On the syntax and prosody of Italian pseudo-echo questions

**Introduction.** The aim of this paper is to offer a unified account of the syntactic and prosodic properties of Italian pseudo-echo questions (henceforth PEQ). As shown in (1B), in PEQs the \textit{wh}-word appears in sentence initial position, making PEQs at first sight to look similar to WhQs (c.f. Sobin 2010). However, as shown in (1B') PEQs and WhQs differ with respect to the discourse contexts they can appear. PEQs cannot be uttered out of the blue and express surprise as in (1B) or request for repetition of the word, which the \textit{wh}-word stands for.

(1)\textbf{A:} Gianni mi ha appena detto che in Cina ha mangiato cavadelle. Gianni to.me has just told that in China has eaten grasshoppers ‘Gianni just told me that in China he ate grasshoppers.’

\textbf{B:} (Eh?!)

\textbf{Cosa ha mangiato?} \textbf{[PEQ]}

\textbf{B'}: #Cosa ha mangiato? \textbf{[WhQ]}

‘Eh?! What did he eat?’

On the basis of experimental evidence we show that PEQs and WhQs have different prosodic properties and we argue that they also differ with respect to their syntactic structure (contra Sobin 2010). The data argue in favour of a one-to-one mapping between syntactic and prosodic structure (Selkirk 2001).

**Prosody.** A production experiment was run to investigate the prosodic properties of PEQs in comparison to WhQs (10 speakers of Standard Italian). We included three types of \textit{wh}-words (\textit{cosa} ‘what’, \textit{come} ‘how’, \textit{quanto} ‘how much’) and three sets of seven verbs; each set of verb was paired with a \textit{wh}-word. This resulted in 42 target sentences per participant. The target sentences were presented in context, thus we included contexts triggering PEQs and WhQs respectively. We obtained duration and F0 data. In PEQs the \textit{wh}-word is significantly longer than the \textit{wh}-word in WhQs in all three types of \textit{wh}-words (\textit{cosa} 192ms vs. 209ms, \textit{t} = 2.547, \textit{p} = 0.014, \textit{come} 189ms vs. 168ms, \textit{t} = 3.457, \textit{p} = 0.001, \textit{quanto} 248ms vs. 217ms, \textit{t} = 3.365, \textit{p} = 0.001). In PEQs the \textit{wh}-word is flat (L*) and there is a rise at the accented syllable of the verb that carries the nuclear pitch accent (L*H) followed by a H\% boundary tone. In WhQs the \textit{wh}-word carries the nuclear pitch accent (L*+H) and is followed by a low plateau with a L-phrase accent followed by a H\% (61\%) or a L\% boundary tone.

**Syntax.** We argue that \textit{wh}-words in PEQs carry different syntactic features ([+wh],[-foc]) than \textit{wh}-words in WhQs ([+wh],[+foc]), in line with Den Dikken (2003). Therefore occupy a different syntactic position (contra Sobin 2010). We assume that \textit{wh}-words in Italian WhQs move to SpecFocP in a Spec-Head configuration (Rizzi 1997). Crucially \textit{wh}-words in Italian WhQs can precede a topic, as shown in example (2). Contrarily, \textit{wh}-words in PEQs cannot precede any type of topic as shown in examples (3)-(5).

(2)\textbf{A:} Tutti parlano di questa storia della \textit{lettera} scoperta da Gianni. Comunque tutti quei discorsi confermano che Gianni ha capito che la \textit{lettera} l’ha scritta Sara.

‘Everybody speaks about this story about the letter that Gianni discovered. Anyways all those discussions confirm that Gianni understood the letter it was Sara who wrote it.’

\textbf{B:} E a \textit{chi}, \textbf{[Familiar Top la \textit{lettera}, \textit{l’ha mandata]?} \textbf{[WhQ]}

And to whom the letter did she send it?’
The *wh*-element in PEQs can NOT precede a Familiar Topic. A Familiar Topic is an element that is part of the already established familiar information introduced at some point of the conversation, and then repeated for topic continuity or as an afterthought (Frascarelli & Hinterhölzl 2007).

(3) A: Tutti parlano di questa storia della lettera scoperta da Gianni. Comunque tutti quei discorsi confermano che Gianni ha capito che la lettera Sara l’ha mandata a Piero. ‘Everybody speaks about this story about the letter that Gianni discovered. Anyways all those discussions confirm that Gianni understood that the letter Sara sent it to Piero.’

B: Eh?! [Familiar Top La lettera] a chi, (*la lettera), l’ha mandata?? [PEQs] Eh the letter to whom the letter it has sent ‘Eh?! The letter to whom (*the letter) did she send it?’

*Wh*-words in PEQs cannot precede neither a contrastive topic nor a shift topic.

(4) A: È incredibile, il maestro ha detto a Gianni di inginocchiarsi sui ceci e a Piero di andare a casa.

‘That’s incredible, the teacher said to Gianni to knee on chickpeas and to Piero to go home.’

B: Eh?! [Contrastive Top A GIANNI] cosa (*A GIANNI) ha detto?(non a Piero)[PEQs] Eh to Gianni what to Gianni has said not to Piero

‘Eh?! To Gianni what did he say? (not to Piero)’

(5) Eh?! [Shift Top Il pacco], a chi (*il pacco) l’ha mandato? [PEQs] Eh the parcel to whom the parcel it has sent

‘Eh?! The parcel, to whom (*the parcel) did he send it?’

An extra argument for our proposal comes from the prosodic properties of WhQs and PEQs. In Standard Italian narrow focus is realized with a H* (Avesani 1995). As shown from the results of our production experiment, in PEQs a *wh*-word is realized with a L* accent, while in WhQs a *wh*-word is realized with a L*H. This clear prosodic difference between WhQs and PEQs calls for a different syntactic analysis of the two, and shows that a *wh*-word in PEQs has different prosody with respect to the *wh*-words in WhQs and focus. Moreover, it is interesting to note that the intonational contour of the *wh*-word in PEQs in Italian (L*) corresponds to the intonational contour identified by Frascarelli & Hinterhölzl (2007) for the Familiar Topic.