The Source and Nature of Conventions in Discourse: An Arabic survey-based study

SADIYA SHAHID

UNIVERSITY OF CAMBRIDGE

1 INTRODUCTION

In this paper, I reexamine Lepore & Stone’s (2015) radical conventionalism – namely their emphasis on the role of linguistic conventions in resolving ambiguities that pertain to cross-sentential anaphora, and misunderstandings that pertain to pure idioms – via a combination of conceptual analysis alongside a pilot empirical study based on purpose-designed surveys in Arabic. The results support that the grammatical system itself does not contain a specific rule for subject- or object-biased anaphoric coreference, and that pure idiomatic meanings cannot be strictly attributed to linguistic conventionality, thereby challenging L&S’s stance. I ultimately conclude that (i) other sources of information (e.g. sociocultural presumptions) in the making of meaning, and pragmatic inference in the processing of meaning, play much bigger roles than radical conventionalists acknowledge; and that (ii) a balanced view of conventions and intentions in theorizing about communication is needed.

2 CONVENTIONS VS. INTENTIONS

Given that the debate between conventionalists and intentionalists goes on to this day, convention-based theories of meaning can be best understood when juxtaposed with intention-based ones. In Lewis’s (1969) game-theoretic account, conventions are socially determined regularities in behavior that are not only arbitrary but also self-perpetuating. That is, convention plays a key role in solving coordination problems that arise when there are various, incompatible courses of action that agents in a group can take to achieve their goals: in such a situation, it would be in the agents’ best interest to arbitrarily settle on one compatible course of action together; moreover, an agent has decisive reason to follow a convention if others in the group also conform. Language, on this view, is just one among many activities that are ruled by conventions. In recent years, L&S (2015) heavily draw from such Lewisian notions to underpin their radical conventionalist stance on meaning-making, as detailed in section 3. The intentionalist camp, on the other hand, consists of those largely influenced by Gricean philosophy. Grice (1957)

©2020 Shahid

This is an open-access article distributed by Section of Theoretical & Applied Linguistics, Faculty of Modern and Medieval Languages and Linguistics, University of Cambridge under the terms of a Creative Commons Non-Commercial License (creativecommons.org/licenses/by-nc/3.0).
The Source and Nature of Conventions in Discourse

differentiates between meaning that is “natural” i.e. characterized by entailment relations, and “non-natural” i.e. defined by a speaker’s intentions as well as the recognition of those intentions by the addressee. Grice’s (1957) intentionalism further underlies his notion of implicatures, the calculation of which – he suggests – hinges on the Cooperative Principle and the four maxims of conversation that people presumably observe in pursuit of efficient communication.

That said, the Gricean and Lewisian approaches are not completely at odds with one another. Both consider language users to have complex mental states that determine linguistic content: they are rational beings with mutual expectations of abiding by particular conventions (à la Lewis) or maxims (à la Grice) to reach a collective goal. Furthermore, agents coordinating by convention requires for them to identify the intentions of others. For example, when a speaker uses some linguistic convention for his audience, he intends what he utters to typify, and the audience recognizes this. If the audience were to recognize his intention as otherwise, they would not produce the particular response induced by his utterance. Likewise, Leezenberg (2006: 7) points out that Grice endorses a universalist view of rationality in that there seems to be, for all humans, only one optimally rational course of action in a given situation; and this rational linguistic behavior is essentially defined as harmonious and cooperative. As such, Grice appears to treat language as a social contract of cooperative and peaceful behavior, a notion elaborated by European Enlightenment thinkers like Hobbes, Rousseau, and Kant to justify liberalism. This is even more evident in the explicitly Kantian characterization of his maxims as those of Quality, Quantity, Relation, and Manner (Leezenberg 2006: 10), showcasing the conventions that underlie his theoretical framework. In this light, the Gricean paradigm “amounts to merely stopping part-way, so to speak, … short of embracing the true origin of his heuristics and, a fortiori, short of embracing the explanatory role of conventions” (Jaszczolt 2019: 19). Theorists who highlight speech acts, social rules, and laws, therefore, fill this void in a Lewisian fashion. Overall, it seems as though Grice and Lewis stress different components of what communication as a whole entails.

Contextualizing the conventionalism-intentionalism divide in this way allows for a balanced understanding of the act of engaging in discourse, and acknowledges the role of both without overplaying conventions or intentions respectively. Nevertheless, this is not an outlook that is adopted by all. In fact, the conventionalist flame has been recently rekindled by L&S (2015), who argue that (i) much more of communication is governed by linguistic conventions than intentionalists have supposed; and that (ii) the aspects which cannot be attributed to grammar by any means are not part of communication at all, but imagination.

2 On another note, this essentially illustrates the ethnocentrism that underlies the Gricean paradigm among others, a topic that is commonly addressed in cross-cultural pragmatics (e.g. Gudykunst 2003, Lim 1994, Wierzbicka 2009) but one that falls beyond the purpose and scope of this paper.
3 Radical Conventionalism

In L&S’s (2015) neo-Lewisian defense of linguistic conventionalism, spoken or written communication is essentially grounded in exploiting linguistic conventions. That is, an array of linguistic conventions determines the public propositional content of our utterances, while some instances – e.g. figurative and evocative uses of language – call for private imaginative engagement with their imagery. This represents a semantic minimalist stance within the realm of semantic-pragmatic boundary disputes, opposing the Gricean, neo-Gricean and relevance-theoretic pragmatic accounts of utterance interpretation. In specific terms, L&S (2015: 83, 245) suggest that semantics describes interlocutors’ social competence in coordinated inquiry through which they commit to make their meanings public; whereas pragmatics merely disambiguates and never contributes content to utterances. Note that pragmatics here does not appeal to anything like Gricean principles, as it is assumed to usually exploit shallow cues instead of deep inferences about speakers’ mental states (L&S 2015: 265). This conflict essentially stems from tipping the balance toward language versus mindreading with respect to communication. Language allows us to represent and communicate meanings through a defined set of grammatical structures, which L&S believe to be responsible for most of the communicative work. On the other hand, intentionalists emphasize that the act of communicating is a special kind of applied mindreading, with language playing a facilitatory role (Papafragou 2002).

This sets the preliminary grounds for a closer look into L&S’s radical conventionalist account. The particular foci of investigation will be anaphora resolution (following Sileo & Jaszczolt unpublished) and pure idiomatic meaning.

3.1 Grammatical Conventions

L&S (2015) postulate that cross-sentential anaphora resolution – in the absence of overriding cues from the broader context – is dictated by grammatical conventions. That is, in a context-free situation where a subject pronoun in one sentence may refer to either the subject or object as its antecedent in the preceding sentence, the subject proves more prominent than the object as a candidate for coreference (L&S 2015: 124). They base this understanding on theories of coherence in discourse in general (e.g. Hobbs 1990, Kehler 2002), and principles of attention in discourse in particular (e.g. Grosz & Sidner 1986, Grosz, Weinstein & Joshi 1995). According to the latter, pronominal reference is an independent process with grammar-driven mechanisms for resolution; in other words, grammatical role is the primary determinant of how a pronoun gets interpreted. Sileo & Jaszczolt (unpublished), on the other hand, provide empirical evidence supporting that out-of-context cross-sentential anaphora can not only be resolved by preceding subjects or objects, but that the latter is significantly preferred. Moreover, their research illustrates how the interpretive bias toward the

---

3 Whether L&S’s conventionalist versus other intentionalist accounts are completely incompatible, or emphasize different aspects of the recovery of meaning (see section 1), or concern different objectives (psychological, philosophical, computational, etc.) (see Saul 2002, Jaszczolt & Sileo in press), are all questions that need further metatheoretical inquiry.
subject or object appears to depend on various factors such as world knowledge, sociocultural assumptions, and memory. These findings strongly oppose L&S’s view, indicating that the English grammatical system itself may not contain a specific rule for subject- or object-biased cross-sentential reference assignments. A natural question that follows is whether this holds cross-linguistically. In section 4, I conduct a pilot survey on cross-sentential anaphoric reference assignment in Arabic to test whether the results reflect a bias for subjects, objects, or possibly neither.

3.2 Conventionalized Expressions

L&S (2015) dedicate a significant portion of their work to argue that the interpretation of speech act conventions, e.g. (1), is a matter of lexical disambiguation or polysemy, rather than implicatures derived via pragmatic principles operating between interlocutors (cf. Bach & Harnish 1979, Levinson 2000).

(1) Can you pass the pepper?
   +> I request that you pass the pepper.

There are several problems with this view, such as the fact that pragmatic narrowings or broadenings of the senses of words quite often lie at the root of linguistic conventionalization; in this sense, pragmatics can be a provider of content rather than just an instrument of disambiguation (Carston 2016: 618-9). A more obvious issue, though, is that L&S (2015) fail to mention idioms in their account of convention and imagination. They (L&S 2015: 163) explain metaphors as invitations to explore the perspectives suggested by their imagery rather than propositional content, while admitting that conventionalized or dead metaphors are a special kind of conventional polysemy that appear to be processed like other instances of semantic ambiguity. On this basis, they would very likely support the view that although the idiom in its core use does not seem to issue any invitation to explore its imagery, its figurative extensions – like novel metaphors – are “invitations to further explore the imagery provided by the core idiomatic phrase, to develop the perspective suggested by the idiom” (Arsenault 2018: 184-6). Pure idioms, on the other hand, are fossilized expressions that bear no plausible link between their compositional and non-compositional senses (Mulhall 2010: 1358); as such, they cannot be explained as imaginative engagement, nor polysemy for that matter. L&S, then, would have to admit them into the arena of linguistic conventions as any other non-ambiguous literal saying. If pure idiomatic and literal language both derive their meanings from linguistic conventions, without any need for pragmatic inference, both should be equally easy to process. In section 4, I empirically test this assumption via a pilot survey on processing non-compositional versus compositional senses of pure idioms in Arabic.

4 Empirical Evidence

The main aim of the empirical component of this paper is to assess two main arguments in line with L&S’s radical conventionalism. Two pilot surveys in Arabic
were conducted to evaluate the assumptions that: the subject proves more prominent than the object as a candidate for cross-sentential anaphoric reference assignment; and that: pure idiomatic and non-idiomatic meanings are linguistic conventions that are equally easy to retrieve in contexts that strongly prefer one or the other respectively.

4.1 Methodology

A total of 20 native Arabic speakers participated in the study, composed of 4 men and 16 women with a mean age of 30.6 years. All participants were above the age of 18; citizens and life-long residents of Arabic-speaking countries; and non-linguists. Before their participation, they were asked to sign a consent form to comply with the ethics regulations of the University of Cambridge. Since they were personal acquaintances who were happy to contribute to the study, and since the survey was fairly short (14 questions) and conducted online, no expenses were incurred and no monetary compensation was offered.

The first survey (henceforth S1) comprised 8 mixed cross- and intra-sentential examples of anaphoric reference. Modeled after Sileo & Jaszczolt’s (unpublished) questionnaire design, the subject and object of the first or part of the first sentence featured the same gender and number in an effort to license potential ambiguity; likewise, S1 required the participants to read every example and clearly explain its meaning based on the specific situation that first came to mind. Their responses were expected to illustrate whether they assigned the preceding subject or object as the anaphoric referent for each case. The second survey (henceforth S2) consisted of 6 two-line dialogues in which the speaker uses a pure idiom4 and the addressee responds based on either its non-compositional (conventionalized) or compositional (unconventionalized) understanding. That is, the conversational contexts were specifically constructed to direct the participants towards either the non-compositional or compositional reading of the pure idiom, in order to compare the strengths of the linguistic meanings encapsulated by conventionalized expressions like pure idioms. S2 required the participants to read each mini-dialogue and rate on a scale of 1-10 how difficult it was to understand, then explain why it was relatively easier or more difficult to understand. Their responses were expected to demonstrate whether there was a significant difference in the level of difficulty of processing non-compositional versus merely compositional meanings of the idioms. Translations of both S1 and S2 are provided in Appendix A.

Both surveys were created using the online platform SmartSurvey, after which a unique link was sent to the participants that enabled them to complete it in their own time. Upon completion, their responses were immediately available for analysis.

4.2 S1 Results

Participants’ responses for S1 – for the most part – explicitly indicated their subject or object interpretation choices; there were a few responses, however, that were

---

4 All pure idioms were extracted from Wehr’s (1993) Dictionary.
The Source and Nature of Conventions in Discourse

undecisive. The following figures illustrate the number of participants’ responses corresponding to subject, object, or subject/object (undecisive) choices; and the total percentage of said responses.

**Figure 1** Number of participants’ subject, object and subject/object responses to S1 examples.

![Figure 1](image1.png)

**Figure 2** Total percentage of participants’ subject, object and subject/object responses in S1.

![Figure 2](image2.png)

Although the majority of responses showed a bias for subject interpretations in anaphora resolution, a Yates’ chi-squared test confirms statistically significant differences between subject and object biases ($\chi^2=30.099$, df=7, p=0.0000) in S1. That is, subject-biased responses were not uniform across the 8 examples: the responses to examples 3 and 4 (Appendix A) were in fact object-biased. Moreover, a small percentage of participants expressed that either the subject or object could be a candidate for anaphoric coreference, showing that their interpretation was underdetermined.
4.3 S2 Results

Participants’ responses for S2 included a 1-10 difficulty rating score. Individual as well as average ratings for understanding each non-compositional (N) and compositional (C) sense of a pure idiom – in respective non-compositional- and compositional-biased conversational contexts – are displayed in the figures below.

**Figure 3** Number of participants’ difficulty ratings (on a scale of 1-10) for understanding non-compositional (N) and compositional (C) examples in S2.

**Figure 4** Participants’ average difficulty rating for understanding non-compositional (N) and compositional (C) examples in S2.

These results show that there was a statistically significant difference in the level of difficulty for participants to process non-compositional and compositional meanings of the idioms in S2, as a paired t test confirms (t=7.2031, df=2, p=0.0187). Participants typically explained that it was relatively easier to understand the non-compositional meanings simply because the dialogue was clear; and that it was relatively more difficult to understand the compositional meanings because the
speaker’s statements – as used in society – were idiomatic and as such called for a non-compositional understanding.

4.4 Discussion

Since the scope of this paper was limited to a pilot study, further research is needed – with larger sample sizes, and across various other languages – to corroborate its findings. Nevertheless, clear patterns of behavior were observed across the handful of examples used in S1 and S2.

S1 results show that out-of-context anaphora can be resolved by preceding subjects or objects with a subject-majority overall preference. That said, there was a statistically significant difference between the subject- versus object-bias in S1, suggesting that L&S’s subject-prominence view cannot be supported. A closer look into some of the scenarios described by the participants indicates – in line with Sileo & Jaszczolt’s (unpublished) report – that factors such as sociocultural and stereotypical presumptions played a role in the interpretive bias towards the subject or object. For instance, subject and object interpretations accounted for 25% and 75% respectively in example 3 (Appendix A), yet 75% and 25% in example 7 (Appendix A); both are listed in (2) and (3) respectively for convenience.

(2) Amīra kissed her daughter. That made her happy.

(3) Ādam bid farewell [to] Il’yās. That made him very sad.

For (2), most participants described a scenario in which Amīra’s daughter was happy due to receiving a kiss from her loving mother, suggesting that the cause for happiness is more strongly linked to receiving rather than giving a kiss in this case. This bias can be attributed to stereotypical assumptions about a mother’s nurturing love toward her child and desire for her child’s happiness, versus say a fan kissing a celebrity she admires which is stereotypically a case of making the fan herself happy. Contrary to (2), (3) elicited subject-biased interpretations. Most participants depicted a situation in which Ādam and Il’yās were inseparable friends, thus Ādam was very saddened when circumstances called for him to part with Il’yās. Again, this bias can be attributed to stereotypical assumptions about close relationships, and that the member who initiates the break-up is clearly saddened to do so and therefore more prominently sad than the member being left. These observations support the theory of Default Semantics (Jaszczolt 2005, 2015), which posits that discourse processing involves integrative information from various sources such as stereotypes about society and culture. Thus, cross-sentential reference assignment does not appear to be primarily or generally dictated by grammatical conventions.

This is reminiscent of the approach developed by scholars within the indigenous Arabic linguistic tradition in the early centuries of the Common Era, who posited that pragmatic cues besides just the situational context of utterance, such as the presumptions interlocutors make about the physical/metaphysical world, play a crucial role in anaphora resolution (see al-Suyūtī’s Ḥam‘ al-hawāmi‘ fi sharḥ jam‘ al-jawāmi‘)
S2 results similarly provide evidence against the exaggerated role of linguistic conventions advocated by radical conventionalists, showing that participants found it significantly more difficult to retrieve the compositional meanings of pure idioms despite the conversational context being compositional-biased. Most participants’ comments disclosed that this difficulty occurred due to non-compositional meanings intervening, a typical comment (translated and) represented in (4).

\[(4) \text{[The speaker] did not use this expression in a literal manner, but [the addressee] understood it in a literal way.} \] (participant 6, example 4)

Two major observations ensue from this data. First, the participants identified the compositional meanings as misunderstandings that did not correspond to what pure idioms customarily convey, suggesting that the conventionality that defines pure idioms appears to lie in social, rather than linguistic, conventions. This resonates with the observation that conventionalized interpretations stem from repeated exposure to information about culture, society and the external world (Jaszczolt 2015: 761). Thus, although pure idioms are constrained by linguistic conventions in the sense that, for instance, the verb *suqit.a* (“it was dropped...”) in S2 example 5 (Appendix A) must be in the singular masculine passive form (see also Kovács 2016), they cannot be strictly classified as such à la L&S; instead, other sources of meaning information besides linguistic convention and imagination need to be distinguished à la Default Semantics. Second, S2 results show that non-compositional meanings of pure idioms appear much stronger than their compositional counterparts. A possible explanation lies in Giora’s (1997, 1999, 2002, 2003) Graded Salience Hypothesis, which predicts that salient meanings – stored in the mental lexicon due to their conventionality or prototypicality – are automatically processed first, regardless of contextual biases; then revised in the case of a mismatch with context. In S2, the non-compositional meaning of highly conventionalized expressions like pure idioms is salient. Similarly, in support of the intentionalist stance, the relative ease in understanding the non-compositional meanings of pure idioms reflects the Grice-inspired notion that the recognition of the speaker’s intentions is sometimes “short-circuited”, that is, the meaning is so conventionalized in a language that conventions create a “shortcut” through the recognition of the intentions, while other times call for a more effortful inferential process (Haugh & Jaszczolt 2012: 94). This is demonstrated by the cline in the average difficulty to process non-compositional to compositional meanings in the S2 data, which essentially challenges the radical conventionalist view that pragmatics merely disambiguates.

---

\[^6\] The average difficulty ratings for the compositional-meaning examples 3, 4, 6 (Appendix A) are built upon large discrepancies, as a number of participants issued very low ratings. Nevertheless, they tended to explain that it was easy to understand the misunderstanding, i.e. that the addressee had clearly misunderstood the speaker’s intended meaning (e.g. participant 20, example 4). Hence, these choices typically align with what high difficulty rating choices demonstrate, namely that non-compositional meanings influenced the processing of the compositional meanings of pure idioms.
5 Conclusions

Strengthened by empirical evidence collected through purpose-designed surveys, this paper opposes L&S’s (2015) radical conventionalism and illustrates that pragmatic factors rather than linguistic conventions figure in resolving ambiguity when it comes to anaphora coreference and misunderstandings when it comes to pure idioms; and that sources of information such as sociocultural presumptions are part of meaning-making. This ties back to the importance of contextualizing the conventionalism-intentionalism dispute to allow for a balanced understanding of the act of communicating as a whole, an understanding that gives due to conventions and intentions as they deserve (see Leezenberg 2006). Again, given that the scope of this paper was limited to a pilot study, further large-scale research is needed to shed more light on the interdependence and compatibility between conventionalism and intentionalism.

References


Appendix A: Translation of S1 & S2

Appendix A: S1

Please read each of the following sentences or sentence pairs, and clearly explain what they mean based on the specific situation that first comes to your mind.

1. Latifà does not play [with] Maryam. She is rude.

2. Fatima threw Ásiyá her ball.

3. Amíra kissed her daughter. That made her happy.

4. ‘Ádil accompanies Hāshim to school. He is a good student.

5. ‘Ali hit Khālid. He is upset.

6. Ja’far threw ‘Ámir his keys.

7. Ádam bid farewell [to] Il’yās. That made him very sad.

8. Zahra invited Nādiya for dinner. She is a nice girl.

Appendix A: S2

Please read each of the following exchanges between person A and person B, and 1) rate on a scale of 1-10 how difficult it was to understand; 2) explain why it was relatively easier or more difficult to understand.

1. A. The matter has become difficult now [Lit: The matter has exposed its shin now].
   B. I’m sure things will become easier over time.

2. A. He just laughed at me maliciously [Lit: He gave me a yellow laugh].
   B. What a terrible friend!

3. A. He married her reluctantly [Lit: He married her in spite of his nose].
   B. She doesn’t seem to mind strange-looking noses!

4. A. She put me to shame after what I did [Lit: She broke my eyes after what I did].
   B. I hope she didn’t break anything else!
(5)  A. When I found out the news, I was at a loss [Lit: …, it was dropped into my hands].
   B. Don’t worry, things will turn around.

(6)  A. He is very amicable [Lit: He has very little blood].
   B. He should go to the hospital!

7 “It” here does not refer back to “the news,” but to some other unnamed entity.