

The instrument-subject alternation in the dialect of Reggio Emilia

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This paper is dedicated to a cross-linguistic comparison of the Instrument-Subject Alternation in Italian and the dialect of Reggio Emilia. This phenomenon lies at the interface between semantics and syntax. It is syntactic in nature but ruled by two main semantic constraints, i.e., the Constraint on the Instrumental Subrole and the Deliberation Constraint. The comparative analysis reveals that the semantic constraints that rule the Instrument-Subject Alternation hold for both Italian and the dialect of Reggio Emilia. Differences between the two languages are found in the lexicon, i.e., in the way the two languages lexicalize the same concepts.

Keywords: Instrument-Subject Alternation, cross-linguistic comparison, semantics-syntax interface, Italian, dialect of Reggio Emilia

1. Introduction

This paper aims at investigating the Instrument-Subject Alternation (ISA), a phenomenon that lies at the interface between semantics and syntax, in a comparative perspective. We present the preliminary results of a cross-linguistic comparison of instruments and their syntactic behavior. Although this work focuses on the comparison between Italian and the dialect of Reggio Emilia, a dialect spoken in the province of Reggio Emilia in the North of Italy, the data from Italian used in this work are the result of a comparison of instruments and their syntactic properties in English and Italian, previously carried out in Suozzi (2026). Due to space constraints, the comparison between English and Italian is not detailed here.

The Instrument-Subject alternation, i.e., the possibility for a semantic instrument to occur as the subject of a verb, is particularly suitable for cross-linguistic comparison because it is a syntactic phenomenon ruled by semantic constraints, which in turn are related to verb lexical meanings. Therefore, it allows one to explore how semantics, syntax and the lexicon interact in explaining similarities

and differences among languages. In turn, similarities and differences may enrich the current knowledge of the phenomenon.

The comparison of English and Italian, and of Italian and the dialect of Reggio Emilia suggests that the semantic constraints on ISA hold cross-linguistically, while differences among languages may lie in the lexicon, i.e., in the different verbs available in each language.

The paper is structured as follows. Section 2 is dedicated to the Instrument-Subject Alternation: the two main semantic constraints that rule it, i.e., the Constraint on the Instrumental Subrole and the Deliberation Constraint, are presented in Section 2.1 and 2.2, respectively. In Section 3, data from the dialect of Reggio Emilia and Italian are systematically compared: in Section 3.1, the focus is on the Constraint on the Instrumental Subrole, while in Section 3.2, on the Deliberation Constraint. Section 4 draws the conclusions.

2. The Instrument-Subject Alternation

The Instrument-Subject Alternation (ISA) occurs when the “participants of an event that are conceptualized as instruments” (Van Hooste 2018:102) are realized as the syntactic subjects of the verbs that semantically license them (for the contrast between verbs that semantically require an instrument and verbs that semantically allow one cf. Koenig et al. 2003, 2008 for English and Suozzi 2026 for Italian). A participant conceptualized as an instrument can be defined as the semantic participant that, being manipulated by the Agent, contributes to the realization of the event denoted by the verb that licenses it (Suozzi 2026). As an example of ISA, consider (1):

- (1) a. Gianni ha aperto la porta con
 Gianni have-PRS.3SG open.PST.PTCP the.F.SG door.F.SG with
 la chiave
 the.F.SG key.F.SG
 ‘Gianni opened the door with the key’
 b. La chiave ha aperto la porta
 The.F.SG key.F.SG have-PRS.3SG open.PST.PTCP the.F.SG door.F.SG
 ‘The key opened the door’

In (1), the participant conceptualized as the instrument of the event is *chiave* ‘key’. The same participant is realized via a *con*-PP in (1a), i.e., the most prototypical way of syntactically realizing instruments in Italian (cf. Suozzi et al. 2024; Suozzi 2026), and as the syntactic subject of the verb *aprire* ‘to open’ in (1b).

That instruments can sometimes be syntactically realized as subjects was first observed by Fillmore (1968). Within his Case Grammar theory, the hierarchy of cases readily accounts for the ISA. Since instruments are ranked between agents and patients ($A > I > O$), they can be promoted to subjects, the syntactic role generally linked to agents (whereas the syntactic role associated to patients is the direct object). This happens when the agent is left unexpressed. Other theories, likewise assuming a preferential linking between certain semantic participants, or thematic roles, and specific syntactic roles (e.g., agent-subject, but also theme/patient-direct object), have similarly recognized that instruments are the most suitable candidates for the subject position after agents, in structures where the linking between semantic participants and syntactic roles is not prototypical – despite adopting different views on the nature of thematic roles (Gruber 1965; Jackendoff 1990; Langacker 1991; Dowty 1991; for an overview of the different approaches to thematic roles, cf. Kasper 2008). Indeed, under some approaches, the similarity between instruments and agents is such that they are considered allo-roles of a more general “cause” role (Brunson 1992; Van Valin & La Polla 1997).

However, not all scholars agree on the nature of the syntactic subjects of sentences like (1b). While some consider them regular instruments occurring in subject position (Fillmore 1968; Kamp & Rossdeutscher 1994; Van Valin & Wilkins 1996; Koenig et al. 2008; Van Hooste 2018), others argue that they should be analyzed as instances of the instrumental role (e.g., Delancey 1984, 1991; Schlesinger 1989; Alexiadou & Schäfer 2006; Jezek & Varvara 2015; Rissman & Rawlins 2017). For instance, Alexiadou and Schäfer (2006) analyze subjects in ISA as either agents or causers. Similarly, for Italian, Jezek and Varvara (2015) have argued that the syntactic subjects of ISA constructions may instantiate three distinct semantic roles: agents, themes, or causes. While the authors acknowledge that “the cases in which an instrument subject covers the role of Agent are sporadic and involve metaphorical or metonymical interpretations” (Jezek & Varvara 2015: 6), as in e.g., *Tante penne scrivono su Napoli, usano Napoli per vendere copie* ‘A lot of pens (writers) write about Naples, they use Naples to sell’ (Jezek & Varvara 2015: 6), they argue that the syntactic subjects in ISA constructions are more frequently interpreted as themes or causes. Consider the examples in (2):

- (2) a. Questa penna non scrive più
 This.F.SG pen.F.SG not write-PRS.3PSG more
 ‘This pen does not write anymore’
 b. Questo coltello taglia benissimo
 This.M.SG knife.F.SG cut-PRS.3P.SG very-well
 ‘This knife cuts really well’

- c. Il fumo uccide
The.M.SG smoke.M.SG kill-PRS.3P.SG
'Smoking kills'
- d. Questa finestra non isola bene
This.F.SG window.F.SG not insulate-PRES.3P.SG well
'This window does not insulate well'
- e. La valanga di ieri notte ha ucciso
The.F.SG avalanche.F.SG of yesterday night have-PRS.3P.SG killed.PST.PTCP
tre persone
three people.F.PL
'Last night's avalanche killed three people'
- f. L' antibiotico ha guarito il bambino
The.M.SG antibiotic.M.SG have-PRS.3SG cure.PST.PTCP the.M.SG child.M.SG
'The antibiotic cured the child'

While we follow Jezek and Varvara in claiming that the syntactic subjects in (2a)–(2d) are conceptualized as themes, since properties of the subjects are predicated by the verbs, we partially depart from their analysis of the syntactic subjects in (2e)–(2f), which they treat as causes. We rather distinguish proper instruments, as in (2f), from natural forces, as in (2e).

The main argument for considering ISA subjects as proper instruments is that the agent, although not syntactically realized, remains present at the semantic-conceptual level, and the subject of the sentence is interpreted as being manipulated by the agent. In (2f), it is easy to infer the presence of an agent who manipulates the antibiotic, namely by administering it to the child. Conversely, the absence of a manipulating agent at the semantic-conceptual level and the complete autonomy of the subject are used as diagnostics to distinguish instruments from natural forces (e.g., Van Valin & Wilkins 1996; Van Hooste 2018). Indeed, in (2e) the subject is a natural force: an avalanche that autonomously killed three people, without being manipulated by an agent. Since they are not manipulated by an agent, natural force subjects are incompatible with the syntactic expression of an agent (*#Un uomo ha ucciso tre persone con la valanga di ieri notte* 'A man killed three people with last night's avalanche'), unlike instruments (1a).

Further, the conjunction test (Fillmore 1968) confirms that the subject in (2e) is a proper instrument and not an agent. The basic assumption behind this test is that constituents that realize different roles cannot be conjoined. As shown in (3a), the conjunction of *medico* 'doctor' and *antibiotico* 'antibiotic' (agent-instrument) yields an ungrammatical sentence, as opposed to the grammaticality of the conjunctions of *medico* 'doctor' and *infermiere* 'nurse' (both agents) in (3b) and of *antibiotico* 'antibiotic' and *vitamine* 'vitamins' (both instruments) in (3c).

- (3) a. *Il medico e l' antibiotico hanno
 The.M.SG doctor.M.SG and the.M.SG antibiotic.M.SG have-PRS.3PL
 guarito il bambino
 cure.PST.PTCP the.M.SG child.M.SG
 'The doctor and the antibiotic cured the child'
- b. Il medico e l' infermiere hanno guarito
 The.M.SG doctor.M.SG and the.M.SG nurse.M.SG have-PRS.3PL cure.PST.PTCP
 il bambino
 the.M.SG child.M.SG
 'The doctor and the nurse cured the child'
- c. L' antibiotico e le vitamine hanno
 The.M.SG antibiotic.M.SG and the.F.PL vitamins.F.PL have-PRS.3PL
 guarito il bambino
 cure.PST.PTCP the.M.SG child.M.SG
 'The antibiotic and the vitamins cured the child'

The sentences in (3) do not rule out the subjects of ISA constructions functioning as causers or causes. Indeed, even under an instrumental analysis of these subjects, their status as causers or causes clearly emerges (see below and Section 2.1). However, treating them simply as causers or causes without a more fine-grained analysis risks being overly generic, failing to capture their precise thematic role. After all, agents, instruments, and natural forces are all – albeit in different ways – causers or causes; this is consistent with approaches that identify a “causal” macro-role subsuming agents, instruments, and natural forces (e.g., Van Valin & La Polla 1997).

Closely related to ISA, and under an instrumental analysis of the subject of ISA constructions, is the existence of (at least two) different instrumental subroles. Since Marantz (1984), it has been observed that some but not all instruments can enter the ISA, and that the *conditio sine qua non* to enter it is that the instrument plays a causal role in the event denoted by the verb. Although this restriction on ISA has been discussed by many scholars (e.g., Marantz 1984; Ono 1992; Van Kamp & Rossdeutscher 1994; Van Valin & Wilkins 1996; Alexiadou & Schäfer 2006; Webb 2008), it is generally referred to without a clear label. The only exception is represented by Van Hooste (2018: 243), who calls the restriction on the causal subrole of instruments “Natural Event Condition”. We propose to label the restriction “Constraint on the Instrumental Subrole”, and we discuss it in Section 2.1.

The subrole played by the instrument is not the only constraint that rules ISA. A second constraint exists, i.e., the Deliberation Constraint. The Deliberation Constraints depends on the verb meaning and is discussed in Section 2.2.

2.1 The Constraint on the Instrumental Subrole

The observation that some instruments can undergo ISA while others do not led to the identification of different instrumental subroles. Following Marantz (1984), many scholars (e.g., Van Kamp & Rossdeutscher 1994; Valin & Wilkins 1996; Alexiadou & Schäfer 2006; Webb 2008) distinguish between two main types of instruments, i.e., *intermediary* instruments, which can undergo ISA, and *facilitating* instruments, which cannot. A finer-grained classification of instrumental subroles (Schlesinger 1995; Koenig et al. 2003, 2008; Rissman 2013) further splits the category of *facilitating* instruments into *enabling* and *ancillary* instruments, depending on the subrole they play in the event. Let us consider (4), which exemplifies intermediary (4a), enabling (4b) and ancillary (4c) instruments:

- (4) a. Gianni ha rotto il vetro [con una
 Gianni have-PRS.3SG break.PST.PTCP the.M.SG glass.M.SG with a.F.SG
 pietra]
 rock.F.SG
 ‘Gianni broke the glass [with a rock]’
 b. Gianni entra in casa [con la chiave]
 Gianni enter-PRS.3SG in house.F.SG with the.F.SG key.F.SG
 ‘Gianni enters the house [with the key]’
 c. Gianni mangia il gelato [con il cucchiaino]
 Gianni eat-PRS.3SG the.M.SG ice-cream.M.SG with the.M.SG spoon.M.SG
 ‘Gianni eats the ice cream [with the spoon]’

In (4a), the instrument *pietra* ‘rock’ is an actual intermediary in the causal chain initiated by the agent and with the patient as its endpoint. Indeed, (4a) can be paraphrased by saying that the action of the agent (i.e., *Gianni* throwing a rock) causes the instrument (i.e., the rock) to come into contact with the patient (i.e., the glass) which in turn causes a change of state or location in the patient (i.e., the glass to become broken). In (4b), the instrument (i.e., the key) is a necessary precondition for the event to happen (i.e., for *Gianni* to enter the room), but it does not directly cause *Gianni* to enter the room. Finally, in (4c), the instrument is merely a helping entity. That is, it helps the realization of the event (i.e., *Gianni* eating the ice cream), but the event could happen without the presence of an instrument, as well.

The instrumental subrole each instrument plays is taken to depend on the verb that licenses it (Marantz 1984; Ono 1992; Schütze 1995; Koenig et al. 2008). In a davidsonian sense (Davidson 1967), verbs are considered to denote (or “project”) an event, and instruments may play different (sub)roles within such event, i.e., they can be intermediary, enabling or ancillary instruments.

As anticipated above, only intermediary instruments can enter ISA, as shown in (5): (5a) is derived from (4a) and is grammatical, while (5b) and (5c), which are derived from (4b) and (4c), respectively, are not:

- (5) a. Una pietra ha rotto il vetro
 A.F.SG rock.F.SG have-PRS.3SG break.PST.PTCP the.M.SG glass.M.SG
 ‘A rock broke the glass’
 b. *La chiave entra in casa
 The.F.SG key.F.SG enter-PRS.3SG in house.F.SG
 ‘*The key enters the house’
 c. *Il cucchiaio mangia il gelato
 The.M.SG spoon.M.SG eat-PRS.3SG the.M.SG ice-cream.M.SG
 ‘*The spoon eats the ice cream’

The crucial difference between intermediary instruments, on the one hand, and facilitating instruments, i.e., enabling and ancillary, on the other, is that only the former are causally involved in the realization of the event. Indeed, since they play a causal role in the event by which they are implied, intermediary instruments share a [+ CAUSE] feature with agents, which allows them to occur in subject position, while the same position is unavailable for facilitating instruments, which do not possess that feature. Indeed, a study on ISA in Italian, in which 93 speakers rated the extent to which agent subjects, instrument subjects, instruments realized as prepositional phrases, and patient objects exhibited the properties associated with Dowty’s (1991) Proto-Roles (volitional involvement, sentience, causing a change, undergoing a change of state, and independent existence), confirmed that the property of causing a change was the only one shared by agents and instruments, especially when the latter are realized as subjects (Suoizzi et al. 2025).

The Constraint on the Instrumental Subrole can be formulated as in (6):

(6) **Constraint on the Instrumental Subrole**

In order to enter the ISA, the role played by the instrument in the event denoted by the verb must be strictly causal

The constraint in (6) is a necessary but not sufficient condition for an instrument to enter the ISA. An additional constraint must be satisfied, i.e., the Deliberation Constraint.

2.2 The Deliberation Constraint

The Deliberation Constraint has been originally formulated by Schlesinger (1989) who, as reported above, claimed that instruments entering the ISA are, in fact, agents. In the version proposed by Schlesinger (1989:195), the constraint states that “when the action demands too much deliberation, agentivization of the instrument is blocked”.

In this work, we rephrase the Deliberation Constraint for two main reasons: first, as pointed out by Van Hooste (2018), Schlesinger's formulation of the constraint does not clarify what "deliberation" means. However, Schlesinger (1989:196), citing Dillon (1974:274) with respect to "verbs of wrongdoing", seems to suggest that deliberation is linked to the requirement of a [+volitive] NP. We maintain this aspect in our definition. Second, as said in Section 2 above, we assume that instruments in ISA constructions are not agents, but regular instruments. Hence, what is blocked if the constraint is violated is not the agentivization of instruments, but their possibility of occurring in subject position. The revised version of the Deliberation Constraint is given in (7):

(7) **Deliberation Constraint (revised version)**

ISA is only allowed with verbs that select a [$\pm$ volitional] subject

To illustrate, see the contrast between (8a') and (8b'):

- (8) a. Gianni ha ucciso Sara con il veleno
 Gianni have-PRS.3SG kill.PST.PTCP Sara with the.M.SG poison.M.SG
 'Gianni killed Sara with the poison'
- a'. Il veleno ha ucciso Sara
 The.M.SG poison.M.SG have-PRS.3SG kill.PST.PTCP Sara
 'The poison killed Sara'
- b. Gianni ha assassinato Sara con il veleno
 Gianni have-PRS.3SG murder.PST.PTCP Sara with the.M.SG poison.M.SG
 'Gianni murdered Sara with the poison'
- b'. *Il veleno ha assassinato Sara
 The.M.SG poison.M.SG have-PRS.3SG murder.PST.PTCP Sara
 '*The poison murdered Sara'

It should be noted that in both (8a) and (8b), instruments are intermediary. Thus, in principle, both are allowed to enter ISA. However, only (8a') does not violate the Deliberation Constraint and is thus grammatical, because the verb *uccidere* 'to kill' allows a [$\pm$ volitional] subject. The verb *assassinare* 'to murder' in (8b)–(8b') instead requires a [+ volitional] subject, thus blocking the ISA, as shown by the ungrammaticality of (8b').¹

1. *Uccidere* 'to kill' (and verbs of this type) can occur with adverbs like *involontariamente* 'accidentally' (i), whereas *ammazzare/assassinare* 'to murder' (and verbs of this type) cannot (ii). This further confirms the fact that verbs like *uccidere* 'to kill' do not require a [+ volitional] subject, while verbs like *ammazzare/assassinare* 'to murder' do:

(i) Gianni ha ucciso Sara involontariamente.
 'Gianni killed Sara accidentally'

In other words, since prototypical instruments are inanimate and, consequently, cannot act intentionally, they can only occur as the subjects of verbs that allow a (possibly non-animate) subject that does not necessarily act intentionally. This behavior is consistent with the definition of instruments provided by Reinhart (2002), who classifies them as [+cause][−mental state], as opposed to agents, which are defined as [+cause][+mental state]. Notably, complex machines (e.g., AI systems, robots, computers, etc.) constitute borderline cases, since they are inanimate entities that are nevertheless perceived as more capable of acting volitionally and autonomously. These two notions should therefore be understood as gradients (Van Hooste 2018). Indeed, such entities can occur as subjects of verbs that require a [+volitional] subject, as in *Il robot ha assassinato l'uomo* ‘The robot murdered the man’.

Summing up, in Italian – as already observed for English – instruments can undergo ISA only if they play a causal subrole in the event by which they are licensed, and the verbs allow a [$\pm$ volitional] subject (except for borderline cases, which will not be explored any further in this work).

2.3 A note on the anticausative alternation

As we have seen, the two main factors ruling ISA are causation and volition. These two lexical-semantic factors also govern the anticausative alternation, which displays a striking symmetry to the ISA alternation. Starting with volitionality, the availability of the ISA depends strictly on whether a verb specifies the intentionality of the agent. Verbs that lexically encode a high degree of intentionality (such as *assassinare* ‘to murder’) block the projection of an inanimate instrument as a subject (8b’), whereas verbs that do not require an intentional agent (such as *uccidere* ‘to kill’) allow it (8a’). This constraint mirrors the behavior of the anticausative alternation, where volitionality acts as the blocking factor (Levin & Rappaport-Hovav 1995; Cennamo 2001; Folli 2002). A case in point in Italian is the verb pair *cuocere* and *cucinare* (both translating to ‘to cook’). *Cuocere* focuses on the process of physical causation and its endpoint, *cucinare* lexically requires an intentional agent preparing food. Consequently, the non-volitional *cuocere* can undergo the anticausative alternation (*L'arrosto cuoce lentamente* ‘The roast cooks slowly’), whereas *cucinare* cannot (**L'arrosto cucina lentamente*). Crucially, the possibility for a verb to undergo the anticausative alternation is closely related to the thematic roles it allows as its subjects also when it occurs in the transitive/

(ii) *Gianni ha ammazzato/assassinato Sara involontariamente.

*‘Gianni murdered Sara accidentally’

causative construction. Verbs that undergo the anticausative alternation allow, as their subjects, not only agents and instruments, but also natural forces, and general causes (e.g., *Un colpo di vento ha rotto la finestra* ‘A gust of wind broke the window’ – *La finestra si è rotta per un colpo di vento* ‘the window broke from a gust of wind’). Indeed, a corpus analysis conducted by Heidinger and Huyghe (2024) on French change-of-state-verbs confirms that verbs whose subjects are most frequently causes, rather than agents or instruments, show a significantly higher frequency in the anticausative frame relative to the transitive/causative. Finally, it should be noted that, since in the anticausative frame, verbs are incompatible with a causative reading, they are also incompatible with the expression of an instrumental prepositional phrase that plays a strictly causal subrole in the event (*Gianni ha rotto il vaso con un martello* ‘Gianni broke the vase with a hammer’ – **Il vaso si è rotto con un martello* ‘*The vase broke with a hammer’).

3. The ISA in the dialect of Reggio Emilia

This section is dedicated to the comparison between Italian and the dialect of Reggio Emilia with respect to the ISA.² When addressing the ISA in the dialect of Reggio Emilia, it is possible to make two predictions. Given the semantic nature of the two constraints presented above, which are closely linked to how events denoted by verb classes are conceptualized, they are expected to be cross-linguistically robust. As such, they should hold for the dialect of Reggio Emilia just as they do for English and Italian. However, these constraints also heavily depend on the meaning of single verbs. It is well-known that languages tend to partition the semantic space in different ways (e.g., Alternberg & Granger 2002), therefore we can predict that possible differences between the two languages under investigation lie in the lexicon.

Before turning to the presentation of the data, a methodological clarification is in order: the preliminary data we present here have been collected by one of the authors of this paper together with an informant, both native speakers of the dialect of Reggio Emilia.

3.1 The Constraint on the Instrumental Subrole

As suggested in Section 3, we expect the Constraint on the Instrumental Subrole, formulated in (6) and repeated in (9), to hold in the dialect of Reggio Emilia.

2. Cf. Hajek (1997) for a description of the main features displayed by the dialect of Reggio Emilia.

(9) **Constraint On The Instrumental Subrole**

In order to enter the ISA, the role played by the instrument in the event must be strictly causal

In other words, we expect that in this dialect as well, only intermediary instruments can enter the ISA. In (10), the sentences in (4) are translated into the dialect of Reggio Emilia.³ In this language, the most prototypical way of realizing instruments is a prepositional phrase headed by the preposition *cun* ‘with’, as in English and Italian:

- (10) a. Gianni l’à ròt al vêdêr [cun na
 Gianni have-PRS.3SG break.PST.PTCP the.M.SG glass.M.SG with a.F.SG
 prêda]
 rock.F.SG
 ‘Gianni broke the glass [with a rock]’
 b. Gianni l’èintra in cà’ [cun la cêva]
 Gianni enter-PRS.3SG in house.F.SG with the.F.SG key.F.SG
 ‘Gianni enters the house [with the key]’
 c. Gianni a’l magna al şlê [cun al cucêr]
 Gianni eat-PRS.3SG the.M.SG ice-cream.M.SG with the.M.SG spoon.M.SG
 ‘Gianni eats the ice cream [with the spoon]’

The three verbs in the dialect of Reggio Emilia, *rûmper* ‘to break’ (10a), *intrêr* ‘to enter’ (10b) and *magnêr* ‘to eat’ (10c) translate the Italian verbs *rompere* ‘to break’ (4a), *entrare* ‘to enter’ (4b) and *mangiare* ‘to eat’ (4c). In (10a) the instrument (*prêda* ‘rock’) plays the causal role played by the instrument in (4a), i.e., *pietra* ‘rock’, hence being an intermediary instrument; in (10b), the instrument (*cêva* ‘key’) is a necessary precondition for the event to happen, i.e., it is an enabling instrument, like the instrument in (4b), i.e., *chiave* ‘key’; finally, in (10c), the instrument (*cucêr* ‘spoon’) is a helping entity, i.e., it is an ancillary instrument, like *cucchiaio* ‘spoon’ in (4c).

3. For the transcription of the data, we refer to the system proposed by Isarco Reggiani, who is an author, poet, and an independent scholar deeply devoted to the dialect of Reggio Emilia, as reported in the site of the *Léngua Mêdra* ‘Mother Tongue’ association. Certain diacritics we used warrant an explanation. The acute accent (´) indicates a short, mid-high sound. It is carried by *é* (to be pronounced [e]) and *ó* (to be pronounced [o]). The grave accent (`) indicates a short, mid-low sound. It is carried by the vowels *è* and *ò* (to signal a mid-low sound approaching “a”, i.e., [æ] and [ɒ], respectively). The vowels *ì* [i], *ù* [u], and *à* [a] are pronounced as in standard Italian. The circumflex accent (ˆ) indicates long, mid-low sounds. It is carried by the vowels *â* [a:], *î* [i:], *û* [u:], *ô* [ɔ:], and *ê* [ɛ:, æ:] (in *ê* and *ô* it signals a long, mid-low sound approaching “a”). The macron (¯) indicates a long, mid-high sound. It is carried by the vowels *ō* [o:] and *ē* [e:]. Finally, the consonant *ş* indicates a sound similar to the voiced Italian “s” [z].

Given the identity between the instrumental subroles in (10) and those in (4), we expect that only the *intermediary* instrument in (10a) can enter the ISA, whereas the *facilitating* instruments in (10b) and (10c) cannot. This is indeed the case in the dialect of Reggio Emilia, as shown in (11):

- (11) a. Na prēda l'à ròt al vèdêr
 A.F.SG rock.F.SG have-PRS.3SG break.PST.PTCP the.M.SG glass.M.SG
 'A rock broke the glass'
 b. *La cêva la èintra in ca'
 The.F.SG key.F.SG enter-PRS.3SG in house.F.SG
 '*The key enters the house'
 c. *Al cucêr a'l magna al şlê
 The.M.SG spoon.M.SG eat-PRS.3SG the.M.SG ice-cream.M.SG
 '*The spoon eats the ice-cream'

The data in (11) confirm that the Constraint on the Instrumental Subrole (8) also holds for the dialect of Reggio Emilia: if instruments do not play a strictly causal role in the event denoted by the verb that implies them, the ISA is not licensed, and the resulting sentence is ungrammatical.

3.2 The Deliberation constraint

The Deliberation Constraint, whose revised version is reported in (7) and repeated in (12) below, claims that ISA is only licensed with verbs that allow a [$\pm$ volitional] subject. Conversely, if a verb requires a [+ volitional] subject, ISA is blocked.

(12) Deliberation Constraint (revised version)

ISA is only allowed with verbs that select a [$\pm$ volitional] subject

In order to investigate whether this constraint holds for the dialect of Reggio Emilia, as we predict, we decided to focus on pairs of verbs that can be labeled *kill/murder pairs*, i.e., pairs of verbs that share the same core meaning (denoting an event where instruments play a causal subrole) but differ in the degree of deliberation they require. One member of the pair systematically allows a [$\pm$ volitional] subject (*kill*-type verbs), whereas the other requires a [+ volitional] subject (*murder*-type verbs). Consequently, the *kill*-type member of the pair should systematically allow ISA, while the *murder*-type member should systematically block it. Three *kill/murder pairs* found in the dialect of Reggio Emilia are reported in Table 1. Crucially, the same pairs of verbs are found in Italian, so that a direct comparison between the two languages can be drawn.

Table 1. *Kill/murder* pairs of verbs in the dialect of Reggio Emilia and Italian

	<i>Kill-type verbs</i>	–	<i>Murder-type verbs</i>
Dialect RE:	<i>Ciapêr</i> ‘to hit’	–	<i>Picêr</i> ‘to beat’
IT:	<i>Colpire</i> ‘to hit’	–	<i>Picchiare</i> ‘to beat’
Dialect RE:	<i>Purtêr</i> ‘to take’	–	<i>Cumpagnêr</i> ‘to accompany’
IT:	<i>Portare</i> ‘to take’	–	<i>Accompagnare</i> ‘to accompany’
Dialect RE:	<i>Avrîr</i> ‘to open’	–	<i>Fursêr</i> ‘to force/to pick’
IT:	<i>Aprire</i> ‘to open’	–	<i>Forzare</i> ‘to force/to pick’

Below, two sentences are presented for each pair of verbs, in both the dialect of Reggio Emilia and Italian (with the following order: sentence in the dialect of Reggio Emilia, sentence in Italian, translation in English). In the first sentence, the instrument is realized as a PP headed by *cun/con* ‘with’; in the second, it is realized as the subject (ISA).

In (13), the sentences for the first pair of verbs, i.e., *ciapêr/colpire* ‘to hit’ ([± volitional] subject) – *picêr/picchiare* ‘to beat’ ([+ volitional] subject), are given:

(13) **Ciapêr/colpire ‘to hit’ (kill-type verb)**

- a. Gianni l’*à* *ciapê* *al* *cavâl* *cun al*
 Gianni ha *colpito* *il* *cavallo* *con il*
 Gianni have-PRS.3SG hit.PST.PTCP the.M.SG horse.M.SG with the.M.SG
bastòun
bastone
 stick.M.SG
 ‘Gianni hit the horse with the stick’
- a’ *Al* *bastòun* *l’*à** *ciapê* *al* *cavâl*
Il *bastone* *ha* *colpito* *il* *cavallo*
 The.M.SG stick.M.SG have-PRS.3SG hit.PST.PTCP the.M.SG horse.M.SG
 ‘The stick hit the horse’

Picêr/picchiare ‘to beat’ (murder-type verb)

- b. Gianni l’*à* *picê* *al* *cavâl* *cun al*
 Gianni ha *picchiato* *il* *cavallo* *con il*
 Gianni have-PRS.3SG beat.PST.PTCP the.M.SG horse.M.SG with the.M.SG
bastòun
bastone
 stick.M.SG
 ‘Gianni beat the horse with the stick’

- b. *Al bastoun l'à picê al cavâl
 *Il bastone ha picchiato il cavallo
 The.M.SG stick.M.SG have-PRS.3SG hit.PST.PTCP the.M.SG horse.M.SG
 'The stick beat the horse'

In (13a) and (13b), where the instrument is realized as a PP headed by *cun* (dialect of Reggio Emilia) and *con* (Italian) the sentences are grammatical for both *ciapêr/colpire* 'to hit' and *picêr/picchiare* 'to beat'; however, only the derived ISA construction in (13a'), whose verb is *ciapêr/colpire* 'to hit', is grammatical, while (13b'), whose verb is *picêr/picchiare* 'to beat', is not. Indeed, the second member of the pair, requiring a [+ volitional] subject, prohibits the ISA construction. The same goes for the second pair of verbs (14), where ISA is only licensed by the first member of the pair, i.e., *purtêr/portare* 'to take' (14a'), but not by the second, i.e., *cumpagnêr/accompagnare* 'to accompany' (14b'), and for the third (15), as shown again by the contrast in grammaticality between (15a'), where the ISA construction is licensed by *avrîr/aprire* 'to open', and (15b'), where it is blocked by *fursêr/forzare* 'to force/to pick'.

(14) **Purtêr/portare 'to take' (kill-type verb)**

- a. Al pilota l'à purtê i suldê a
 Il pilota ha portato i soldati a
 The.M.SG pilot.M.SG have-PRS.3SG take.PST.PTCP the.M.PL soldier.M.PL to
 Tirana cun l' areoplân
 Tirana con l' aeroplano
 Tirana with the.M.SG airplane.M.SG
 'The pilot took the soldiers to Tirana with the airplane'
- a'. L' areoplân l'à purtê i suldê
 L' aeroplano ha portato i soldati
 The.M.SG airplane.M.SG have-PRS.3SG take.PST.PTCP the.M.PL soldier.M.PL
 a Tirana
 a Tirana
 to Tirana
 'The airplane took the soldiers to Tirana'

Cumpagnêr/accompagnare 'to accompany' (murder-type verb)

- b. Al pèd(e)r l'à cumpagnê i
 Il papà ha accompagnato i
 The.M.SG father.M.SG have-PRS.3SG accompany.PST.PTCP the.M.PL
 putèin a scōla cun la mâchina
 bambini a scuola con la macchina
 child.M.PL to school.F.SG with the.F.SG car.F.SG
 'The dad accompanied his kids to school with his car'

- b. *La mâchina l'à cumpagnê i putèin
 *La macchina ha accompagnato i bambini
 The.F.SG car.F.SG have-PRS.3SG accompany.PST.PTCP the.M.PL child.M.PL
 a scôla
 a scuola
 to school.F.SG
 'The car accompanied the kids to school'

(15) **Avrîr/aprire 'to open' (kill-type verb)**

- a. Gianni l'à avêrt la pôrta cun la
 Gianni ha aperto la porta con la
 Gianni have-PRS.3SG open.PST.PTCP the.F.SG door.F.SG with the.F.SG
 cêva
 chiave
 key.F.SG
 'Gianni opened the door with the key'
- a. La cêva l'à avêrt la pôrta
 La chiave ha aperto la porta
 The.F.SG key.F.SG have-PRS.3SG open.PST.PTCP the.F.SG door.F.SG
 'The key opened the door'

Fursêr/forzare 'to force/to pick' (murder-type verb)

- b. Gianni l'à fursê la pôrta cun la
 Gianni ha forzato la porta con la
 Gianni have-PRS.3SG force.PST.PTCP the.F.SG door.F.SG with the.F.SG
 mulêta per i cavî
 forcina per i capelli
 clip.F.SG for the.M.PL hair.M.PL
 'Gianni forced the door with the hairpin'
- b. *La mulêta per i cavî l'à fursê
 *La forcina per i capelli ha forzato
 The.F.SG clip.F.SG for the.M.PL hair.M.PL have-PRS.3SG force.PST.PTCP
 la pôrta
 la porta
 the.F.SG door.F.SG
 '*The hairpin forced the door'

The examples (13)–(15) show that the Deliberation Constraint holds for the dialect of Reggio Emilia, as well. When two verbs that share the same core meaning exist, one denoting an action that requires a low degree of deliberation to be performed (i.e., that allows a [$\pm$ volitional] subject) and the other denoting an action that requires a high degree of deliberation to be performed (i.e., that

requires a [+ volitional] subject), the ISA is permitted with the former and prohibited with the latter.⁴

3.3 Differences between the dialect of Reggio Emilia and Italian lie in the lexicon

The Constraint on the Instrumental Subrole and the Deliberation Constraint are expected to hold cross-linguistically. Indeed, the data we collected (albeit preliminary) confirm this prediction. However, since languages tend to partition the semantic space in different ways, lexicalizing concepts differently, one might also expect that differences arise when two verbs in the two languages lexicalize different portions of meaning. Indeed, a second group of verbs exist in the dialect of Reggio Emilia, whose form corresponds to an Italian verb that requires a [+ volitional] subject but whose meaning covers the meanings of both verbs of the corresponding Italian *kill/murder* pair of verbs. Three verbs of this type are represented in Table 2:

Table 2. Verbs in the dialect of Reggio Emilia whose meaning is lexicalized *via* a *kill/murder* pair in Italian

Meaning	Dialect of Reggio Emilia	Italian
Cause someone to die	<i>Masêr</i>	<i>Uccidere</i> ‘to kill’ [± volitional] <i>Ammazzare/assassinare</i> ‘to murder’ [+ volitional]
Cause something to become closed	<i>Sarêr</i>	<i>Chiudere</i> ‘to close’ [± volitional] <i>Serrare</i> ‘to lock’ [+ volitional]
Cause something to become extinguished/ less intense/turned off	<i>Smorsêr</i>	<i>Spegnere</i> ‘to extinguish’ [± volitional] <i>Smorzare</i> ‘to dampen’ [+ volitional]

4. It should be noted that sentences like *Questa macchina mi ha accompagnata per anni* ‘This car accompanied me for years’ or *La macchina ha accompagnato la signora Ferrero nel suo ultimo viaggio* ‘The car accompanied Mrs. Ferrero on her last trip’ (a naturally-occurring sentence pointed out by an anonymous reviewer), which may seem to be counterexamples to our generalization, actually involve a metaphorical interpretation of *accompagnare* (cf. Section 2).

Table 2 shows three portions of meaning which are lexicalized by a single verb in the dialect of Reggio Emilia, but by a *kill/murder* pair of verbs in Italian. Formally, the “single” verbs of the dialect closely resemble the member of the corresponding Italian *kill/murder* pair which requires a [+ volitional] subject. *Masêr* formally resembles the Italian *murder*-type verb *ammazzare* ‘to murder’; the verb *sarêr* the Italian *murder*-type verb *serrare* ‘to lock’, and the verb *smorsêr* the *murder*-type verb *smorzare* ‘to dampen’. The meaning of these verbs, however, is compatible with the meaning of both the corresponding Italian *kill/murder* pairs of verbs. Indeed, all these verbs allow ISA constructions, as shown in (16) for the verbs *masêr* (dialect) – *uccidere* ‘to kill’/*ammazzare/assassinare* ‘to murder’; in (17) for *sarêr* (dialect) – *chiudere* ‘to close’/*serrare* ‘to lock’, and in (18) for *smorsêr* – *spegnere* ‘to extinguish’/*smorzare* ‘to dampen’.⁵

- (16) a. Gianni ha ucciso/assassinato/ammazzato Sara con il
 Gianni have-PRS.3SG kill/murder.PST.PTCP Sara with the.M.SG
 veleno Italian
 poison.M.SG
 ‘Gianni killed/murdered Sara with the poison’
- a'. Il veleno ha ucciso/*ammazzato/*assassinato Sara
 The.M.SG poison.M.SG have-PRS.3SG kill/murder.PST.PTCP Sara
 ‘The poison killed/*murdered Sara’
- b. Gianni l'ha masê la Sara cun al
 Gianni have-PRS.3SG {kill/murder}.PST.PTCP the.F.SG Sara with the.M.SG
 vlèin Dialect
 poison.M.SG
 ‘Gianni {killed/murdered} Sara with the poison’
- b'. Al vlèin l'ha masê la Sara
 The.M.SG poison.M.SG have-PRS.3SG {kill/murder}.PST.PTCP the.F.SG Sara
 ‘The poison killed Sara’

5. Furthermore, like *kill*-type verbs in Italian (cf. footnote 2), these verbs can occur with adverbs like *involontariamente* ‘accidentally’, which in the dialect of Reggio Emilia is realized through the expression *sèinsa vlér* LIT: without wanting (to do it) ‘accidentally’ as shown in (i), (ii), (iii):

- (i) *Gianni l'ha masê la Sara sèinsa vlér*
 ‘Gianni killed Sara accidentally’
- (ii) *Gianni l'ha sarê al baùl sèinsa vlér*
 ‘Gianni closed the trunk accidentally’
- (iii) *Gianni l'ha smùrsê al fóg sèinsa vlér*
 ‘Gianni extinguished the fire accidentally’.

- (17) a. Gianni ha chiuso/serrato il baule con
 Gianni have-PRS.3SG close/lock.PST.PTCP the.M.SG trunk.M.SG with
 la chiave Italian
 the.F.SG key.F.SG
 ‘Gianni closed/locked the trunk with the key’
- a'. La chiave ha chiuso/*serrato il baule
 the.F.SG key.F.SG have-PRS.3SG close/lock.PST.PTCP the.M.SG trunk.M.SG
 ‘The key closed/*locked the trunk’
- b. Gianni l'ha sarê al baùl cun
 Gianni have-PRS.3SG {close/lock}.PST.PTCP the.M.SG trunk.M.SG with
 la cêva Dialect
 the.F.SG key.F.SG
 ‘Gianni {closed/locked} the trunk with the key’
- b'. La cêva l'ha sarê al baùl
 The.F.SG key.F.SG have-PRS.3SG {close/lock}.PST.PTCP the.M.SG trunk.M.SG
 ‘The key closed the trunk’
- (18) a. Gianni ha spento/smorzato l' incendio con
 Gianni have-PRS.3SG extinguish/dampen.PST.PTCP the.M.SG fire.M.SG with
 un secchio d' acqua Italian
 a.M.SG bucket.M.SG of water.F.SG
 ‘Gianni extinguished/dampened the fire with a bucket of water’
- a'. Un secchio d' acqua ha
 A.M.SG bucket.M.SG of water.F.SG have-PRS.3SG
 spento/*smorzato l' incendio
 extinguish/dampen.PST.PTCP the.M.SG fire.M.SG
 ‘A bucket of water extinguished/*dampened the fire’
- b. Gianni l'ha smûrsê al fôg
 Gianni have-PRS.3SG {extinguish/dampen}.PST.PTCP the.M.SG fire.M.SG
 cun un caldarêin Dialect
 with a.M.SG bucket-of-water.M.SG
 ‘Gianni {extinguished/dampened} the fire with a bucket of water’
- b'. Un caldarêin l'ha smûrsê
 A.M.SG bucket-of-water.M.SG have-PRS.3SG {extinguish/dampen}.PST.PTCP
 al fôg
 the.M.SG fire.M.SG
 ‘A bucket of water extinguished the fire’

Since this group of verbs in the dialect of Reggio Emilia can in principle receive both an intentional and an unintentional reading, ISA constructions are always allowed. In contrast, the same is not true for the corresponding pair of Italian verbs, where only verbs licensing a [+ volitional] subject allow the ISA construction. It should be noted, however, that the verbs *serrare* ‘to lock’ and *smorzare*

‘to dampen’ can sometimes occur with non-volitional subjects, e.g., *Il pianto le serrava la gola* ‘crying tightened her throat’, *Il latte di cocco smorza il piccante* ‘coconut milk tones down the spiciness.’ Certain constructions of this kind, which are highly conventional, can either be interpreted as having a theme subject whose properties are predicated by the verb – as in the *coconut milk* example (cf. Section 2) – or involve a shift in verbal meaning. A broader investigation of the ISA employing quantitative methods and corpus analysis could help clarify whether such examples represent marginal uses, diachronic residues, or evidence of a more productive pattern than is currently acknowledged, and hence lead to a more nuanced approach to the constraints ruling ISA. This is left for future research.

Returning to the dialect of Reggio Emilia, it can be observed that, although the verbs in (16b, b’), (17b, b’), and (18b, b’) allow the ISA construction, the [$\pm$ volitional] subject interpretation is blocked, and so is ISA, if more information about the volition of the subject is added to the sentence. For instance, if more information is added to (16b) and (17b), as in (19a) and (20a), so as to imply that the subject acts volitionally, the non-volitional reading of the action denoted by the verb is blocked, and the ISA construction becomes ungrammatical, as in (19a’) and (20a’).⁶

- (19) a. Gianni l’*à* masêda cun
 Gianni l’*ha* {uccisa/assassinata/ammazzata} con
 Gianni her.CL.OBJ= have-PRS.3SG {kill/murder}.PST.PTCP with
 al vlèin par i só sòld
 il veleno per i suoi soldi
 the.M.SG poison.M.SG for the.M.PL her-POSS.M.PL money.M.PL
 ‘Gianni {killed/murdered} her with the poison for her money’
 a’ *Al vlèin l’*à* masêda
 *Il veleno l’*ha* assassinata/ammazzata
 the.M.SG poison.M.SG her.CL.OBJ= have-PRS.3SG murder.PST.PTCP
 par i só sòld
 per i suoi soldi
 for the.M.PL her-POSS.M.PL money.M.PL
 ‘*The poison murdered her for her money’

6. In (19) and (20), the order is: sentence in the dialect of Reggio Emilia, sentence in Italian, English translation.

- (20) a. Gianni l'à prûvê a sarêr al
 Gianni ha provato a {~~chiudere~~/serrare} il
 Gianni have-PRS.3SG try.PST.PTCP to {close/lock}.INF the.M.SG
 baùl cun la cêva
 baule con la chiave
 truck.M.SG with the.F.SG key.F.SG
 'Gianni tried to {close/lock} the trunk with the key'
- a' *La cêva l'à prûvê a sarêr al baùl
 *La chiave ha provato a serrare il baule
 the.F.SG key.F.SG have-PRS.3SG try.PST.PTCP to lock.INF the.M.SG truck.M.SG
 '*The key tried to lock the trunk'

The comparison between (16)–(18) and (19)–(20) shows that when no further information about the subject acting volitionally is present, the verbs are interpreted as the Italian verbs that allow a [$\pm$ volitional] subject and ISA is allowed. However, when further information about the subject acting volitionally is provided, the subject-acting-unintentionally interpretation is no longer available. The verbs receive a restricted interpretation that requires a [+ volitional] subject and ISA is blocked.

4. Conclusions

In this paper, we investigated the Instrument-Subject Alternation in Italian and the dialect of Reggio Emilia, a syntactic phenomenon ruled by two semantic constraints, i.e., the Constraint on the Instrumental Subrole and the Deliberation Constraint.

After having defined the phenomenon and the constraints that rule it, we formulated two predictions on possible similarities and differences between the two languages under investigation. We predicted that (i) the constraints that rule ISA in Italian would also hold for the dialect of Reggio Emilia, because they are semantic and, as such, expected to hold cross-linguistically, and (ii) if variation is found between the two languages, then it should regard the lexical semantics of verbs, thus lying in the lexicon.

The comparison between Italian and the dialect of Reggio Emilia showed that the two semantic constraints also hold in the dialect, as expected, and that the differences between the two languages lie in the lexicon. Two groups of verbs have been identified in the dialect of Reggio Emilia. In the first group, two verbs that share the same core meaning but differ in the degree of volition they require are present, which have a corresponding pair in Italian. For this group of verbs, one member systematically allows the ISA and the other systematically blocks it.

In the second group of verbs, the dialect of Reggio Emilia does not display a pair of verbs differing in the value of the feature [volitional] but only one single verb, which formally resembles the Italian verb that requires a [+ volitional] subject, but which is assigned a “broad” interpretation ([± volitional]) that allows the ISA. However, when further information about the volition of the subject is provided by the syntactic context, the only interpretation available is that implying that the subject acts intentionally, and ISA is blocked.

The preliminary data presented in this paper, which represents one of the first attempts at cross-linguistically studying instruments and their syntactic behavior, are consistent with the predictions derived from previous literature on the topic. A question raised by the second group of verbs found in the dialect of Reggio Emilia and left open for future research concerns the preferential interpretation that these verbs receive when no additional syntactic context is present.

Finally, as suggested above, the primary goal for future research is to expand the sample of verbs and sentences. By employing quantitative methods and collecting naturally-occurring sentences – rather than relying solely on elicited data – we aim to carry out a broader investigation of this phenomenon. This will help account for potential borderline cases and additional factors contributing to the distribution of ISA constructions. A second goal is to expand the cross-linguistic comparisons between languages and dialects, in order to reach a deeper understanding of lexico-semantic phenomena and phenomena that lie at the interface between semantics and syntax.

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