Patterns of interaction and young ESL learners

What is the impact of proficiency and task type?

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Previous research carried out from a socio-cultural perspective has explored the way adult learners interact when undertaking tasks. Following the type of analysis initiated by Storch (2002) we examined the patterns of interaction of young ESL learners (ages 9–12) of different English proficiency levels, high-intermediate (H) and low-intermediate (L) as they worked with native speakers (NS) (i.e., H/NS and L/NS pairs) to carry out a one-way and a two-way task. Once the patterns of interaction were determined, we then explored the relationship between these patterns, the learners' proficiency levels and the task type. Our findings reveal that, regardless of proficiency, these child ESL learners engaged with the tasks and with each other, most often collaboratively, but also using other patterns interaction. However, the findings also suggest that task type and learner proficiency influenced the pattern of interactions that occurred.

Keywords: patterns of interaction, ESL, young learners, task-based interaction, proficiency

1. Introduction

Research informed by both socio-cultural (Vygotsky, 1978) and task-based interaction perspectives has explored the patterns of interaction that occur in second and foreign language learning (Storch, 2002). Integral to these patterns are the learners' mutuality and equality during the process of collaborative work. Mutuality refers to learners' engagement with each other's contribution and equality refers to the degree of control or authority over the task or activity that is exerted by the interlocutors. It is suggested that these two factors can affect the opportunities for second language learning (L2) during collaborative work (Storch, 2002).

In particular, it has been shown that a high level of mutuality (engagement) and equality (control) lead to more opportunities for L2 development (Storch, 2002) than less collaborative patterns of interaction representing low mutuality or equality. Storch (2002) identified four interactional patterns based on learners' mutuality and equality, namely, collaborative, dominant/dominant, dominant/passive and expert/novice (see Table 1 below).

Table 1. Patterns of interaction described in Storch (2002)

Pattern	Mutuality	Equality	Description
Collaborative	High	High	The two learners contribute similarly and engage in interaction in a way where they accept or finish what their interlocutor says.
Dominant/ dominant	Low	High	Both learners participate similarly in interaction, but they do not engage with each other's contributions.
Dominant/ passive	Low	Low	One member of the pair dominates the interaction, while the other member does not participate and remains passive.
Expert/ novice	High	Low	One member of the dyad has the main control of the task, but acts as an expert and assists the less expert member.

However, the categorization of these patterns of interaction "is by its very nature imprecise" (Storch, 2002, p. 129) and, not surprisingly, other researchers have provided further categorizations. For example, Watanabe and Swain (2007) also described an expert/passive pattern for adult learners, where one partner acts as the expert member of the pair and encourages the less proficient peer to participate in the task but the passive member remains reluctant to do so. Tan, Wigglesworth and Storch (2010), again working with adults, identified a cooperative pattern, which is similar to the dominant/dominant pattern but with lower mutuality and no attempt to control the task. Butler and Zeng (2014, 2015) in an attempt to clarify, distinguished between collaborative and cooperative patterns, treating the cooperative pattern as a parallel/passive pattern.

Research with L2 learners has explored the impact of different variables on the patterns of interaction, such as proficiency (Storch & Aldosari, 2013; Watanabe, 2008; Watanabe & Swain, 2007), communication mode (face-to-face, computer-mediated-communication) (Rouhshad & Storch, 2016; Tan et al., 2010), age (Butler & Zeng, 2014, 2015; García Mayo & Imaz Agirre, 2016), and task (Ahmadian and Tajabadi, 2017; Chen, 2017, 2018). Overall, the findings suggest that collaboration leads to more opportunities for transfer and co-construction of knowledge, and more explanations, requests, comments or suggestions (Chen, 2017, 2018; Rouhshad & Storch, 2016; Storch, 2002). Collaborative pairs also engage in

more assessment (Butler & Zeng, 2015) and generally perform better than do other learners (Chen, 2017, 2018; Watanabe & Swain, 2007).

To date the majority of studies investigating patterns of interaction have been carried out with adult populations (in ESL settings: Storch, 2002; Tan et al., 2010; Watanabe & Swain, 2007; and, in EFL settings: Chen, 2017, 2018). However, there is less research investigating the patterns of interaction of young learners (YLs). Children's needs, capabilities and perspectives differ considerably from those of older learners (Mackey & Gass, 2005, p. 223). Therefore, it is necessary to distinguish findings obtained with YLs and adults in L2 research (see Oliver & Azkarai, 2017) and this includes research related to learners' patterns of interaction in L2 collaborative task work.

Some recent research has begun examining the patterns of interaction in YLs (e.g., Ahmadian & Tajabadi, 2017; Butler & Zeng, 2014, 2015; García Mayo & Imaz Agirre, 2016). However, these studies only investigated English-as-a-foreign-language (EFL) settings. Butler and Zeng (2014, 2015) explored the patterns of interaction and the interactional characteristics, such as topic development and turn taking, of Chinese EFL YLs in 4th and 6th grades as they engaged in collaborative tasks in their L1 (Chinese) and L2 (English). Their findings showed that 4th graders had more difficulties carrying out the tasks and provided less information to their partner to help complete the tasks although they raised more questions when they had doubts. When completing the task, the majority of 4th graders interacted in a dominant/dominant pattern in Chinese and a passive/parallel pattern in English. In contrast, the sixth graders worked collaboratively in both English and Chinese. In another YL study, García Mayo and Imaz Agirre (2016) explored the negotiation of meaning (NoM) strategies used by 120 Spanish L1/English L2 children of different ages (8–9 and 9–10) when they worked in pairs on a spot-the-differences task under different task repetition conditions (i.e., procedural – repeating the procedure of the task, but not the content; and exact task repetition – repeating exactly the same task). They found that, in comparison to the older learners, the younger learners showed more collaborative patterns of interaction in the two task repetition conditions and at both testing times. Ahmadian and Tajabadi (2017) analysed the patterns of interaction of a group of young Iranian EFL learners, focussing on which pattern of interaction would lead to better vocabulary learning. In this study, the students performed two tasks (a recognition and a production task) over six sessions. The vocabulary they learned was measured using a post-test. The authors found the collaborative pattern to be the most common, and over the six sessions only four pairs varied from a less collaborative to a more collaborative pattern of interaction. Furthermore, Ahmadian and Tajabadi confirmed previous research, namely that collaborative interaction is supportive of L2 development – in this case, vocabulary acquisition.

Although these studies shed some light on the patterns of interaction of YLs, particularly from a task-based perspective, there remains a paucity of research exploring patterns of interaction from a socio-cultural perspective with YLs in English-as-a-second language (ESL) setting. As EFL and ESL settings differ considerably with regard to the amount of input available to the learners (i.e., it is larger in ESL settings), and given documented differences in the task-based interaction in these two settings (see Azkarai & Oliver, 2016), it is possible that differences might also exist in the patterns of interaction. Thus, a focus of the current study was to explore the patterns of interaction of ESL YLs during task-based interaction and to do so from a socio-cultural perspective (i.e., based on the analysis initiated by Storch, 2002).

1.1   Tasks and patterns of interaction

The contribution of tasks, for example, task types and task repetition, to interaction has been the focus of a body of research, particularly with adult learners. Chen (2017), for example, explored the impact of patterns of interaction on task-achievement as well as on the accuracy of the target language (English) use by 18 EFL adult Chinese learners over a six-week period as they performed a dictogloss, an interview and a jigsaw task. Chen found that pairs with high mutuality generated more opportunities to negotiate and greater error-correction across the three tasks. Thus, Chen concluded that mutuality rather than equality contributed to the creation of learning opportunities. In another study, Chen (2018) explored how the patterns of interaction of 11 adult EFL Chinese pairs varied when tasks (in this study, dictogloss tasks) were repeated. She found that the first time the pairs completed the task, most showed a non-collaborative pattern (i.e., dominant/passive), however on the second and third repetition of the task, the pattern changed to be more collaborative in the majority of cases. Chen concluded that although non-collaborative patterns also showed evidence of learning, collaborative patterns provided greater opportunities for this.

The relationship between tasks and patterns of interaction has also been carried out in YL settings, as described above (Ahmadian & Tajabadi, 2017; García Mayo & Imaz Agirre, 2016). However, these studies have mainly focused on the effects of task repetition rather than on the impact of task types on patterns of interaction. For example, Lázaro Ibarrola and Hidalgo (2017) found that task repetition can lead to the development of proficiency in young learners.

Research conducted on both adults and children has also reported differences in the outcomes for different tasks. For example, research with adults has shown that writing tasks provide learners with more opportunities to focus on form and meaning, resulting in more opportunities for L2 development than oral

tasks (Adams, 2006; Adams & Ross-Feldman, 2008; García Mayo & Azkarai, 2016; Niu, 2009; Williams, 1999). However, other studies have also reported differences between tasks of the same modality. For example, García Mayo and Azkarai (2016) found that a comparison of the two writing tasks in their study (i.e., text editing and dictogloss) showed the text editing task generated more language related episodes (LREs) – which are claimed to support language learning (Swain & Lapkin, 1998) – than the dictogloss task. In contrast, in the oral tasks (i.e., picture placement and picture differences) they found that the picture placement task generated more LREs. In the case of YLs, Azkarai and Imaz Agirre (2016) explored the negotiation of meaning (NoM) strategies produced by EFL mainstream and Content and Language Integrated Learning (CLIL) learners in 4th and 6th grade when they carried out a picture placement task and a guessing game task. Overall, they found that these learners had more opportunities to negotiate for meaning in the guessing game task, which was a one-way repeated task. However, they also found some task-based differences were dependent on the learners' age and instructional setting. However, the effect of different types of tasks on the pattern of interactions has not been explored to the same extent. One notable exception is Storch (2002) who found with her adult learners that the patterns of interaction remained stable regardless of task type (a composition, text editing and text reconstruction). Whether or not this is the case for ESL YLs is unclear and so this is another focus of the current study.

1.2   Proficiency and pairings

The role of L2 proficiency, particularly in relation to task interaction, has received considerable research attention. Despite Malmqvist's (2005) claim that it is personality traits rather than proficiency that impacts on interaction, there are now a number of studies showing how proficiency contributes to the pattern of interaction that occurs, such as its influence on the production of language-related episodes (LREs) (Kim & McDonough, 2008; Leeser, 2004; Malmqvist, 2005; Storch & Aldosari, 2013; Watanabe, 2008; Watanabe & Swain, 2007). For example, Storch and Aldosari (2013) found that adult high-low proficient pairs in their study produced more LREs than low-proficient pairs, but only if there was a high level of mutuality (collaborative and expert/novice) in the pairing. Kim and McDonough (2008) also found a difference in the pattern of interaction according to proficiency with intermediate learners becoming more dominant when they worked with an intermediate partner but more collaborative when working with higher proficiency peers. Other research with learners of different proficiency levels (i.e., low, intermediate, high) has found that high-proficient learners: (a) have more opportunities to negotiate than low-proficient learners (Kim & McDonough,

2008; Leeser, 2004; Storch & Aldosari, 2013; Watanabe & Swain, 2007), (b) focus more on form while low-proficient learners focus more on meaning (Leeser, 2004; Malmqvist, 2005) and, (c) provide more opportunities for language learning than low-proficient learners (Kim & McDonough, 2008; Leeser, 2004; Watanabe & Swain, 2007).

Proficiency has also been shown to impact on the outcomes of interaction between YLs. Oliver (1995) explored the opportunities of younger (aged 8 to 13) native speakers (NSs) and non-native speakers (NNSs) to provide and use negative feedback (NF) (i.e., recasts and NoM strategies) when performing a one-way and a two-way task. Her findings showed that the NSs provided the NNS with NF, which the learners then used. In another study, Oliver (1998) examined 192 children working in three different types of dyads (NNS-NNS, NS-NNS, NS-NS). Again the pairs worked on both a one-way and a two-way task (using a counter-balanced design). Analysis showed that these children negotiated for meaning and used a wide range of strategies to do so (e.g., clarification requests, confirmation checks, comprehension checks and repetitions), but proportionally less so than adults. She also found the overall proficiency of the pairing made a difference: NNS-NNS pairs produced more NoM strategies than NS-NNS, who in turn produced more than the NS-NS pairs. In another study with the same population, Oliver (2002) explored the effects of age (8 to 13 years), gender, and NNS proficiency (low, high). She did not find any effects for age or gender, but she did find that there was more negotiation as learners' proficiency decreased (i.e., L-L>H-L>H-H). Then with a group of even younger learners (aged 5–7) Oliver (2009), examined the effects of proficiency pairings (i.e., NS-NNS, NNS-NNS) on the provision and use of corrective feedback when working on communicative tasks. Her findings showed that like older child learners, these younger children negotiated for meaning and provided and used corrective feedback. Once more she found proficiency had an effect with NNS-NNS being more likely to negotiate than NS-NNS pairs but NS-NNS pairs providing more recasts than NNS-NNS pairs.

Clearly proficiency and task impact on YLs interaction in an ESL setting, but what has yet to be explored is how these influence the patterns of interaction that occur. Therefore, this study seeks to do this by answering the following questions:

1. What are the patterns of interaction for YLs undertaking tasks in an ESL context?
2. Do one-way or two-way tasks affect the patterns of interaction of young ESL learners?
3. Are there differences in the patterns of interaction of young ESL learners according to proficiency level-pairing (high [H]-NS vs. low [L]-NS)?

2.   Method

2.1   Participants

The participants of this study were 64 children of which half were 8–10 years and the remainder 11–13 years. Thirty-two were NSs who were age- and gender-matched (in a counterbalanced design) with 32 NNSs. Of the NNSs, 16 were high-proficient ESL learners and 16 low-proficient ESL learners who each worked with NSs (i.e., H-NS and L-NS pairs). The proficiency of the learners was determined initially by researcher observation and was also informed by teacher judgement based on a rating scale reflecting the Australian EAL/D Bandscales (i.e., the assessment method with which the teachers were most familiar, and, therefore, one that provided the most reliable assessment in this context). A comparison with the Common European Framework would equate the H proficiency group at A2 and the low proficiency group at A1. All the NNSs had been studying ESL in an intensive situation in Australian primary schools for between 3–12 months. In general, but with some exceptions reflecting individual learner differences, the lower proficiency learners had been studying English for less than 6 months, while the higher proficiency ones had been studying English for more than 6 months. More information about the participants can be found in Table 2.

2.2   Materials

The learners in this study carried out a one-way task and a two-way task. A variety of tasks were trialled with similar aged learners before the commencement of the study. The two tasks selected appeared more motivating and interesting to the learners (in that they willingly and enthusiastically worked on them when given the opportunity to do so). Another reason for choosing these tasks was that, as one-way and two-way tasks, they required the learners to exchange information in order to complete the task, which has been shown to create greater language learning opportunities (Pica, Kang, & Sauro, 2006). To maintain ecological validity, the tasks were selected from those commercially available to teachers for learners of this age as the teachers were more likely to select tasks from such sources than they were to produce their own.

The one-way task required the NNSs to describe a black outline picture for their NS partner to draw. The two-way task was a picture placement task with each of the pair possessing complementary information. The tasks were performed in a counterbalanced design with half the pairs completing the one-way task and half the two-way task first.

Table 2. Information about the participants

	NNS proficiency	Gender	Age (in years)	First task
Pair 1	High	Male	9-10	One-way
Pair 2	High	Male	9-10	One-way
Pair 3	High	Male	9-10	Two-way
Pair 4	High	Male	9-10	Two-way
Pair 5	High	Male	11–12	One-way
Pair 6	High	Male	11–12	One-way
Pair 7	High	Male	11–12	Two-way
Pair 8	High	Male	11–12	Two-way
Pair 9	High	Female	9-10	One-way
Pair 10	High	Female	9-10	One-way
Pair 11	High	Female	9-10	Two-way
Pair 12	High	Female	9-10	Two-way
Pair 13	High	Female	11–12	One-way
Pair 14	High	Female	11–12	One-way
Pair 15	High	Female	11–12	Two-way
Pair 16	High	Female	11–12	Two-way
Pair 17	Low	Male	9-10	One-way
Pair 18	Low	Male	9-10	One-way
Pair 19	Low	Male	9-10	Two-way
Pair 20	Low	Male	9-10	Two-way
Pair 21	Low	Male	11–12	One-way
Pair 22	Low	Male	11–12	One-way
Pair 23	Low	Male	11–12	Two-way
Pair 24	Low	Male	11–12	Two-way
Pair 25	Low	Female	9-10	One-way
Pair 26	Low	Female	9-10	One-way
Pair 27	Low	Female	9-10	Two-way
Pair 28	Low	Female	9-10	Two-way
Pair 29	Low	Female	11–12	One-way
Pair 30	Low	Female	11–12	One-way
Pair 31	Low	Female	11–12	Two-way
Pair 32	Low	Female	11–12	Two-way

2.3   Method

In the first week, each dyad completed the two tasks and were audio-recorded while they did this. This was done so that the participants were familiar with the procedure and to avoid participant anxiety about the tasks and the recording equipment. The data collected in this first week were not used; rather the data collected using parallel tasks in week two with the same pairs of learners was recorded, transcribed and analysed.

2.4   Data analysis

The first 100 utterances of each dyad were transcribed as this was determined to be the baseline amount of data (i.e., the minimal number of utterances) for all dyads and in this way we were able to compare the amount of interaction for each pair. These transcriptions were then analysed in the following way: as an initial step, we conducted a qualitative analysis focusing on the overall patterns of interaction for each pair as they performed each task. The patterns of interaction were determined following the patterns described in Butler and Zeng (2014, 2015), Storch (2002, 2009), Tan et al. (2010) and Watanabe and Swain (2007). These patterns included: collaborative, cooperative or parallel/passive, dominant/dominant, dominant/passive, expert/passive and expert/novice, as defined in Table 1 and in the Introduction.

The coding of the pattern types was carried out by each of the researchers working independently. Despite the 'imprecise' nature of the patterns (Storch, 2002, p. 129), the data was such that the categories were clearly apparent and aligned with those patterns described in the existing literature. The small number of differences in categorisation by the two researchers (less than 10%) were highlighted and discussed until consensus was achieved. This required the researchers to go back and forth between the transcriptions and the descriptions of the patterns in an iterative manner.

Each pair was assigned a pattern of interaction that best represented the general dynamics of their exchanges (see Table 1 above), based on their level of mutuality and equality and judged holistically by reflecting on the total exchange over the 100 utterances. Mutuality was determined by considering (a) the details learners provided about the task, (b) whether they asked questions of their partners concerning details of the task, and (c) the nature of their responses, whether they were elaborate responses or just yes/no answers. Those pairs who provided only a few details about their pictures, who barely asked questions and gave only short responses were coded as showing low mutuality. The pairs who provided many details, asked questions about items in the pictures, and provided long answers

were considered to have a high level of mutuality. Equality was determined by considering the learners' contribution to the task, that is, whether it was similar (high equality) or if one member contributed more to the interaction than the other (low equality). Based on this information pairs were determined to be collaborative (high mutuality and equality), dominant/dominant (low mutuality and high equality), parallel/passive (low mutuality and high equality), dominant/passive pairs (low mutuality and equality), expert/novice (high mutuality and low equality), or expert/passive (low mutuality and equality).

3.   Results and discussion

The patterns of interaction for each pair in both tasks are presented below in Table 3.

Table 3. Pattern of interaction in the two tasks for each pair

	One-way task			Two-way task			Same pattern in the two tasks
	Pattern	Mutuality	Equality	Pattern	Mutuality	Equality	
Pair 1	Dominant/ Passive	Low	Low	Dominant/ Passive	Low	Low	Yes
Pair 2	Expert/ Passive	Low	Low	Parallel/ Passive	Low	High	No
Pair 3	Parallel/ Passive	Low	High	Collaborative	High	High	No
Pair 4	Collaborative	High	High	Collaborative	High	High	Yes
Pair 5	Collaborative	High	High	Collaborative	High	High	Yes
Pair 6	Dominant/ Passive	Low	Low	Parallel/ Passive	Low	High	No
Pair 7	Collaborative	High	High	Parallel/ Passive	Low	High	No
Pair 8	Dominant/ Passive	Low	Low	Dominant/ Passive	Low	Low	Yes
Pair 9	Collaborative	High	High	Collaborative	High	High	Yes
Pair 10	Dominant/ Passive	Low	Low	Dominant/ Passive	Low	Low	Yes
Pair 11	Dominant/ Dominant	Low	High	Dominant/ Dominant	Low	High	Yes
Pair 12	Collaborative	High	High	Collaborative	High	High	Yes
Pair 13	Collaborative	High	High	Collaborative	High	High	Yes

Table 3. *(continued)*

	One-way task			Two-way task			Same pattern in the two tasks
	Pattern	Mutuality	Equality	Pattern	Mutuality	Equality	
Pair 14	Collaborative	High	High	Parallel/ Passive	Low	High	Yes
Pair 15	Collaborative	High	High	Dominant/ Dominant	Low	High	No
Pair 16	Collaborative	High	High	Collaborative	High	High	Yes
Pair 17	Dominant/ Passive	Low	Low	Expert/ Novice	High	Low	No
Pair 18	Expert/ Novice	High	Low	Dominant/ Passive	Low	Low	No
Pair 19	Collaborative	High	High	Collaborative	High	High	Yes
Pair 20	Expert/ Passive	Low	Low	Expert/ Passive	Low	Low	Yes
Pair 21	Collaborative	High	High	Collaborative	High	High	Yes
Pair 22	Collaborative	High	High	Expert/ Novice	High	Low	No
Pair 23	Collaborative	High	High	Expert/ Novice	High	Low	No
Pair 24	Expert/ Passive	Low	Low	Expert/ Novice	High	Low	No
Pair 25	Dominant/ Passive	Low	Low	Dominant/ Passive	Low	Low	Yes
Pair 26	Parallel/ Passive	Low	High	Dominant/ Passive	Low	Low	No
Pair 27	Expert/ passive	Low	Low	Parallel/ Passive	Low	High	No
Pair 28	Collaborative	High	High	Collaborative	High	High	Yes
Pair 29	Collaborative	High	High	Collaborative	High	High	Yes
Pair 30	Parallel/ Passive	Low	High	Collaborative	High	High	No
Pair 31	Collaborative	High	High	Collaborative	High	High	Yes
Pair 32	Dominant/ Passive	Low	Low	Expert/ Novice	High	Low	No

From this table we can see that in answer to research question one the results show that, despite being YLs, the majority of the pairs interacted with a high level of mutuality, that is in a collaborative manner (20/32 – one-way task; 20/32 two-way task). In addition, and even though the pairings were NS-NNS, they mostly did so in a way that represented a degree of equality in their exchanges

(17/32 – one-way task; 18/32 two-way task). An examination of how these two aspects come together shows the predominant pattern of interaction for these young ESL learners was collaborative (16/32 in the one-way task; 13/32 – two-way task) and the next most prevalent pattern was dominant/passive (7/32 – one-way task; 6/32 – two-way task). Occurring less frequently were parallel/passive (3/32 & 4/32 respectively), expert/novice (1/32 & 6/32), expert/passive (4/32 & 1/32) and dominant/dominant (1/32 & 2/32) patterns.

These findings are quite similar to previous interactional research undertaken with both adults (e.g., Storch, 2002; Tan et al., 2010) and children (e.g., Ahmadian & Tajabadi, 2017; Butler & Zeng, 2015; Chen, 2017, 2018) showing high levels of collaboration. In contrast, however, although García Mayo and Imaz Agirre (2016) also found a high proportion of YL pairs interacting collaboratively, the number of other types of patterns was higher than in the current study. It could be that the nature of the settings (i.e., EFL vs. ESL) accounts for these differences.

With respect to research questions two and three, we found that the factors of task type and learner proficiency came together to jointly impact on the pattern of interaction. Therefore, the findings related to task type are described according to whether the group was H-NSs or L-NSs. Firstly, for the H-NSs (i.e., pairs 1–16) when they worked on the one-way task, the majority of pairs ($n=9$), namely pairs 4, 5, 7, 9, 12, 13, 14, 15 and 16 engaged collaboratively as they interacted. This is exemplified in Excerpt 1 below taken from Pair 9, as they worked on the one-way task. Both learners requested more information and also shared detailed information about the items in their pictures.

Excerpt 1. H-NS pair. One-way task. Collaborative Pattern. Pair 9

	H	NS
13	There is a sun in the left hand.	
14		Yer, but is it a big one or is it small (one)?
15	Like, like a dollar, dollar coin.	
16		I don't know what you mean.
17	Um, you know that dollar coin?	
18		Yer.
19	Like that big.	
20		Mm.
21	There's a tree, ah right hand.	
22		A tree?
23	Yep.	
24	Right hand.	
25		Is it big?
26	Like um seven centimeters.	
27		Is it up the top or down the bottom?
28	Um, no really down the-the bottom.	
29	But um they have little grass, then comes little-.	

Excerpt 1. *(continued)*

	H	NS
30		Grass?
31	Yep.	
32	Grass first.	
33		The grass on then the tree on it?
34	Yer.	
35	Is the right hand.	

The remaining H-NS pairs had a lower level of mutuality when working on the one-way task. For example, in pair 2, representing an expert/passive pattern, the NS acted as the expert member and asked a lot of questions to clarify what the NNS had said, and in doing so encouraged him to provide greater explanation.

Excerpt 2.   H-NS pair. One-way task. Expert/passive pattern. Pair 2

	H	NS
1	One sun, left corner up.	
2	Finished?	
3		What do I need to draw?
4	One sun.	
5	Up, left corner.	
6		What do I need to draw at the top in the left hand corner?
7	Sun.	
8		Ok.
9	Mm, grass.	
10	Six, no four centimeters of[f] the -mm-off the, of the thing.	
11		Whereabouts?
12	Grass.	
13		Ok.
14	Um, one tree.	
15	On the grass.	
16	Six centimeters big.	
17		Whereabouts, on the left or the right?
18	On the right.	
19		Right.
20		How big is the trunk?
21	Um, three centimeters.	
22		Ok.
23	And – two, one boy and one girl.	
24		Whereabouts?
25	Ah, on the grass.	

Excerpt 2. *(continued)*

	H	NS
26		In the middle?
27	No, on the left.	
28		Are they stick people?
29	Yep.	
30		Have they got hair?
31	Yep.	
32		What type of hair?
33	What?	
34		What type of hair?
35		Spikey or.
36	Spikey.	

Other pairs engaged in different ways during the one-way task, for instance the pattern of interaction for pair 3 was a parallel/passive pattern, Pair 11 a dominant/dominant pattern and four pairs showed a dominant/passive pattern of interaction (Pairs 1, 6, 8 and 10).

In the two-way task, only seven H-NS pairs engaged collaboratively (Pairs 3, 4, 5, 9, 12, 13 and 16) with the remaining pairs showing either a dominant/passive pattern (Pairs 1, 8 and 10), or a dominant/dominant pattern (Pairs 11 and 15). This latter pattern of interaction is illustrated in Excerpt 3 below. In this case both members of the pair (no. 11) try to manage the task using expressions such as "it's your turn" (see lines 40 and 44).

Excerpt 3. H-NS pair. Two-way task. Dominant/dominant pattern. Pair 11

	H	NS
32		On the left side or the right side?
33	Left side.	
34	Um, the left side the plant.	
35		Ok.
36		Right at the end?
37	Um, just-not the end.	
38	To the end and move a little bit.	
39		Finished.
40		It's your turn.
41	Um, where to put the brush?	
42		The brush goes in front of the table, on the right side.
43	Oh. I'm finished 'R'.	
44	It's your turn.	
45		Um 'L', where does the bread go?
46	The bread?	

Excerpt 3. *(continued)*

H	NS
47	Yes.
48	No, the loaf.

The four remaining pairs interacted using a parallel/passive pattern in the two-way task (Pairs 2, 6, 7 and 14), as shown in Excerpt 4 below. In this case they exchanged information, but did not provide many details to each other. However, as with the dominant/dominant pattern there were some instances of task management – specifically where they used the phrase "your shot" to indicate whose turn it was (see lines 44, 48, 56).

Excerpt 4. H-NS pair. Two-way task. Parallel/passive pattern. Pair 6

H	NS
40	And-.
41 On the top of.	
42	On the top of it.
43 Here, here shelf and it does it go here.	
44	Um, your shot.
45 Where's the washing powder?	
46	The washing powder is on the bottom shelf on the one where's there are five shelves.
47 Bottom shelf.	
48 You shot.	
49	Um, whereabout is the coffee?
50 Coffee.	
51 The coffee is um-, [under] the glasses.	
52	Under?
53 Yer, under.	
54 Where the two shelves.	
55	Ok.
56	Your shot.
57 Where's the brush?	
58	The brush is um, down the bottom, on, sitting on the wall.
59	On the right hand wall.
60	XX it's on the right of the chair.
61	In the right hand corner.
62	At the bottom.
63 Ok, your turn.	
64	Whereabouts the bottles?

Next, in the case of L-NSs (i.e., pairs 17–32) we found greater variety in the patterns of interaction during completion of the one-way task. The most common

pattern was still collaborative (Pairs 19, 21, 22, 23, 28, 29 & 31), although there were fewer pairs who interacted in this way compared to the H-NS pairs. Another pair (no.18) engaged well with each other but did so with an expert/novice pattern of interaction and the remaining pairs interacted either in an expert/passive pattern (20, 24 & 27), a parallel/passive pattern (Pairs 26 & 30), or a dominant/passive pattern (Pairs 17, 25 & 32), as illustrated in Excerpt 5. In this interaction the NS is observed continuously asking questions of the ESL learner, however, the ESL learner did not respond with many details.

Excerpt 5. L-NS pair. One-way task. Dominant/passive pattern. Pair 25.

	L	NS
4	A tree.	
5		A tree.
6		And where, is it on the left or the right?
7	A right.	
8		And how big's the tree?
9	Mm. Just six.	
10		And is it in the middle?
11		Or down the bottom?
12	Ah, down the bottom.	
13		How far from the bottom is it?
14	Two.	
15		Is it right near the edge?
16	What?	
17		Is it right near the edge?
18	Mm, yes.	
19		How big's the trunk?
20	Two.	

In the two-way task, the number of L-NS pairs showing a heightened level of mutuality (i.e., engagement with each other) increased. For example, pairs 19, 21, 28, 29, 30 and 31 engaged in a collaborative pattern, and pairs 17, 21, 22, 23 and 32 in an expert/novice pattern. An example of this latter pattern is shown in Excerpt 6 below.

Excerpt 6. L-NS pair. Two-way task. Expert/novice pattern. Pair 21

	L	NS
1	Where puts the, where puts the-.	
2		Cups?
3	The [brush], [brush].	
4		The, the plates.
5		Plates.
6	Brush.	
7	No, b-r-u-s-h.	

Excerpt 6. *(continued)*

	L	NS
8		B-r-.
9	B-r-u-s-h.	
10		The brush, the brush.
11	Yep.	
12		Oh, um, the bottom right hand corner.
13		See the bottom right hand corner?
14		And ah, the, the, near the leg of the table, closest to the bottom right hand corner.
15	Pardon?	
16		The bottom right hand corner.
17		You see the corner?
18		The bottom of the right.
19		Right?
20		Um, the chair- the table, the table leg, near the table leg against the wall.
21	Near the table?	
22		Near the table leg, aga-, near the wall.
23	Hm. Like this one, is the table like this one?	
24		Yer, near the table.

The remaining five pairs interacted in either a dominant/passive way or (Pairs 18, 25 & 26) using an expert/passive pattern (Pair 20) or a parallel/passive pattern (Pair 27). Thus, in the two-way task the majority of L-NS pairs interacted with a high level of engagement (i.e., collaborative) or at the very least demonstrated an equality in their exchanges which is somewhat surprising given their lower proficiency levels.

There were also other differences between the pairings according to task type. For example, just over half of the L-NS pairs changed their pattern of interaction when working on the two different tasks (9/16), whereas fewer of the H-NS group did so (5/16). Further, the H-NS group tended to be more collaborative in the one-way task, but it was the opposite case for the L-NS group. For the L-NS pairs, the way the patterns of interaction changed from one task to another was not consistent. Some pairs showed a more collaborative pattern in the two-way task than in the one-way task, but for a few others it was the opposite. This inconsistency was less prevalent in the H-NS pairs. As the study employed a counterbalanced design, these differences cannot be attributed to task order. Why this is the case is less clear, however, it does support previous research with EFL children which has found differences in interaction according to task type (Azkarai & Imaz Agirre, 2016). Specifically, Azkarai and Imaz Agirre (2016) found that when repeated, one-way tasks led to more opportunities to negotiate for meaning, signifying a high level of engagement than occurred in the two-way task. Yet, the current findings

contrast with those from adult ESL research: Storch (2002) did not find any variation in the patterns of interaction based on the type of tasks used. Thus, it seems that the effect of task type, age (adult vs YL) and context (ESL vs EFL) interact to determine the patterns of interaction.

As suggested by the differences in the pairings (H-NS & L-NS) this relationship between the various factors is even more complex when the factor of proficiency is considered. As indicated, the type of task seemed to have a greater impact on the interaction patterns of the L-NS pairs, which varied more frequently, than it did on the H-NS pairs. Previous research found that lower-proficient adult learners show less mutuality (Kim & McDonough, 2008), produce fewer LREs and negotiate for meaning less (Kim & McDonough, 2008; Leeser, 2004; Storch & Aldosari, 2013; Watanabe & Swain, 2007). This was not the case in the current child ESL study where there was an equal amount of collaboration, slightly higher levels of equality and more negotiation for the L-NS than the H-Ns pairs, once more highlighting a complex dynamic of influences upon patterns of interaction for this age group.

Even so and regardless of their level of mutuality and equality, it does appear that, working with a NS peer does seem to offer young ESL learners opportunities that are facilitative of L2 development. This would be advantageous for teachers who have class consisting of both NS and ESL students. However, further research needs be done with comparisons between NS-NNS and NNS-NNS to determine whether or not such pairings are the most useful (i.e., comparing whether learners working together may be more or less useful). Furthermore, whilst tasks appear to provide opportunities for language learning (Ellis, 2016), including YLs, careful attention needs to be paid to the type of tasks that are used. It is also important that there is further research comparing a range of different types, including both oral tasks as well as written tasks, and how they may influence the pattern of interaction that occurs. Clearly, there remains much further research to do with this aged group of learners.

This study has some limitations. This study only focused on the patterns of interaction during the process of working on these tasks, but whether one pattern or other resulted in more learning as previous research suggests was not tested in this context and further research needs to be done taking this into consideration. In addition, this study only focused on speaking tasks while previous research has shown differences in the level of engagement of speaking and writing tasks in adult learners (García Mayo & Azkarai, 2016) with writing tasks leading to higher levels of engagement, it would be useful to explore this with YLs from a socio-cultural perspective.

4.   Conclusion

Our study explored the patterns of interaction of young ESL learners who worked in H-NS and L-NS pairs on a one-way task and a two-way task. These pairs showed various levels of engagement and equality in their patterns of interaction. The findings showed both similarities, but also some differences with research carried out in adult ESL settings (Storch, 2002), and child EFL settings (Chen, 2017, 2018; García Mayo & Imaz Agirre, 2016). Our findings suggest an interactional effect between the task type and proficiency on the pattern of interaction for these young ESL learners. However, much further research is required in this area.

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