989: 134)
> syntactic relationship beyond canoncial clause linkage framework

(iii) McGregor (1994): "whole-whole relationship between a **picture** and its **frame**" (cf. Davidson (1984: 83-4) for terminological precedent)

> The picture, its frame, and the framed picture may be regarded as **distinct wholes, none of which is in any significant sense a part of some larger whole**. ... The picture and the frame are entities of very different characters: the picture represents some referent world - it is an icon. The frame clearly is neither an icon, nor does it represent something in the referent world. What it does is set the icon off from the context ... In doing this it also provides information as to how the icon is to be viewed ... (McGregor 1994: 77)

(iv) Güldemann (2008: 231-3): QI is a **tag** (in non-technical sense) on the direct quote > like (iii), compatible with syntactic "anomalies" of direct RD constructions like autonomy of quote, lack of QI, multiple or multi-positional QI, grammaticalization of QI etc. but it deals better with McGregor's questionable assessment (in bold above):

- QI tag and quote form a binary RD construction, so that they ARE a "larger constituent"
- QI tag alone is incomplete and depends semantically on quote, so that it IS a part of a whole rather than a "distinct [independent] whole"

> head-satellite relation of quote and QI reversed vis-à-vis traditional "complementation"!

> tag-model can also be transferred to a considerable portion of non-direct RD - many tokens of the "matrix of a complement clause" can be analysed synchronically as comment clauses (and develop diachronically to modifying clause satellites) as also observed in child language acquisition (Diessel and Tomasello 2001) and discourse analysis (Thompson 2002)

\+ tag-model concerning QI ties in with account of direct RD as mimesis in that such expressions may look like normal language but are in fact "alien" to principal descriptive mode of language and thus have first of all to be embedded and labelled within it

Within a simplified non-scalar approach, direct RD is in terms of structure and function the intersection of linguistic mimesis (as per §4) and "Macro-RD" (as per §5).

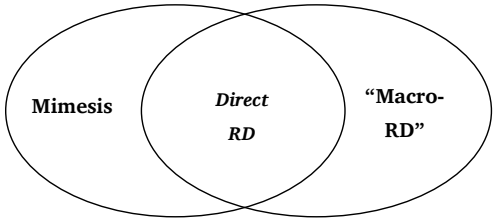

Figure 1: Direct RD vis-à-vis linguistic mimesis and "Macro-RD"

Abbreviations

ATC Anticipatory, COMP Complementizer, DECL Declarative, DEM Demonstrative, DET Determiner, DRD Direct reported discourse, DS Different subject, F Feminine, FUT Future, GOA Goal, IA Inanimate, ID Ideophone, IND Indicative, IPFV Imperfective, LOC Locative, M Masculine, MED Medial verb, NAR Narrative, OBJ (Direct) object, P Plural, PF Predication focus, PFV Perfective, PN Proper name, PRO Pronoun, PRS Present, PST Past, Q Quotative, QI Quotative index, QV Quotative verb, RD Reported discourse, REL Relative, REM Remote, S Singular, SBJ Subject, THET Theticity, V Verb

Appendix 2: The isomorphism of QIs and other non-RD-constructions in the African language sample

Language	RD	Sound	Ideophone	Gesture	QI-element involved
Kanuri	X	X	X	no info	quotative verb *n*
Ik	X	X	X	no info	quotative verb *kut*
Aiki	X	X	X	no info	quotative verb *ir*
Kunama	X	X	X	no info	quotative verb *u*
Dongola	X	X	X	no info	quotative verb *ɛ́*
Murle	X	X	X	no info	quotative verb *zi*
Khoekhoe	X	X	X	X	quotative (*nee-*)*ti*
Ju|'hoan	X	X	X	no info	quotative verb *ko*
Taa	X	X	X	no info	quotative verb *té'ẽ*
Tigre	X	X		no info	speech verb *bela* 'say'
Bedauye	X	X	X	no info	quotative verb *an*
Burunge	X	X	X	no info	quotative *ta*
Lamang	X	X	X	no info	quotative verb *gV*
Hausa	X	X		no info	quotative verb *cêe*
Izon	X	X	X	X	quotative *mọ́*
Ngbaka Ma'bo	X	X	X	no info	quotative verb *'bō*
Yoruba	X	X	X	X	adverb *báyìí* 'thus'
Birom	X	X	X	no info	quotative verb *ye*
Tikar	X	X	X	no info	quotative *lɛ*
Nguni	X	X	X	X	quotative verb *thi*

Appendix 1: African language sample and research results

Classification of sample languages (*NON-GENEALOGICAL*, GENEALOGICAL POOL)

1 *KHOISAN*: 2 Isolates (Hadza, Sandawe), 1 Khoe-Kwadi, 1 Kx'a, 1 Tuu

2 *NIGER-KORDOFANIAN*: 1 Mande, 1 Ijoid, 1 Dogon, 1 Kru, 11 Niger-Congo, (1 ATLANTIC, 2 GUR, 1 ADAMAWA, 1 UBANGI, 6 BENUE-KWA

3 *NILOSAHARAN*: 1 Isolate (Kunama), 1 Songhay, 1 Saharan, 1 Kuliak, 1 Maban, 1 Furan, 2 Central Sudanic (1 Lenduic, 1 Bongo-Bagirmi, 1 Nubian, 2 Nilotic-Surmic (1 Surmic, 1 Nilotic), 1 Kadu

4 7 Afroasiatic (1 Semitic, 1 Berber, 2 Cushitic, 3 Chadic)

Column content

1 Direct RD tokens

2 Direct RD tokens without QI in %

3 QI tokens (including non-direct RD)

4 QI tokens with non-direct RD in %

5 QI tokens with direct RD

6 QI tokens without predicativity vis-à-vis column 5 in %

7 QI tokens with marked predicativity vis-à-vis column 5 in %

8 QI tokens with overt speech-event reference vis-à-vis column 5 in %

9 QI tokens with quotative verb vis-à-vis column 5 in %

10 QI tokens with non-speech verb vis-à-vis column 5 in %

11 QI tokens with speaker reference vis-à-vis column 5 in %

12 QI tokens with addressee reference vis-à-vis column 5 in %

13 QI tokens with quote orienter vis-à-vis column 5 in %

14 QI tokens with quote orienter and bipartite structure vis-à-vis column 5 in %

No.	Language	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Koyra Chiini	126	2	303	59	123	0	0	100	-	-	100	51	11	11
2	Kanuri	254	22	202	2	198	8	13	22	79	-	95	20	80	10
3	Ik	121	26	97	8	89	1	0	9	91	3	99	34	97	16
4	Aiki	40	48	24	12	21	0	0	5	71	33	100	10	71	10
5	Fur	25	16	22	4	21	0	0	71	28	-	100	10	38	10
6	Ngiti	15	0	15	0	15	0	0	53	48	14	100	47	67	40
7	Ngambay	109	21	97	11	86	1	0	71	-	19	99	52	85	84
8	Kunama	126	0	129	2	126	2	0	3	97	-	100	36	98	3
9	Dongola	146	7	138	1	136	11	2	43	58	-	98	22	60	12
10	Murle	117	14	108	7	100	1	3	13	88	-	99	60	97	84
11	Anywa	72	3	85	18	70	0	0	98	-	1	84	18	81	81
12	Krongo	28	4	49	45	27	0	0	100	-	-	100	22	78	78
13	Hadza	129	50	64	0	64	77	28	14	-	36	100	3	78	0
14	Sandawe	73	16	64	5	61	79	0	21	-	15	98	2	87	8
15	Khoekhoe	145	19	124	6	117	18	21	96	-	2	72	8	90	90
16	Ju|'hoan	138	1	163	16	137	0	0	60	60	6	85	61	100	66
17	Taa	143	2	173	19	140	1	0	21	79	5	71	32	86	24
18	Tigre	72	0	81	11	72	3	0	98	-	1	99	54	8	8
19	Tamajeq	134	12	133	11	118	0	13	100	-	1	98	80	0	0
20	Bedauye	127	1	127	1	126	1	0	66	33	-	100	28	38	5
21	Burunge	256	25	195	1	193	67	0	30	-	8	53	12	69	5
22	Kera	58	14	103	51	50	66	0	30	-	12	90	20	96	30
23	Lamang	133	4	128	0	128	62	6	3	92	-	93	17	96	0
24	Hausa	212	6	242	18	199	0	2	8	89	3	100	6	95	6
25	Mandinka	212	15	203	11	181	3	89	10	92	-	100	46	91	34
26	Izon	57	5	72	25	54	11	2	87	-	-	89	24	59	46
27	Kisi	12	0	13	8	12	0	0	100	-	-	100	83	83	83
28	Donno Sɔ	30	47	65	75	16	69	0	31	-	-	62	56	0	0
29	Kouya	51	0	55	7	51	2	0	8	92	-	98	14	92	0
30	Supyire	17	6	31	48	16	0	0	88	-	10	100	31	44	44
31	Koromfe	54	13	87	46	47	6	0	94	-	-	98	15	64	64
32	Waja	99	9	102	12	90	91	0	9	-	-	26	4	100	9
33	Ngbaka Ma'bo	103	17	99	14	85	87	9	10	-	8	99	8	96	9
34	Ewe	29	14	60	58	25	4	8	52	63	3	96	25	96	56
35	Yoruba	17	41	94	89	10	10	0	30	67	-	100	10	80	10
36	Igbo	27	0	72	62	27	0	0	100	-	5	100	33	48	48
37	Birom	137	0	148	7	137	0	0	78	21	1	100	77	23	1
38	Tikar	9	0	27	67	9	0	0	89	-	11	100	77	100	100
39	Nguni	56	14	69	30	48	0	52	25	72	7	100	8	88	21

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