Adam Szczegielniak Harvard University szczeg@fas.harvard.edu

Clitic positions within the Left Periphery: evidence for a phonological buffer.*

Abstract:

In this paper I will argue that Polish auxiliary clitics provide additional evidence for adopting Rizzi's (1997) expanded structure of the Left Periphery (LP) by arguing that auxiliary clitics are a phonological manifestation of the morphological properties of the Fin⁰ head. This will be supported by examples of auxiliary clitics demarcating Focus/Topic constructions from material within IP. Further support will come from examples where auxiliary clitics interact with LF operations like reconstruction and reflexive interpretation. However, I will also show that syntactic operations over-generate possible outputs and that we need to postulate a phonological buffer which filters syntactic output.

Keywords:

Clitics, Reconstruction, Left Periphery, Second Position, Focus, Topic.

1. Introduction

This paper will deal with auxiliary clitic phenomena in Polish and second position clitics in Slavic. Polish has auxiliary and pronominal clitics, but neither group is considered to be second position (Booij & Rubach 1987, Borsley & Rivero 1994). My paper will concentrate on the properties of the auxiliary clitics. There are differences between the pronominal clitics and auxiliaries. Pronominal clitics in Polish are weak pronouns

-

1

^{*} I would like to thank Noam Chomsky, Lorie Heggie, Alec Marantz and David Pesetsky, as well as an anonymous reviewer for their invaluable comments. I would also like to thank the participants of the LSA

(following the classification of Cardinalletti & Starke (1994). Thus, for example, they do not require a phonological host. Their distribution is also less limited. For example, unlike auxiliary clitics, they can occur after the verb. Consequently, there is good reason to believe that pronominal weak pronouns can be treated as separate from auxiliary clitics.

The paper is organized as follows. Section 2 provides an outline of the proposal and an overview of the data. In section 3, I will provide an account of Polish auxiliary clitic distribution within Rizzi's LP. Section 4 contains proposals on the structure of a phonological buffer and arguments why it is needed.

2. The Proposal and Data

In this paper I will argue that auxiliary clitics in Polish are generated under a Finitness head (as proposed by Rizzi 1997). These clitics will be argued to cliticize only to material that is fronted to, or generated in Spec positions within the Left Periphery. Furthermore, I will examine the predictions my proposal makes as far as the interaction between cliticization and Topicalization and Focus movement is concerned. Finally, evidence from cliticization and relative clause formation will be evaluated and argued to support the proposal that auxiliary clitics are generated in Finitness. However, I will also argue that a purely syntactic account of their behavior is not possible. My proposal is that Polish auxiliary clitics are generated in the syntax. However, there is also a morphophonemic filter that limits their distribution. Thus, I assume that overt syntax overgenerates and that a filter has to be applied to its output.

I concentrate on the auxiliary clitics since they behave distinctly from pronominal ones, which, following the proposals in Cardinaletti and Starke (1994), would be better

Summer Institute Perspectives on Clitic and Agreement Affix Combinations workshop at the University of Illinois, Urbana-Champaign. However, all errors remain mine.

classified as *weak pronouns*. For example, clitic pronouns in Polish can receive stress (shown below as underlined), and can be coordinated, something auxiliary clitics cannot.

- (1) a. <u>Ci</u> dałem książkę a nie jej. You gave book and not her 'I gave a book to you and not her'
 - *b. My <u>śmy</u> poszli do kina we aux. 1st. pl. went to cinema 'We went to the cinema'
 - c. Mu i jej dałem książkę
 him and her gave book
 'I gave a book to him and her'
 - *d. Wczoraj **ście** i **śmy** poszli do kina¹ yesterday aux. 1st. pl. and aux. 2nd. pl went to cinema 'We and you went to the cinema'

Polish auxiliary clitics on the other hand have a more restricted distribution. They only occur in past tense formation (other tenses use non-clitic auxiliaries, or no auxiliaries at all) and serve as subject-verb agreement markers. Clitic auxiliaries can attach to the verb, or to elements preceding the verb. The only other occurrence of the agreement clitic is when we cliticize the copula 'to be' as in the examples (2). Examples (2a,b,d,e) show that the clitic copula's host can undergo movement within a simple clause. The truncated copula encliticizes to hosts within the CP that the copula is generated, hence (2f) is bad. Interestingly, it is much worse when we focus the Adjective *mqdry* but not make it a host as shown in example (2c). Finally, (2g) shows that in subordinate clauses the copula can attach to the complementizer (clitics are highlighted in bold).

(2) a. Ty jeste**ś** mądry you are+2nd. sg smart 'You are smart'

yesterday we+aux. 1st. pl. and you+aux. 2nd. pl went to cinema

3

¹ It has to be noted that with clitics hosted the example is perfectly fine (i) Wczoraj myśmy i wyście poszli do kina

- b. Tyś mądry. you+2nd. sg. smart 'You are smart'
- ??c. Mądry, tyś smart you+2nd. sg 'You are smart'
- d. Mądryś ty smart+2nd. sg you 'You are smart'
- e. Ty mądry**ś**you smart+2nd. sg
 'You are smart'
- *f. Ty**ś** wiesz, że ty mądry you+2nd. sg know that you smart 'You know that you are smart'
- g. On wie żeś ty mądry he knows that+2nd. sg you smart 'He knows that you are smart'

When not hosted by the verb, auxiliary clitics used in the formation of past tense encliticize to hosts preceding the verb. Their distribution is very similar to that of the identical in form clitic copula. The difference being that there is no full form associated with the clitic auxiliaries, whereas the copula has a non-clitic form. Another difference is that clitic auxiliaries cannot follow the verb, whereas on the surface it seems (example 2c) that the copula clitic can. However, I will argue that example (2c) is not a good example since the adjective functions there like the participle in past tense constructions.

Consider the distribution of auxiliaries when not hosted by the verb. Examples in (3) below all involve the same auxiliary clitic, the second person singular Subject-Verb agreement marker. Examples 3(a-e) show that the clitic $-\dot{s}$ can be hosted in a simple clause by the verb, the object or the subject, even in cases when the host has undergone

movement, or is non-canonically base generated.² Crucially, when the auxiliary clitic is hosted by an element following the verb, the construction is ungrammatical (3f-g). In unmarked constructions the auxiliaries attach to verbs, however, they may also attach to other constituents that precede the verb. The auxiliary in past tense constructions cannot be clause initial (3d) and is thus classified as an enclitic requiring a phonological host to its left. Booij & Rubach (1987:34) provide further examples of the clitic being hosted by pronouns, particles, conjunctions, complementizers, adverbs and nouns, provided they precede the verb (the subject 'ty' is in brackets to indicate the preference for pro-drop in constructions where it is not hosting the clitic).

- (3).(Ty) zobaczyłaś Janka a. you saw+aux 2nd. sg. John 'You saw John'
 - b. Tvś zobaczyła Ianka you+aux 2nd. sg. John saw 'You saw John'
 - Tyś Janka zobaczyła c. you+aux 2nd. sg. John saw 'You saw John'
 - d. (Ty) Janka zobaczyła you. John+aux 2nd. sg saw 'You saw John'
 - (Ty) Janka zobaczyłaś e. vou John saw+aux 2nd. sg. 'You saw John'
 - *f. Ty zobaczyła Jankaś you saw John+aux 2nd. sg. 'You saw John'
 - Zobaczyła tyś *g. Ianka you+aux 2nd. sg. John saw 'You saw John'

² I am not claiming here that there is a canonical word order in Polish, or whether non-canonical word orders are generated by movement or base generated. It has to be noted that in most cases the clitic has the same freedom to attach to a host regardless whether the clause is a simple one or not.

- h. Zobaczyłaś (ty) Janka saw+aux 2nd. sg. you John 'You saw John'
- *i. **Ś** zobaczyła Janka aux 2nd. sg. saw John 'You saw John'

Polish auxiliary clitics are not second position clitics and can be preceded by XP's and X^0 's. The most frequent cases are verb plus clitic or complementizer plus clitic combinations. Both can occur in simple and subordinate clauses.

- (4). a. Zobaczyłe**ś** (ty) Janka saw+aux 2nd. sg. you John 'You saw John'
 - b. Żeś (ty) zobaczył Janka that+aux 2nd. sg. you saw John 'You saw John'
 - c. On wie żeś (ty) zobaczył Janka he knows that +aux 2nd. sg. you saw John 'He knows that you saw John'
 - d. On wie że (ty) zobaczyłeś Janka he knows that you saw+aux 2nd. sg. John 'He knows that you saw John'

The auxiliary clitics can also break up constituents. However, this only takes place when constituents can be broken up independently by other material (for a discussion about similar facts in Serbo-Croatian, see Wilder & Ćavar 1994). This is important since a theory of clitic distribution which claims that clitic placement is part of some special phonological process triggered by their deficiency (say, for example, theories of Prosodic Inversion, Halpern 1995, Marantz 1989) would have a hard time explaining the correlation between the fact that clitics break up constituents that can only be broken up by other, non-clitic elements. This would prove especially significant if we find constructions where the clitic is inserted into a constituent that has been broken up by syntactic operations. For instance, a DP where not only is the clitic between the D⁰ and the NP, but the NP has also been displaced. We can see that Polish provides plenty of

such examples. Such data also supports the idea that clitic placement is done via syntactic process, since it is sensitive to the same constraints that govern the distribution of other elements. The examples listed below show that clitics can break up all sorts of constituents (a-examples) but they also show that this is only possible if these constituents allow other items to also break them up (the b-examples).

Example (5) shows that the auxiliary can attach to the possessive NP breaking up a DP in a way that cannot be usually done in English. However, as example (5b) shows, the clitic is not unique in that respect since overt subject can also be placed in the same position. Furthermore, we can have the overt subject splitting up the DP with the clitic still being hosted by the head D^0 (5c) – a construction that would be difficult to account for with theories like PI.

- (5) a. Ty Ewyś książkę kupił you Eve's+aux 2nd. sg. book bought 'You bought Eve's book'
 - b. Ewy ty książkę kupiłeś Eve's you book bought+aux 2nd. sg. 'You bought Eve's book'
 - c. Ewy**ś** ty książkę kupił Eve's+aux 2nd. sg you. book bought 'You bought Eve's book'

Co-ordination can also be broken up by a clitic auxiliary, however, again this can also happen when you use a reflexive, as shown in (6b).³

³ Even triple co-ordination seems to work like this, although it must be noted that the clitic seems to have more freedom in dividing up constituents. I have no idea how to account for this.

⁽i) [?]Ty z Jankiem **się** i Marię i Adamem spotkałe**m** you with John refl. and Mary and Adam met+aux 2nd. sg.

⁽ii) Ty z Jankiem**ś** i Marią i Adamem **się** spotkał you with John+aux 2nd. sg. and Mary and Adam refl. met 'You met with John, Mark and Adam'

- (6) a. Ty Janka**ś** i Marię widział You John+aux 2nd. sg. and Mary saw 'You saw John and Mary'
 - Janka się oglądało w telewizji i Marię John refl. watched in television and Mary 'We used to watch John and Mary on TV'

Usually, prepositions in Polish have to be adjacent to the complement DP (7c-d). However, multi-syllabic prepositions can host clitics (7a), and also can be non-adjacent to the complement DP (7b).

- (7) a. Wokółś domu biegał Around+aux 2nd. sg. house ran 'You ran around the house'
 - b. Wokół **się** domu biegało, a nie drzewa Around refl. house ran and not tree 'We used to run around the house not tree'
 - *c. Doś domu pobiegł to+aux 2nd. sg. house ran 'You ran to the house'
 - *d. Do ty domu pobiegłeś
 to you house ran+aux 2nd. sg.
 'You ran to the house'

The example below shows that negation cannot be separated from the verb by anything, be it the auxiliary clitic, or a reflexive.

- (8) *a. Ty nieś zjadł chleba you not+aux 2nd. sg. eat bread 'You did not eat bread'
 - *b. Ty nie się zatrułeś chlebem you not refl. poison bread 'You did not poison yourself with bread'

Idiom Chunks are another example of a constituent that cannot host clitics, and which, at the same time, is 'unbreakable' by other elements. Example (9a) shows that clitics cannot be hosted by material within an Idiom Chunk, but as (9b) shows there seems to be a general prohibition to do that.

- (9) ??a. Sołwa**ś** rzucał na wiatr words+aux 2nd. sg. throw at wind 'Your words did not have any impact'
 - *b. Słowa ty rzucałeś na wiatr Words you threw+aux 2nd. sg. at wind 'Your words did not have any impact'

The above examples show that the auxiliary clitics can break up constituents but only in cases when these constituents can be broken up by other material. Thus, negation (8) and Idiom Chunks (9) cannot be separated by clitics or other material. Interestingly, examples (7c,d) show that prepositions can host clitics but only when they can be separated from their complements by other material. This seems to support the idea that clitic placement is a syntactic process in Polish.

One last property of auxiliary clitics in Polish is that they do not undergo clitic climbing. Thus (10) is bad. However, I will show that there are exceptions to this. On the basis of examples in relative clauses, I will modify this claim and argue that clitics cannot climb out of a CP unless they reconstruct. For now, let us assume that clitic cannot climb out of the CP.

*(10) On zawsześ wiedział [CP że ty poszedł do kina] he always+aux 2nd. sg. knew that you went to cinema 'He always knew that you went to the cinema'

The properties of Polish auxiliary clitics can be summarized in the following way:

- (11) Auxiliary clitics in Polish must:
 - a. encliticize;

⁴ A reviewer has pointed out that the level cohesion of idioms here is unusual. There are idioms where it the level of cohesion is less pronounced, however, these are not the interesting cases. However, even in the case of the idiom discussed there are elements that can intervene, for example negation. This can be easily accounted for however, if we assume that negation is generated above the vP, whereas in order to have a subject intervene between the verb and the object you have to have some sort of movement. I will argue that this is also why the clictic cannot be hosted by the object since it would have to move above Fin.

- b. attach to a host positioned linearly in front of the verb of which they are subject-verb agreement markers⁵;
- c. be contained in the clause containing the verb on which they mark agreement;
- d. not break up elements that cannot be broken up by other elements.

Items (11c) and (11d) require some additional explanation. In proposing (11d), I adopt the assumption that broken-up constituents are generated by some syntactic process, either movement or base generation. For our purposes, it is irrelevant what the nature of this process is. What is crucial is that it applies indiscriminately to clitics and non-clitic elements. The claim in (11c) is supported by the fact that Polish auxiliaries cannot undergo clitic climbing out of the clause they were generated in. This is shown in example (10) where the clitic is hosted by an element that is outside the CP in which the clitic marks subject-verb agreement.

Hence we are faced with a question as to how best account for the distribution of auxiliary clitics. I will use the data presented above to argue for a certain model of the Left Periphery proposed by Rizzi (1997), and will propose that auxiliary clitics in Polish can be best described as being in Fin.

3. The Analysis

I adopt a model of Left Periphery phrase structure proposed in Rizzi (1997). It presumes that there are two distinct heads that carry features like subject-verb agreement or tense. The traditional one is Tense. However, Rizzi proposes that the phrase structure of a

⁵ They can also attach to the verb itself. I will not discuss cases of the verb hosting the clitic since following Embick (1995), I assume that these cases are really instances of the verb being fully inflected and there are no clitics present. This is supported by the fact that, when on the verb, the auxiliaries behave phonologically like affixes (see also Booij & Rubach 1987). Similarly to Polish affixes, they trigger lexical phonological rules. However, this only happens when the verb is their host. Consequently, I will assume that Polish can have two types of past tense: using a fully inflected verb, and using auxiliary clitics hosted by items other than the verb.

clause has at least two domains: the IP domain, where the Tense head is located, and the Left Periphery (LP) domain, where the CP head is located. LP also has a head that can carry tense/agreement features albeit in a truncated form, Rizzi calls it Finiteness (Fin). I will propose that Polish clitic auxiliaries in constructions where they are not hosted by the verb are generated in Fin. If we assume that there is no separate AGR head, then Fin and Tense are the only natural candidates to host a subject-verb past tense number/person marker.

(12) Structure of the Left Periphery (following Rizzi 1997)

Why argue that auxiliary clitics are in Fin and not Tense? After all they are subject-verb agreement markers and Tense is the locus of agreement features. First of all, let us consider how the auxiliary clitics interact with the CP or IP system.⁶ Interaction with Focus and Topic would strongly suggest that auxiliary clitics are part of the CP system.⁷ Consider the following examples (focal stress is indicated by underlining):

- (13) a. <u>Ty</u> że**ś** kupił książkę a nie Maria you that+ aux 2nd. sg. bought book but not Mary 'You and not Mary bought a book'
 - b. <u>Książkę</u> żeś kupił a nie koszulę book that+ aux 2nd. sg. bought but not shirt 'You bought a book and not a shirt'

Examples (13a,b) show that an XP can occupy a Spec-Focus position and be followed by a complementizer hosting the clitic. I will argue that this complementizer is located in Fin and not C. This is supported by examples like (14) where we see two complementizers present in one clause.

⁶ I am going to use the notion Left Periphery and CP domain interchangeably.

⁷ I only discuss contrastive focus since the position for non-contrastive focus is below the verb and auxiliaries cannot be hosted by elements following the verb. For Rizzi (1997) the Focus position in LP is a contrastive focus one.

- (14) a. On wiedział **że** <u>książkę</u> że**ś** kupił a nie koszulę He knew that book that+ aux 2nd. sg. bought but not shirt 'He knew that you bought a book and not a shirt'
 - *b. On wiedział żeś <u>książkę</u> że kupił a nie koszulę He knew that+ aux 2nd. sg. book that bought but not shirt 'He knew that you bought a book and not a shirt'

Example (14b) shows that the order of the two complementizers is fixed. I propose that the non-clitic hosting complementizer is in C and the lower one in Fin since it hosts inflectional material. This will imply that Fin can have a structure where there are two lexical items. On the other hand, we can argue that what we really have here is a complementizer that is inflected. One argument against the latter hypothesis is that the complementizer is only inflected in past tense constructions and ones involving copulas, exactly the same environment where the auxiliary clitic appears. ⁸ I will not discuss this issue here.

Evidence for a Focus and Topic head interacting with the clitic can be found in examples (15-17). Thus, the clitic can be hosted by the subject functioning as a Topic (example 15 vs. 16), but it can also be hosted by the lower complementizer with Topic and Focus above (example 17).

- (15) Książkę tyś kupił a nie koszulę book you+ aux 2nd. sg. bought but not shirt 'You bought a book and not a shirt'
- *(16) <u>Książkę</u> ty**ś** kupił a nie Maria book you+ aux 2nd. sg. bought but not Mary 'You bough a book and not Mary'

⁸ Conversely, if we propose that the complementizer is inflected, like the verb when it hosts the clitic, it would make it similar to subjunctive complementizers which obligatorily host the clitic. Polish non – subjunctive complementizers would then be argued to have the option to either occur inflected or bare like verbs. When inflected, they would occur in Fin, when uninflected the complementizer would be located in

C.

(17) <u>Ksiażke</u> ty że**ś** kupił a nie Maria book you that aux 2nd. sg. bought but not Mary 'You bough a book and not Mary'

Furthermore, we have constructions where the clitic can be hosted by a complementizer in Fin. In example (18) Spec-Topic is occupied by the subject, the object is in Spec-Focus and the non-inflected complementizer is in C.

(18) On wie że <u>książkę</u> ty że**ś** kupił a nie Maria He knows that book you that aux 2nd. sg. bought but not Mary 'You bough a book and not Mary'

This distribution can be accounted for if we assume that the clitic is in Fin, where it can be optionally hosted by the complementizer. If there is no complementizer in Fin, the clitic is hosted by the Topic, or if that is not present, by the Focus, or items in Spec-CP, like wh-words.

3.1 Reconstruction Effects

Another example of interaction between cliticization and Focus/Topic formation can be observed in Polish Relative clauses. The head noun can host a clitic from within the clause but only if it receives a Focus interpretation (depicted by underlining).

- (19) Ja odwiedziłem miasto, które (ty) znałeś
 I visited city which (you) knew aux 2nd. sg.
 'I visited a city that you knew'
- ?(20) Ja odwiedziłem <u>miastoś</u>, które (ty) znał I visited city+aux 2nd. sg. which (you) knew 'I visited a city that you knew'
- *(21) Ja odwiedziłem miastoś, które (ty) znał I visited city+aux 2nd. sg. which (you) knew 'I visited a city that you knew'

As I mentioned, the clitic usually cannot raise out of the CP it is generated in. The above examples contradict this. However, I will argue that the generalization has to be only

slightly modified, namely the auxiliary clitics can climb, provided they reconstruct. We can find evidence of obligatory reconstruction of clitic hosts that underwent movement. For example, Polish has subject-oriented reflexives. In the example below, the reflexive in bold can only be bound by the most local subject DP *Robert*.

(22) On chciał by Robert kupił zdjęcie **siebie** he wanted that Robert buy picture self 'He wanted Robert to buy a picture of himself'.

Consider Polish relative clauses, where the reflexive has been relativized. It can host a clitic, provided it receives focus. However, when the reflexive *siebie* hosts the auxiliary clitic, the reflexive is bound not by the most local subject *Janek*, but by the one within the relative clause, *ty* 'you'. Any other interpretation is impossible.

(23) Janek₂ zobaczył zdjęcie *siebie***ś**₁ które ty₁ kupił Janek saw picture self+aux 2nd person sg. which you bought 'Janek saw a picture of *himself/yourself which you bought'

The example below shows that in cases when the clitic is within the relative clause and not hosted by the reflexive, the interpretation is different. The reflexive can only refer to the most local subject *Janek* and cannot refer to the subject of the relative clause.

(24) Janek₂ zobaczył zdjęcie *siebie*₂ które ty**ś**₁ kupił Janek saw picture self which you+aux 2nd person sg. bought 'Janek saw a picture of himself/*yourself which you bought'

The above contrast provides further evidence that clitics interact with LF interpretation. First of all, they seem to occur in environments where their XP hosts are in LP. Furthermore, they interact with the LF interpretation of reflexives.

Another example of clitic interaction with LF processes involves scope interpretation. We know that clitic climbing forces reconstruction from the following facts (based on Fox 2000):

(25) Jak wiele zdjęć Stalina Marek chciał byś ty kupił? how many pictures Stalin Marek wanted that+cl you buy 'How many pictures of Stalin did Mark want you to buy?'

The above can mean:

- A. How many concrete pictures of Stalin = wiele 'many' < kupil'bought'
- B. How many pictures of Stalin in general = kupil 'bought' < wiele 'many' Polish Clitics can climb with wh-words. When attached to 'how many' they tend to disambiguate the reconstruction context.⁹
 - (26) [Jak wiele zdjęć Stalinaś]₁ Marek chciał byś ty kupi_ t₁ how many pictures Stalin+cl Marek wanted that+cl you buy 'How many pictures of Stalin did Mark want you to buy'

The above can only have the meaning in B, *kupit* 'bought' < *wiele* 'many'. These examples show that LF interpretation is influenced by clitic attachment.

How is it possible for the clitic to raise out of the CP it is generated in? I propose that auxiliary clitics can encliticize to hosts that are in LP (Left periphery) even if these XP's then undergo further cyclic movement. In a sense the clitic is piggybacking on its host. In a multiple Spell Out system, as in the one proposed by Chomsky (1999), this makes sense. The CP is a phase and spell out takes place at phases; if the clitic does not have a host by the time CP is processed (C being the topmost head of LP) then the derivation crashes at PF. Thus we have a system where the clitic is generated in the syntax and at Spell-Out it cliticizes to a host in LP. However, since we have a multiple Spell-Out system, the clitic plus host combination can undergo further syntactic operations, like movement. This yields interesting results where PF operations like cliticization interact with LF operations like reflexive, or scope interpretation.¹⁰

¹⁰ A separate question is why reconstruction is optional in cases when a moved XP is not a clitic host. One possible account is that wh-constructions as well as relative clauses in Polish can be generated via move or Merger. Since the clitic has to be 'picked up' by the XP, these constructions inherently have to involve movement. Thus there is no optional Reconstruction.

⁹ It has to be noted that there is a clitic doubling phenomenon occurring. I am not certain why examples with clitic doubles are preferred here, aside from the fact that the subjunctive complementizer has to host the clitic when present.

Although the auxiliary clitic in Fin⁰ is a marker for the 'border' between the domain of IP and Left Periphery domains, it has to be noted that the clitic is not necessary for there to be a Focus/Topic structure. Example (27) is fine without any auxiliary clitic.

(27) <u>Książke</u> kupiłeś a nie koszulę book bought+ aux 2nd. sg. but not shirt 'You bought a book and not a shirt'

Thus it is not the case that XP movement to LP is some sort of 'Last Resort' operation aimed at saving the derivation. ¹¹ Furthermore, the clitic can occur without a Topic/Focus host.

(28) Żeś poszedł do kina that+aux 2nd. sg went to cinema 'You went to the cinema'

However, it remains to be answered whether examples like (28) involve an inflected complementizer and, or whether the complementizer is generated in Fin in order to provide a host. Regardless of this however, it seems to be correct to claim that the clitic is hosted by elements within LP.

4. Phonological Filter

However, if we propose that the auxiliary clitic is generated in Fin then the question arises why the clitic cannot be clause initial? A possible answer is that it is an inherent property of Polish auxiliary clitics not to be clause initial. However, I think that we would be missing a certain generalization here. It cannot be that phonologically reduced elements, like clitics, cannot be sentence initial in Polish – pronominals as well as reflexives can occur sentence initially, although the former are truncated forms of full pronouns.

 11 See Bański and Franks (1998) for an account of Polish auxiliary clitics where 'Last Resort' is utilized.

16

- (29) a. **Mu** kupiłem książkę him(cl) bought book 'I bought him a book'
 - b. **Się** zakochałem w niej refl. love in her 'I fell in love with her'

It could be argued that weak pronouns are not deficient enough and thus can occur sentence initially. Interestingly enough, however, they are deficient enough not to occur at the end of clauses:

??(30) Kupiłem książkę **mu** bought book him(cl) 'I bought him a book'

I will propose an alternate account of why auxiliary clitics cannot be clause initial. I propose that syntactic operations are later filtered by phonological constraints that, as is the case of Polish auxiliaries, prohibit clitics from being clause initial.

In closely related languages, like Slovak or Czech, the same auxiliary clitic is a second position one – it also cannot be clause initial, and, moreover, it can only be proceeded by one XP or X^0 , unless X^0 is also a clitic. In second position languages a prosodic argument might be applicable (see Prosodic Inversion). That claim would be harder to maintain for Polish since we would have to argue that PI applies selectively to some clitic positions but not to others. Moreover, I have mentioned that Polish auxiliaries can only be hosted by an XP when there is a Topic/Focus reading of some sort imposed on that XP. A phonological operation like PI (Halpern 1995, Marantz 1989) cannot have such semantic consequences, even in a multiple Spell-Out system.

An OT account proposed by Anderson (1997) also has its problems. For one, I have shown that auxiliary clitics interact with syntactic operations and LF interpretation. In Anderson's model there is no room for such interactions. Furthermore, Anderson (1997) has some inherent problems pointed out by Bader (1998). One example is the problem with prohibiting second position clitics from piling up at the end of a clause (CP). This

piling up would ensure that no Integrity constraint is violated, Non-Initial would also be not violated, and Edge-Most would be preserved since clitics would follow one XP, namely the entire CP itself. Thus, none of the constraints would be violated and this would be the most optimal derivation.

Although Polish auxiliaries are not second position, it is evident that there are restrictions on their distribution. There seem to be three major facts that have to be accounted for: (i) auxiliary clitics cannot be clause initial, (ii) auxiliary clitics cannot attach to hosts that linearly follow the verb, (iii) auxiliary clitics have XP hosts that are Focused or Topicalized. The Focus/Topic facts can be accounted for by assuming that auxiliaries are generated in Fin and that XP material hosting the clitic is raised to Spec-Top or Spec-Foc. We can also account for (ii). Even if we assume that verbs in Polish can raise to head positions in the Left Periphery, then we can still argue that, according to the Head Movement Constraint, the verb has to pass through Fin and incorporate the clitic. Thus, there is no possible derivation where the verb is above the clitic. What remains to be accounted for is why clitics cannot be clause initial. I propose that clause initial clitics can be generated in the syntax and what rules out these structures is a morphological filter of the type proposed in Bošković (1995).

(31) PF Filter:

*Clitic ...

The above filter reflects one important generalization Anderson (1997) tried to capture – clitics 'conspire' to be as close to edge of a clause without being actually initial. ¹² I propose that this is an interplay of two effects – the syntax generating them high up in LP and a phonological filter excluding derivations when clitics occur first. In essence, I assume that syntax over-generates and a filter rules out structures that do not conform to PF restrictions.

¹² A reviewer has pointed out that the inability to have initial clitics can also be connected to ECP effects. This is an interesting possibility worth further research, however, because of space limitations, it is beyond the scope of this paper.

In the system outlined in this paper I propose that syntactic operations over-generate the amount of structures permissible in a given language. This is possible since there exists a phonological filter that filters these structures before they are sent to PF.

References:

- Anderson, S. R. 1997. "Towards an Optimal Account of Second Position Phenomena".In Lizanne Kaiser, (ed), Yale A-Morphous Linguistics Essays: Studies in the Morphology of Clitics. Dept. of Linguistics, Yale U.
- Bański, P. and S. Franks. 1998. Approaches to 'schizophrenic' Polish Person-Number markers. In FASL 7 Proceedings, K. Dziwirek, et. al. (eds.), 123-145. Michigan Slavic Materials.
- Bader, C. 1998. The Syntax and Phonology of Serbo-Croatian Clitic Placement. MS MIT.
- Booij, G., and J. Rubach. 1987. "Postcyclic versus postlexical rules in lexical phonology". *Linguistic Inquiry* 18:11-44.
- Borsley, R. and M-L. Rivero. 1994. "Clitic auxiliaries and incorporation in Polish". Natural Language and Linguistic Theory 12,373-423.
- Bošković, Ž. 1995. "Participle movement and second position cliticization in Serbo-Croatian". *Lingua* 96, 245-266.
- Cardinaletti A, and M.Starke. 1994. The typology of structural deficiency. On the three grammatical classes. MS. University of Venice.

Linguistics.

- Embick, D. 1995. Mobile inflections in Polish. NELS 25 Proceedings.
- Fox, D. 2000. Economy and Semantic Interpretation. MIT Press.
- Halpern, A. L. 1995. *On the placement and morphology of clitics*. Stanford: CSLI Publications.
- Marantz, A. 1989. "Clitics and Phrase Structure". In Mark R. Baltin and Anthony S. Kroch, (eds), In *Alternative Conceptions of Phrase Structure*. U. of Chicago Press.
- Rizzi, L. 1997. The Structure of the Left periphery. In Liliane Haegeman (ed) *The New Comparative Syntax*.
- Wilder, C and D.Cavar. 1994. "Long Head Movement? Verb Movement and Cliticization in Croatian". *Lingua* 93, 1-58.