

Afranaph Questionnaire: Object Marking

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1 Introduction to the Phenomenon

All languages have specific linguistic forms to refer to things that are familiar from the discourse context—pronouns. In English, pronominal forms occur in same position that other kinds of objects do.

- 1) a. John read the book.
- b. John read **it**.

In many languages, however, instead of a free-standing pronoun like in English, a special form appears on the verb itself that refers to the familiar element in the discourse. These forms are often referred to as object clitics, object pronouns, or object agreement (depending on the author's analysis and/or theoretical persuasions): here we refer to these morphemes as object markers, which is a relatively theory-neutral term. In many Narrow Bantu languages they appear between the form for tense and the verb root itself. The example below comes from Swahili:

- 2) a. Juma a-li-soma ki-tabu [Swahili]
 1Juma SM.c1-PST-read 7-book
 'Juma read the book.'
- b. Juma a-li-**ki**-soma
 1Juma SM.c1-PST-**OM.c7**-read
 'Juma read it.'

For linguists, and syntacticians in particular, forms like the class 7 object marker in (2) are of great interest. Similar forms have been well-studied in European languages like Spanish, French, and Italian, and have been central to much theoretical syntax research over the past 30 years. Research has continued in many different languages and language families, and the languages of Africa offer many interesting language patterns that have not been previously documented. Most of the examples throughout this questionnaire are drawn from Narrow Bantu languages because this is the research domain of the main author, but in no means are our interests restricted to these languages, nor do we mean to give the impression that we only care about structures that mimic the Narrow Bantu constructions. These are simply the illustrations we have at hand for our discussions.

2 Relevant Notation, terminology

I want to summarize a couple of main kinds of notation that are used here, and may be useful to you. If these are already familiar to you, you can simply skip over this section.

Use the following symbols for acceptability judgments. You do not have to employ all of them for any given paradigm. If you leave a sentence you provide as unmarked, we take it to be ok unless your commentary about it suggests otherwise.

- ok = Perfect
- ? = A bit odd, but acceptable
- ?* = Pretty bad
- * = Unacceptable
- ** = Word jumble

Parentheses mean that words are optionally present without affecting acceptability

3) I can write this sentence (with or) without those words.

means that a sentence is anomalous or infelicitous

This means that this sentence is generally acceptable, just not in the particular context that is currently being referred to.

Commas mark intonational breaks

A comma in a data example means that the speaker pauses while they are speaking, or breaks from the normal/canonical intonation of the sentence.

4) As for John, I like that guy.

As indicated in the Afranaph guidelines for consultants, you are provided with four lines, including “original text”, which is a version of how the sentence would be pronounced, the morpheme breakdown line, which breaks each word into subparts separated by hyphens, the gloss line, which follows our glossing conventions on our website, and a translation line, where you render in English what the sentence means. For example:

John unzipped his bags.	
John un-zip-ed his bag-s	
John REV-zip-PST POSS.PRN.3 rd .sg bag-pl	
John unzipped his bags.	

You might choose to accompany this sentence with some commentary, and if you do it should appear as, for example,

Comment: I used REV for ‘reversative’ for a gloss because I was not sure what the correct gloss should be in the Afranaph system. Also *his* in this sentence could be John, but does not have to be.

Please keep in mind: for syntacticians, it is just as important to know which examples are unacceptable or unnatural as it is to know which examples are acceptable and natural. So it is important to include a thorough documentation both of what is acceptable and also what is not. Sometimes it is also useful to comment that a sentence is ambiguous in its interpretation, as in the case above, or that a sentence you might have expected to be ambiguous is unambiguous by comparison with a similar sentence. In addition, you may notice that a sentence is grammatical, but only in a very particular sort of discourse context. All of these scenarios are things that you can describe in a **comment** below an example sentence. Please do note that there are specific

questions in section 7 of the questionnaire about discourse contexts and interpretations of object markers.

3 Initial morpho(syntactic) documentation

This section explores the issue of documenting what different forms of object markers exist in your language.

- A. First, does your language have a noun class system? What are the noun classes?
- B. Does the form of an object marker vary based on noun class?
- C. Do object markers exist for all noun classes? Do object markers exist for 1st and 2nd person?
- D. In some languages (e.g. Kinyaka) some object markers occur as prefixes and others as enclitics. Do all object markers occur in your language occur in the same morphological/syntactic positions?

Please illustrate all of the answers to the above with example sentences.

For example, here is a basic listing of the different OM forms and an example of the OM in use from Lubukusu (Bantu, Kenya):

5) Forms of the OM (partial listing, Wasike 2007: 40):

Class	OM	Example: 'They'll take X'
1	mu-	ba-la- mu -bukula 'They'll take him/her.' 2SM-FUT-1OM-take
2	ba-	ba-la- ba -bukula 'They'll take them.' (<i>human</i>)
3	ku-	ba-la- ku -bukula 'They'll take it.'
4	ki-	ba-la- ki -bukula 'They'll take them.' (<i>non-human</i>)
5	li-	ba-la- li -bukula 'They'll take it.'
6	ka-	ba-la- ka -bukula 'They'll take them.' (<i>non-human</i>)
7	si-	ba-la- si -bukula 'They'll take it.'
8	bi-	ba-la- bi -bukula 'They'll take them.' (<i>non-human</i>)
9	ki-	ba-la- ki -bukula 'They'll take it.'
10	chi-	ba-la- chi -bukula 'They'll take them.' (<i>non-human</i>)

E. Are the forms of the object marker the same whether the object is a direct object or an indirect object? For example, in a sentence like *John gave her a gift*, would the form of the object marker for *her* be the same as it would be for a sentence like *John saw her*? Please provide example sentences that illustrate what is possible and also what is not possible.

F. Locatives

How are locative noun phrases formed in your language? And related, how is a location referred to in an anaphoric/pronominal sort of way? So instead of "I went to town," if you just wanted to say, "I went **there**." Is the equivalent of *there* an independent pronoun, a demonstrative, or a verbal affix? (or, something else ...)

If locations are marked on the verbal form itself, are they marked with object markers like those documented above, or with another morphological form? Many languages, such as Lubukusu, mark non-locative objects with prefixes (as above) but mark locative objects as enclitics, as shown below (useful verbs that take locative objects include: *come, go, arrive, put, place*, as well as a variety of verbs with applicative morphemes).

- 6) N-okesia-**mo** Lioneli [Lubukusu]
 SM.1sg-showed-**LM.c118** 1Lionell (Sikuku et al 2018)
 ‘I showed Lionell **it/there**’

If your language has markers like these for more than one kind of location (e.g. ‘in that place’, ‘from that place’, etc., or kinds of places) or if there is a marker meaning ‘in that direction’, please provide example sentences that illustrate these markers.

4 Can Object Markers co-occur with objects?

A major area of study for syntacticians is whether or not object markers can co-occur with noun phrase objects (and if so, what the conditions are on that co-occurrence). This section begins to explore these questions, though more questions will arise later.

For example, in Lubukusu co-occurrence of an object marker and an object is not possible in most discourse contexts:

- 7) #N-a-**mu**-bon-a Wekesa
 SM.1sg-PST-OM.c11-see-FV Wekesa
 *‘I saw Wekesa.’
 OK on the interpretation: ‘I DID see Wekesa!’

We’ll come back to the particular interpretation that makes co-occurrence possible in Lubukusu. Compare the Lubukusu facts, then, to Swahili, where any class 1 object must co-occur with (i.e. *double*) an object marker:

- 8) Ni-li-**m**-won-a Juma [Swahili]
 SM.1sg-PST-OM.c11-see-FV Juma
 ‘I saw Juma.’

To show yet another point of variation, in ditransitives the second object can co-occur with an object marker in Sambia, but only if the first object *also* co-occurs with an object marker:

- 9) a. N-za-nka ng’wana kitabu [Sambia]
 SM.1sg-PERF.DJ-give 1child 7book (Riedel 2009: 106)
 ‘I gave the child a book.’ (no OM)
 b. N-za-**m**-nka ng’wana kitabu
 SM.1sg-PERF.DJ-give 1child 7book
 ‘I gave the child a book.’ (OM for IO)

- c. N-za-**chi-m**-nka ng'wana kitabu
 SM.1sg-PERF.DJ- OM.cl10-OM.cl7-give 1child 7book
 'I have the child a book.' (OM for IO and DO)
- d. *N-za-**chi**-nka ng'wana kitabu
 SM.1sg-PERF.DJ- OM.cl10-give 1child 7book
 'I have the child a book.' (OM for DO but not IO)

Basic patterns of OM co-occurrence with objects

In what follows, we lay out a list of specific contexts to examine to see if and when OMs may co-occur with objects, and to help discover the syntactic and interpretive properties of these constructions if they exist. Please illustrate all descriptions with example sentences. In many instances we give models/examples of what kinds of sentences will help complete a particular task, but please keep in mind these are just models, and you don't need to restrict yourself to those particular kinds of example sentences.

A. Basic co-occurrence facts

In a transitive verb (like *hit*, *see*, and *cook*) can an object marker co-occur with an object? Please illustrate with example sentences.

B. Intersection with conjoint/disjoint patterns

An important piece of background information that is relevant to this discussion is whether a particular morphological pattern exists in your language. Specifically, does your language have a conjoint/disjoint distinction? Conjoint/disjoint refers to variation in the realization of verb forms (often in tense/aspect morphology) depending on whether the verb is the final element in a sentence or not. If you are unsure, feel free to interact with the Afranaph researchers about this. But if your language DOES have a conjoint/disjoint distinction, do you see a difference in the verbal form based on whether or not an object marker co-occurs with an object?

To illustrate, in Zulu (in the relevant tense) the disjoint morpheme (-ya-) appears on the verb when the verb is the final element in the verb phrase, but does not appear when some other element appears inside the verb phrase. When an object marker co-occurs with an object, critically, the disjoint morpheme must be present, suggesting that the object has moved outside the verb phrase in these instances.

- 10) a. Ngi-theng-a le moto. [Zulu]
 SM.cl1-buy-fv dem9 9car (Zeller 2012)
 'I'm buying this car.'
- b. *Ngi-**yi**-theng-a le moto.
 SM.cl1-**OM.cl9**-buy-fv dem9 9car
 'I'm buying this car.'
- c. Ngi-**ya-yi**-theng-a le moto.
 SM.cl1-**DIS-OM.cl9**-buy-fv dem9 9car
 'I'm buying this car.'

A similar pattern occurs in Tswana, where *-a-* is the disjoint marker (S31, Creissels 1996:112,113):

- 11) a. CJ Re-thusa Kitso. [Tswana]
1PL.SM-help Kitso (Creissels 1996:112,113)
'We help Kitso.'
- b. DJ Re-a-mo-thusa Kitso.
1PL.SM-DJ-1OM-help Kitso
'We help him, Kitso.'
- c. CJ *Re-mo-thusa Kitso.
- d. DJ *Re-a-thusa Kitso.

If there is a conjoint/disjoint distinction in your language, please place all sentences in the appropriate tense/aspect (or other relevant context) that shows this distinction for all sentences in this questionnaire. It is a quite useful diagnostic and we want to be sure

If your language has this distinction, please revisit your sentences from from A above – if the object marker can co-occur with the object in a transitive verb, does the verb appear in the conjoint form or the disjoint form in such sentences?

C. Interpretations of co-occurrence (i.e. doubling)

Again following on the results from section A above, if an OM can co-occur with the object (which we will call “doubling”), is there a particular interpretation that occurs when the object marker co-occurs with an object? As best as you can, please explain what interpretive difference the presence of the OM makes. This can be done by explaining the interpretation of a particular sentence directly, or (even better) by describing what kinds of discourse contexts or real-world scenarios would make that sentence feel most natural. Sentences that sound bad in some contexts sound natural in others, so it is sometimes helpful to explain the kinds of situation where a sentence sounds most natural.

Bukusu examples here.

Changana examples here

If there are different interpretations, are they affected by whether the verb is in the conjoint or disjoint form? (if your language has the CJ/DJ distinction)

A small note: it can be very difficult to think of these situations, but do your best! The Afranaph researchers will work with you to help you figure things out if you need help.

Moving forward, if there are particular interpretations that occur with doubling, documenting their presence/absence will be important moving forward in order to accurately document the sentences you describe. If you do have interpretive restrictions, please comment on their presence/absence in the data presented going forward.

D. Obligatory presence/absence of the OM

Is co-occurrence of an OM obligatory with any kinds of objects? Possible kinds of objects to look for this co-occurrence with are:

- Human objects (e.g. *I saw Mary, the teacher saw the students*)
- Non-human animate objects (*the children saw the dog, the hawk chased the chickens*)
- Free pronouns (in object position as objects) (e.g. *I OM-saw him*)

Are there any kinds of objects which never permit an OM to co-occur with it?

- Quantified nominals, such as ‘every man’, ‘two women’, e.g., ‘I saw-them three birds’ or ‘I saw-it each bird’ or ‘I didn’t see-them any birds.’
- Focused objects such as ‘only children’ or ‘only birds,’ for example, ‘I saw-them only birds,’ or ‘I saw-them only children.’

Please illustrate all of the above with example sentences.

As noted above, please use a tense that has CJ/DJ if your language has the distinction.

Likewise, if co-occurrence of the OM and the object includes a particular discourse interpretation (as addressed in C) please note whether any co-occurrences in this section require that interpretation, or if they do not.

Diagnostics for the position of doubled objects

Across languages, when object markers co-occur with objects a significant question that is raised is whether the object is in its canonical (i.e. normal or regular) position, or if it is dislocated (i.e. in a non-canonical object position). Languages frequently vary in this respect. A variety of tests are used to diagnose the position of an object, which will be illustrated here. All of these tests serve to compare the properties of a regular object with the properties of an object that co-occurs with an object marker.

E. Doubled objects and adverb positions

Test to see if the position of an object with respect to an adverb is the same when it co-occurs with an object marker. Temporal adverbs (like *yesterday* or *tomorrow*) and manner adverbs (like *quickly*, *slowly*, and *well*) are generally thought to demarcate the edge of the verb phrase, so if an object appears inside an adverb, it can be thought to be in its canonical position. This means that when an OM and an object co-occur in a sentence, adverbs can be used to test the position of the object itself.

12) a. N-a-bon-e baasomi likolooba **no OM** [Lubukusu]
1sgS-PST-see-PST 2-students yesterday
‘I saw the students yesterday.’

b. N-a-**ba**-bon-e likolooba , baa-somi **OM+Dislocation**
1sgS-PST-2O-saw-PST yesterday 2-students

‘I saw them yesterday, the students.’

c. *n-a-**ba**-bon-e baa-somi likolooba **OM, no dislocation**
1sgS-PST-2O-saw-PST 2-students yesterday

This suggests that in Lubukusu (without the special interpretation we’ll discuss below) an object marker cannot co-occur with an object in its usual position. Compare that with Swahili, where co-occurrence inside an adverb is acceptable:

13) Ni-li-wa-on-a wa-nafunzi jana [Swahili]
1sgS-PST-2OM-see-PST 2-students yesterday
‘I saw the students yesterday.’

See how your language patterns in these respects – when object markers co-occur with objects, do the objects occur in different positions than they normally do with respect to temporal and manner adverbs? Please illustrate with example sentences. Please use a tense/aspect with conjoint/disjoint, if your language has those patterns.

F. Prosodic breaks as a diagnostic for object positions

Another common diagnostic to see whether the co-occurring object is in its canonical position is to discern whether or not there is an obligatory prosodic break (a pause) between the verb and an object. Example (8) above shows that this is not the case for Swahili, but it is the case for Lubukusu (in neutral discourse contexts, where, for example, where the speaker is not trying to emphasize anything in particular):

14) N-a-ki-bon-a , e-mbwa [Lubukusu]
SM.1sg-PST-OM.cl9-see-FV 9-dog
‘I saw it, the dog.’

If OMs can co-occur with objects, please note in sample sentences whether there is a prosodic break between the verb and the object. Please use a tense/aspect with conjoint/disjoint, if your language has those patterns.

G. Raising verbs as a diagnostic of object positions

An additional environment to test the position of the co-occurring object is a specific class of verbs that take an embedded clause, but cross-linguistically the subject of this embedded clause is treated as if it were an object of the main clause (so-called raising-to-object verbs, or exceptional case-marking (ECM) verbs). These verbs are usually verbs like *want* and *expect* – this pattern is seen in (15)b here for Manyika Shona:

15) a. Ndi-ngo-da [kuti Tendai a-hy-e sadza.] [Manyika Shona]
1sgS-HAB-want that 1Tendai 1S-eat-SBJ 5sadza (Bax and Diercks 2012)
‘I want Tendai to eat sadza.’

- b. Ndi-ngo-**mu**-da **Tendai** [kuti a-hy-e sadza.]
 1sgS-HAB-1OM-want 1Tendai that 1s-eat-SBJ 5sadza
 ‘I want Tendai to eat sadza.’

If OMs can co-occur with objects, please give examples using raising verbs like *want* and *expect*, parallel to the examples given above for Manyika Shona (specifically, please note that the OM is on the main clause verb, and we are testing if it can co-refer with the embedded subject, *Tendai* in the example in (15)). Please use a tense/aspect with conjoint/disjoint, if your language has those patterns.

H. Tone patterns as a diagnostic of object positions

Yet another major diagnostic to consider is phonological in nature: tone patterns often distinguish objects in their usual positions from objects that are occurring in a dislocated (i.e. non-regular) position. Do you notice any difference in the tonal patterns between objects that co-occur with object markers and those objects that occur without an object marker? Please illustrate with examples, or if you are unable to transcribe/describe the tonal differences well, please do your best to explain the effects as you understand them.

5 How Many Object Markers can occur on a verb at once?

Languages vary with regard to how many object markers they will allow to occur on one verbal form. Lubukusu and Tiriki, for example, usually only allow a single object marker, as shown for Lubukusu below:

- 16) Wekesa a-a-atekh-el-a Sara by-akhulia [Lubukusu]
 1Wekesa 1S-PST-cook-APPL-FV 1Sara 8-food (Sikuku et al 2018)
 ‘Wekesa cooked Sara food.’

- 17) *Wekesa a-a-bi-mu-tekh-el-a
 1Wekesa 1S-PST-8O-1O-cook- APPL -FV
 Intended: ‘Wekesa cooked her it.’

- 18) Wekesa a-a-mu-atekh-el-a by-akhulia
 1Wekesa 1S-PST-cook-APPL-FV 8-food
 ‘Wekesa cooked her food.’

In contrast, other languages allow multiple object markers. Kuria (Bantu, Kenya/Tanzania), for example, has been documented to allow up to 5 object markers, and Sambaa has been documented to allow multiple object markers as well, as shown below:

- 19) N-za-**chi-m**-nka ng’wana kitabu [Sambaa]
 1sgSA-PERF.DJ-7OM-1OM-give 1child 7book (Riedel 2009: 106)
 ‘I have the child a book.’

A. The overall task: how many OMs can occur on a verb form?

How many object markers can occur on a verbal form in your language? In order to test this, you will have to identify ditransitive verbs and other kinds of complex verb forms (see what follows). Please illustrate everything that follows with example sentences.

B. Two OMs in ditransitives?

Try to test this both with verbs that are lexically ditransitive (for many Bantu languages, at least, these are verbs like *give* and *show*) as well as verbs that become ditransitive by virtue of adding applicative and causative morphology to the verb. (for example, some Bantu languages render the English ‘show’ meaning with a causative, as in ‘cause X to see Y’). In some languages there is more than one applicative marker, and so you will need to show whether or not they co-occur or whether multiple applicatives or causatives can appear on one verb form. For example, in some languages, the marker that introduces benefactive arguments is not the same as the one that introduces instrument or subject matter arguments, while in others, the same affix introduces both, but it is not clear if affixes of the same kind can occur two in a row. Here are some model sentences that you might try, but you do not need to limit yourself to these particular sentences.

- a) John gave it (the toy) to them (the children).
- b) John started it (the fire) for them (the students).
- c) John told them (people) about them (giraffes).
- d) John painted it (the house) with them (the brushes).
- e) John fed them (the chickens) it (the maize) (i.e. John made the chickens eat the maize)
- f) John made them (the children) carry it (the firewood).

C. More than 2 OMs in complex verb forms?

To test more than two object markers, you need a verb with at least three objects, for which you will probably need to create a more complex verb form, e.g. combining causative and applicative morphology, or combining an applicative form with a lexical causative (something like *John brought a gift to school for his teacher*). Here are some models for sentences that you might be able to form in your language, but adjust them as you see fit in order to test whether more than one OM is possible and also to see what order multiple OMs appear in.

- a) Mary brought it (the maize) there (to the kitchen) for them (the children).
- b) Mary made him (John) bring/buy/cook it (the meat) for them (the students).
- c) Mary had/made him (John) give/send it (the gift) to them (the people).

D. Maximum OMs on the verb?

Do you have a sense of the maximum number of OMs that can occur on a verb form? This may involve getting creative, and inventing a situation that is complex and requires specific discourse context. This is simply to engage the question of whether there is a clear upper limit on the number of OMs that can occur on a verb form.

An extreme example can have up to 6 object markers, as has been documented for Kinyarwanda (JD61, Beaudoin-Lietz et al. 2004: 183). Examples like this tend to be rare and hard for speakers to process, but informative to a linguist as to the upper limits of object marking.

- 20) Umugoré a- ra- na- **ha- ki- zi- ba- ku- n-** someesheesherereza
 1woman SM1-DJ-ALSO- OM16- OM7- OM10- OM2- OM2SG- OM1SG-
 read.CAUS.CAUS.APPL.APPL
 ‘The woman is also making us read it (book) with them (glasses) to you for me there (in the house).’

It is possible that you have no clear upper limit, and the main constraining factor is whether there is a verb that can take enough objects, or whether you can understand the sentence at all. That is fine, just document here what you find to be possible.

E. Does OM order matter? (only if multiple OMs are possible in your language)

Only answer this section if your language allows multiple OMs on the verb.

In sentences with multiple object markers, does the order of the object markers on the verb matter, or can they be re-ordered without changing the interpretation? If reordering produces other interpretations, please illustrate by giving examples that change the order of the pronouns in the answers to sections (B) and (C) above, and explaining the new interpretations. If the sentences are ambiguous without reordering, please be sure to indicate what the different interpretations are. If you had an answer to (D) that involved many OMs on a verb, don’t worry at present about testing ordering with that, focusing instead on the answers in sections (B) and (C).

The example from Setswana below shows that re-ordering OMs in some languages has no impact on interpretation (Marten & Kula 2012: 247).

- 21) a. Ke mo e ape-ets-e. [Setswana]
 1sm 1om 9om cook-appl-perf_{SEP} (Marten & Kula 2012: 247).
 ‘I cooked it for him/her.’
- b. Ke e mo ape-ets-e.
 1SM 9OM 1OM cook-APPL-PERF
 ‘I cooked it for him/her.’

In other languages, such re-ordering is impossible while retaining the same interpretation.

F. Does the kind of OM make a difference as to whether multiple OMs are possible?

Is there any difference in how many object markers can occur on a verb when one of the objects is a first person object marker? What about when one of them is a reflexive object (i.e. a reflexive marker on the verb)? Is the ordering affected if one OM is human and another is not? How about if one is plural and the other is not? You might try forming sentences of the following sort to illustrate this.

- a) My assistant paid her for me.
- b) Her assistant paid me here for her.
- c) They paid us for you (singular)
- d) They paid you (singular) for us.

- e) They criticized themselves for her
- f) They criticized her for themselves
- g) I criticized myself for her
- h) I criticized her for myself (for my own benefit)
- i) They bought them (the chickens) for them (the farmers).
- j) They brought them (the captives) for them (the hungry lions!).

To illustrate this, in Bemba a 1st person singular object marker can co-occur with another object marker, whereas this is not true of two 3rd person object markers (Marten & Kula 2012: 245).

- 22) a. *N-àlíí-mù-yà-péél-à. [Bemba]
 sm1sg-past-om1-om6-give-fv (Marten & Kula 2012: 245).
 Int: ‘I gave him it (e.g. water).’
- b. À-**chí-m**-péél-é.
 SM1-OM7-OM1SG-give-OPT
 ‘S/he should give it to me.’

Likewise, in Lubukusu two OMs cannot co-occur (as noted previously in (17)) but if one argument is a reflexive marker (RFM), it can co-occur with another object marker.

- 23) A-a- ba- e- ir- isy-a Lubukusu
 1S-PST-2O-RFM-kill-CAUS-FV (Sikuku 2012)
 ‘He made them_k kill themselves_k.’

G. Are locative objects treated differently?

If one of the objects is a location in a locative noun class, does this affect how many object markers can appear on the verb? Or does the locative object marker behave the same as non-locative object markers, being subject to the same restrictions? Some model sentences to try:

- a) She sold them there
- b) She sold them there for us

To illustrate, two OMs are unacceptable in Lubukusu, but if one is a locative enclitic, the sentence is acceptable:

- 24) a. N-okesia Lioneli lusimu [Lubukusu]
 1sgS-showed 1Lionell 11-phone (Sikuku et al 2018)
 ‘I showed Lionell the phone.’
- b. *N-a-mu-lu-okesia
 1sgS-PST-1O-11O-show
- 25) a. N-okesia Lioneli mu-nju
 1sgS-showed 1Lionell 18-house
 ‘I showed Lionell the inside of the house.’

- b. N-a-mu-okesia-mo
1sgS-PST-1O-show-18L
'I showed him it/there.'

H. Interaction of multiple objects?

If your language only allows a single OM, you can skip this question

Please use a tense/aspect with conjoint/disjoint, if your language has those patterns.

In ditransitive verbs, can object markers co-occur with either or both of the objects? There are a variety of possible patterns to test here. We refer to the two objects as the recipient and the theme in the schematics given below:

- John gave Mary the book
- SUBJ verb RECIPIENT THEME

In a sentence like this, then, you can test co-occurrence in many different ways (one object marker with either object, two object markers). Two sets of such patterns are included here. The subscripted 1s and 2s are simply to help to show which object marker corresponds to which object.

- | | |
|--|--|
| ▪ SUBJ verb RECIPIENT ₁ THEME ₂ | |
| ▪ SUBJ OM ₁ -verb THEME ₂ | One OM for RECIPIENT, no doubling |
| ▪ SUBJ OM ₂ -verb RECIPIENT ₁ | One OM for THEME, no doubling |
| ▪ SUBJ OM ₁ -verb RECIPIENT ₁ THEME ₂ | One OM doubles RECIPIENT |
| ▪ SUBJ OM ₂ -verb RECIPIENT ₁ THEME ₂ | One OM doubles THEME |
| ▪ SUBJ OM ₁ -OM ₂ -verb RECIPIENT ₁ THEME ₂ | Two OMs, doubles both |
| ▪ SUBJ OM ₂ - OM ₁ -verb RECIPIENT ₁ THEME ₂ | Opposite OM order, doubles both objects |

(There are even more possible variations in orders and patterns here for multiple-object verbs: if you notice anything please do report it, but otherwise we will explore this on a follow-up if it is relevant for your language.)

6 Can object markers occur in object questions? Object relative clauses? Object Clefts?

One point of variation between languages is whether an object marker can occur when an object is *extracted*, for example in an object question, an object cleft, or an object relative clause.

A. Can object markers occur in an object relative clause? Are object markers obligatory in an object relative clause? Language vary in these respects.

- Is there a difference in kinds of object markers in this regard? For example, can/must animate object markers co-occur even if others don't?
- How do locative objects behave in locative relative clauses? The same as or different from other object markers?

To illustrate, in Lubukusu object relative clauses, it is impossible to have an OM co-occur with the extracted object, as illustrated below in (26), but it is optionally possible for the locative marker on the verb to do so in (27).

26) Wekesa a-a-som-a [sii-tabu ni-syo n-a>(*si)-kula ___] [Lubukusu]
 Wekesa 1S-PST-read-FV 7-book COMP-7 1sgS-PST-(*7O)-buy
 ‘Wekesa read the book which I bought.’ (Sikuku et al 2018)

27) Mu-nju ni-mwo Peter a-la-bona-(**mo**) ba-ba-andu
 18-house COMP-18 1Peter 1SM-FUT-see-18LM 2-2-people
 ‘the house in which Peter will see the people’ (Diercks 2011)

Please note (as relative clauses and other extraction contexts can be very confusing) – what you are testing for here is the co-occurrence of an OM with the object that is the head of the relative clause, *book* in (26) and *in the house* in (27).

B. Can object markers appear in an object cleft? Are object markers obligatory in an object cleft?

- Is there a difference in kinds of object markers in this regard? For example, can/must animate object markers co-occur even if others don’t?
- How do locative objects behave in locative clefts? The same as or different from other object markers?

To illustrate, in Lubukusu object clefts, it is impossible to have an OM co-occur with the extracted object, as illustrated below in (28), but it is optionally possible for the locative marker on the verb to do so in (29).

28) A-a-ba Wekesa ni-ye n-a>(*mu)-bona [Lubukusu]
 1S-PST-be 1Wekesa COMP-1 1sgS-PST-(*1O)-see
 ‘It is Wekesa who I saw.’ (Sikuku et al 2018)

29) mw-a-ba mu-nju ni-mwo ba-ba-ana ba-a-funa-(**mo**) lu-u-saala
 18SM-PST-be 18-house COMP-18 2-2-child 2SM-PST-break-18LM 11-11-stick
 ‘It was in the house that the children broke the stick.’ (Diercks 2011)

C. Can object markers appear in an object question? Are they obligatory in an object question?

- Is there a difference in kinds of object markers in this regard? For example, can/must animate object markers co-occur even if non-animates don’t?
- Are there multiple question-asking strategies in your language? (i.e. *in situ* question words vs. *ex situ* question words)
- If so, test the possibility of object marking with both kinds of object questions.
- Test locative object markers as well as non-locative object markers

To illustrate, in Lubukusu object wh-clefts, it is impossible to have an OM co-occur with the extracted object, as illustrated below in (30):

- 30) Naanu ni-ye w-a-(*mu)-bona?
 1who COMP-1 2sgS-PST-1O-see
 ‘Who did you see?’

[Lubukusu]
 (Sikuku et al 2018)

Also test so-called D-linked questions, where you are asking about a specific reference set—translated to English as “which X” (which person, which field, etc). Is it possible to OM a wh-object if it is D-linked?

7 What discourse contexts allow for co-occurrence of an object marker and an object?

An area of research that is currently in need of much expansion in many languages is which discourse contexts allow for doubling an object marker and an object. In many instances where this kind of doubling is possible, it creates a very specific kind of interpretation that is only acceptable in certain discourse contexts. That said, the particular interpretations that are triggered by the co-occurrence of object markers with objects can vary widely between languages. If your language **never** allows co-occurrence of object markers and objects, you will not have anything to report in this section. But it may take special attention to notice that co-occurrence is in fact possible with very particular or special interpretations (for example, early versions of Sikuku et al 2018 claimed that OM-doubling was impossible, and they only discovered later that it *was* in fact possible in a very particular set of discourse contexts, as discussed in Sikuku et al 2018 and Sikuku and Diercks 2019).

A. Definiteness/Specificity

Does using an object marker together with the object create a ‘definite’ or ‘specific’ reading of the object? In Ruwund, for example, use of an OM together with an object creates a specific reading of the object (Woolford 2001):

- 31) a. ku-kimb muntu
 inf-look.for person
 to look for (any) person

[Ruwund]
 (Nash 1992: 565)

- b. ku-mu-kimb muntu
 inf-OM-look.for person
 to look for a/the person (speaker has a particular person in mind)

Often a discourse context where the object is familiar to the audience is necessary for a specific or definite object to occur, so consider the possibility of such a pattern in those contexts.

Please note if your language has a pattern similar to this, and illustrate with examples. Please use a tense/aspect with conjoint/disjoint, if your language has those patterns.

B. Topic/Focus (information structure)

In some languages, using an object marker together with an object is only possible if the object is already familiar from discourse context (i.e. not new or contrastive). Bax and Diercks (2012) report this for Manyika Shona, which is tested by considering a non-co-occurrence context like

32) and a co-occurrence context like (33), and comparing which of these sentences is acceptable to answers to different kinds of questions:

- | | | |
|-----|---|--------------------|
| 32) | Tendai w-aka-werenga bhuku nekukasika.
1Tendai 1fs-PST-read 5book quickly
'Tendai read the/a book quickly.' | Non-doubled |
| 33) | Tendai w-aka- ri -werenga bhuku nekukasika.
1Tendai 1fs-PST- 5OM -read 5book quickly
'Tendai read the (particular) book quickly.' | Doubled |

		Response:	
		<u>non-doubled</u>	<u>doubled</u>
<u>VP Focus</u>			
34)	Tendai w-aka-ite-nyi? 1Tendai 1fs-PST-do-what? 'What did Tendai do?'	✓ (32)	# (33)
<u>Object-focus:</u>			
35)	Tendai w-aka-werenge-nyi? 1Tendai 1fs-PST-read-what? 'What did Tendai read?'	✓ (32)	# (33)
<u>V-focus:</u>			
36)	Tendai w-aka-ite-nyi nge bhuku? 1Tendai 1fs-PST-do-what with 5book 'What did Tendai do with the book?'	✓ (32)	✓ (33)

The Manyika Shona pattern is that when the object is part of the focus of a sentence (here, the part that answers the question), it is unacceptable to have an object marker co-occur with the object. So when either the object itself is in focus (as in (35)) or when the VP is in focus (as in (34)), it is impossible to answer the question with an OM-doubled sentence.

This is just one example of many different kinds of concerns about the information status of the object as old, new, or contrasted information. If you think something like this is relevant for your language, you can replicate these tests, or talk with the Afranaph researchers about how to test for this in your language.

If your language has some kind of focus effects like this, please describe it and illustrate with examples. Please use a tense/aspect with conjoint/disjoint, if your language has those patterns.

C. Verum

One last pattern is that which occurs in Lubukusu (and mentioned above) is that using an object marker co-occurring with an object creates what is often called a verum reading (or a verum focus reading) of the sentence. This means that the sentence is a re-affirmation of the reported fact, so speakers are already familiar with the sentence and perhaps making a final point in an argument, or confirming for a listener that this is in fact the case.

37) A: Wekesa se-a-nywe-ele ka-ma-ruwa ta. [Lubukusu]
 1Wekesa NEG-1sgS-drink-PRF 3-3-beer NEG
 ‘Wekesa didn’t drink the beer.’

B: Wekesa a-ka-nywe-ele ka-ma-ruwa!
 1Wekesa 1sgS-6O-drink-PRF 3-3-beer
 ‘Wekesa DID drink the beer!’

It is possible that your language has a pattern like this, or perhaps some other pattern that is a distinctive interpretation, even if it doesn’t match this one precisely.

If your language has some kind of effect like this, please describe it and illustrate with examples. Please use a tense/aspect with conjoint/disjoint, if your language has those patterns.

D. Do other interpretive properties of the verb phrase affect doubling?

Some languages allow doubling only when there is *focus* on some other element in the verb phrase. Generally, *focus* is a semantic/discourse context where a phrase invokes potential alternatives. So, a wh-word and the answer to a wh-word are *focused* in this sense. In some languages, focus on an element in the verb phrase enables OM-doubling on an object.

38) Q: w-a-teekh-a ka-ma-kanda o-rieena ? Lubukusu
 2sg-pst-cook-fv 6-6-beans 2sg-how (Sikuku and Diercks 2019)
 ‘How did you cook the beans?’

A: N-a-ka-teekh-a ka-ma-kanda bwaangu
 1sg-pst-6om-cook-fv 6-6-beans quickly
 ‘I cooked the beans quickly.’ (not: ‘I DID cook the beans quickly.’)

Does your language have similar patterns? Please use a tense/aspect with conjoint/disjoint, if your language has those patterns.

Manner adverb (transitive sentence):

‘The children ate the ugali quickly.

Q: **How** did the children eat the ugali?

A: The children OM-ate the ugali **quickly**. (OM=ugali)

Time question

Q: **When** did you see those children?

I OM-saw those children **yesterday** (OM=children)

Focus via an “only” phrase

Phrases that are translated as “only” are usually focused as well, because they invoke alternatives (only this thing, not other things).

The teacher OM-gave the students [**only a task**] yesterday (OM=students)

E. Any other interpretive effects?

In the estimation of the Afranaph researchers, the interpretation of these co-occurrences between object markers and objects are relatively under-researched in most African languages. So it is quite possible that you encounter interpretive effects in your consideration of these patterns that are not described here (or anywhere else in the literature yet). So do your best to describe what you find even if it doesn't match previously-reported patterns, and the Afranaph researchers will work with you to figure out how to best describe the interpretive effects you are noting.

8 Interaction with other objects

A. Symmetry

It is a long-standing observation that in ditransitives (double object constructions), languages differ in how flexible they are in allowing objects to have canonical ‘object’ properties like being object marked, occurring in passives, and occurring in specific word orders. These different properties are laid out here for 2 main different kinds of constructions that normally take two objects (lexical ditransitives and benefactive ditransitives, often occurring with an applicative morpheme). Note that all of the causative examples below are approximations of what your language might do, as English does not use a morphological causative.

- In a lexical ditransitive construction (e.g. *give, show*) that has two noun phrase objects, can the objects appear in either order, or is one order of objects preferred? Please illustrate with examples.
- In a benefactive ditransitive construction (e.g. *cook food FOR someone*) that has two noun phrase objects, can the objects appear in either order, or is one order of objects preferred? Please illustrate with examples.

For each of these same kinds of sentences, is it possible to represent either object with an object marker on the verb? Please illustrate with example sentences. Please use a tense/aspect with conjoint/disjoint, if your language has those patterns.

- in a lexical ditransitive, can either object be object marked? (e.g. *I gave the children it (the gift) vs. I gave them (the children) the gift*)
- in a benefactive ditransitive, can either object be object marked? (e.g. *I cooked Mary it (dinner) vs I cooked her (Mary) dinner*)

For reference (and relevant for the next section as well), we will also ask about passives – another property that some languages have is allowing either object to be passivized, where as some languages allow only one of the objects to passivize. How does your language behave in this respect? Please illustrate with examples. Please use a tense/aspect with conjoint/disjoint, if your language has those patterns.

- in a lexical ditransitive, can either object be passivized? (e.g. *the children were given the gift vs. the gift was given the children*)
- in a benefactive ditransitive, can either object be passivized? (e.g. *Mary was cooked dinner vs. dinner was cooked (for) Mary*)

For all of these patterns, please use a tense/aspect with conjoint/disjoint, if your language has those patterns.

B. Can OMs occur in passives?

Another question that arises with respect to passive constructions in ditransitives is, when one object is passivized and becomes the subject of the sentence, whether the other object can be expressed as an object marker on the verb. Please illustrate with examples. Please use a tense/aspect with conjoint/disjoint, if your language has those patterns.

- a. The children were it-given (the gift). (cf. I gave the children the gift)
- b. Mary was it-cooked (dinner). (cf. I cooked Mary dinner)

For languages that allow passivization of either object, is it possible to do the same thing with the roles of the object switched? Please illustrate with examples.

- c. the gift was them-given (the children). (cf. I gave the children the gift)
- d. dinner was her-cooked (Mary). (cf. I cooked Mary dinner)