

## Interpretation of conjunction and disjunction in legal discourse: What can pragmatic theories contribute?

Interpretacja koniunkcji i dysjunkcji w dyskursie prawnym:  
Jaki wkład mogą wnieść teorie pragmatyczne?

**Abstract:** This paper investigates the interpretation of the conjunction *and* and the disjunction *or* in legal texts, with a focus on international law and on ways in which pragmatic theories can assist such legal interpretation. The aim of the research is to explore if three different linguistic, or more precisely, pragmatic frameworks are applicable to interpretation in international law: Laurence Horn's neo-Gricean framework and post-Gricean Relevance Theory, according to which *and* and *or* have conceptual meaning, and Mira Ariel's as well as Ariel and Caterina Mauri's framework, according to which these connectives have procedural meaning. Through a comparative analysis of these models, the paper demonstrates how each theory accounts for the potential pragmatic enrichment of the connectives, and that constraints on legal interpretation – the rules of interpretation – can be integrated into the three theories as instantiations of Gricean maxims. An analysis of two legal examples shows that all three theories make adequate predictions.

**Key words:** lexical pragmatics, conjunction, disjunction, legal interpretation

**Abstrakt:** Niniejszy artykuł podejmuje analizę interpretacji spójnika *and* (i) oraz alternatywy *or* (lub) w tekstach prawnych oraz prawniczych, ze szczególnym uwzględnieniem prawa międzynarodowego oraz sposobów, w których teorie pragmatyczne mogą wspierać taką interpretację prawną. Celem badania jest ustalenie, czy trzy odmienne podejścia językoznawcze – a ściślej rzecz ujmując, pragmatyczne – mogą znaleźć zastosowanie w interpretacji prawa międzynarodowego: neogrice'owskie ujęcie Laurence'a Horna, postgrice'owską teorię relewancji, zgodnie z którymi *and* i *or* mają znaczenie konceptualne, oraz koncepcję Miry Ariel, a także wspólną teorię Ariel oraz Cateriny Mauri, w której spójniki te mają charakter proceduralny. Poprzez analizę porównawczą tych modeli artykuł ukazuje, w jaki sposób każda z teorii wyjaśnia możliwość pragmatycznego wzbogacenia znaczenia tych wyrażań, a także wskazuje, że ograniczenia interpretacji prawniczej – tzw. reguły wykładni – mogą zostać włączone do omawianych teorii pragmatycznych jako przejawy maksym Grice'a. Analiza dwóch przykładów orzeczniczych dowodzi, że wszystkie trzy podejścia formułują trafne i spójne predykcje interpretacyjne.

**Słowa kluczowe:** pragmatyka leksykalna, koniunkcja, dysjunkcja, interpretacja prawna

## Introduction

In this contribution, I investigate the interpretation of the conjunction *and* and the disjunction *or* in legal texts, with a focus on international law (IL) and, particularly, how pragmatic theories can assist such legal interpretation. The broader research question is: Despite being a field of specialized communication, are general pragmatic theories of meaning applicable to it? Law has its own technical vocabulary, coupled with institutional particularities and rules – such as the *rules of interpretation* (hereinafter: ROI), which guide and constrain the interpretive process normatively. However, legal language ultimately follows basic linguistic/pragmatic rules of communication (Carston, 2013), which can be integrated into general theories of linguistic communication/comprehension as “instantiations of Gricean maxims” (Carston, 2013, p. 17).

Different fields use specific methods/ROI (Feteris, 2017, p. 14). Here, as I wish to center on IL, I analyze the so-called linguistic rules delineated in the Vienna Convention on the Law of Treaties (VCLT, 1969), which lend themselves to exemplary linguistic analysis (Aher, 2013, p. 23) and are applied by an overwhelming majority of international courts and are deemed to apply to all sources of IL (Ammann, 2020, pp. 192–193). The VCLT only implicitly references canons of interpretation, as they are referred to in other fields of law, in its Article 31 (“any relevant rules of international law applicable”) and Article 32 (“supplementary means of interpretation”). While canons may subsidiarily assist the interpretation based on the provisions of the VCLT, they cannot be applied to reverse or undermine such interpretation (Dörr, 2012, p. 242). My analysis will not focus on canons (for examples/analyses, see, e.g., Carston, 2013; Smolka, 2022). Research on law and language generally neglects IL (see, however, Aher, 2013), in favor of national law (NL) (see, e.g., Carston, 2013; Horn, 1995; Skoczniak, 2019), where there is typically a hierarchy of equivalent rules to those in the VCLT that is inexistent in IL.

In this study, I examine legal texts from the perspective of lexical pragmatics, which is concerned with pragmatic phenomena related to the semantic *underspecification* of lexical items. The notion of underspecification refers to the idea that the meaning of lexical items in a given utterance cannot simply be decoded but has to be contextually inferred. I am interested in the interpretation – the contextual or pragmatic enrichment – of the underspecified semantics of lexical items by legal interpreters, such as judges in case decisions.

Legal interpreters are cognizant of the importance of the lexical semantics and pragmatics of content words, as illustrated by famous hypothetical examples such as *no vehicles in the park*, where the legal meaning of the lexical item “vehicle” must be interpreted (Hart, 1958). However, there seems to be less awareness of the semantic and pragmatic meaning of function words, such as conjunctions and disjunctions.<sup>1</sup> Nonetheless, judges frequently have to decide on the legal meaning of *and* and *or* – mirroring the fact that

---

<sup>1</sup> The greater focus on content words may be due to the minimal semantics of function words such as *and* and *or*.

these connectives represent a much-discussed case in pragmatics literature (Carston, 2013, p. 11). On the premise that these connectives are likely highly relevant in law,<sup>2</sup> I take three pragmatic theories of ordinary linguistic interpretation and ask whether they provide tools to help determine the legal meaning of *and* and *or*.

Simultaneously, I explore how the interpretation of these connectives is impacted by IL's ROI, which constrain the interpretation of legal texts to guarantee their *institutional* interpretation. Robyn Carston (2013) hypothesizes that a semantically minimal meaning of *and* will “unlikely [...] be accepted as a sound line of reasoning in most contexts, including in a court of law” (p. 11). Research on law and language suggests that the ROI may be used to convey a pragmatically-enriched or adjusted *and*-reading, such as a relation of contrast, temporal sequence, or causation. I thus hypothesize that the ROI may allow disjunction to convey a pragmatically-enriched exclusive meaning (cf. Smolka & Pirker, 2018).

To test this hypothesis, I will compare two prominent pragmatic theories vis-à-vis their approach to the drawing of pragmatic inferences: Relevance Theory (RT) and Laurence Horn's neo-Gricean framework. Both theories have been applied to legal interpretation (Carston, 2013; Horn, 1995), and both consider these connectives to have conceptual meaning, that is, they semantically encode a concept. I have chosen these theories based on suggestions that Horn's framework better suits interpretation in NL (e.g., Skoczeń, 2019), while RT better suits IL (Smolka, 2022).

At Mira Ariel's suggestion, I will contrast these two theories with her theory vis-à-vis *and*, and Ariel and Caterina Mauri's theory vis-à-vis *or*. The latter theories, which I treat as a conjoined theory, are closely related to RT but consider these connectives to have procedural meaning, that is, they encode a processing instruction. Ariel (e.g., 2008) has also applied her theory to legal interpretation.

First, I will introduce the semantics and pragmatics of *and* and *or* from the three aforementioned theoretical perspectives. Second, I will describe how the ROI can be viewed as instantiations of Gricean maxims and how they fit into the respective models. Third, on this basis, I will analyze two IL examples to test my claim that the legal meaning of *and* and *or* can be a pragmatically-enriched one, and to determine which of the three theories makes more adequate predictions regarding the connectives' legal meaning. In my chosen examples, *and* and *or* conjoin and, respectively, disjoin parts of sentences, such as nouns.

## The Semantics and Pragmatics of *and* and *or*

Before describing the semantics and pragmatics of the connectives<sup>3</sup> in the following subsections, I will highlight important distinctions between the aforementioned three

<sup>2</sup> For IL examples, see Jennifer Smolka and Benedikt Pirker (2018). Mateusz Zeifert (2018) briefly discusses U.S. and Polish law (pp. 39–40). As Zeifert (2018) mentions, additional questions arise in cross-linguistic comparisons and in legal translation, as *and* can be translated to “*i* and *oraz*,” and *or* can be translated to “*lub* and *albo*” (p. 40). These questions would, however, exceed the scope of this contribution.

<sup>3</sup> Within linguistics, there are ongoing “border wars” between semantics and pragmatics concerning the division of labor between them in understanding the meaning of words and sentences (Börjesson, 2014). However, I will discuss only three selected approaches to *and* and *or* here.

frameworks regarding the inferential nature of connectives and how I bridge these distinctions for comparative purposes.

### ***The Selected Frameworks***

Generally, semantics deals with aspects of meaning encoded in words (and sentences), while pragmatics investigates the processes by which such encoded meaning is modified in use (Wilson, 2003, pp. 273–274). Put briefly, theories inspired by Paul Grice (1989) are based on his assumption that every act of communication is inferential because the addressee is required to infer the speaker's intention from whatever – but, most importantly, linguistic – evidence is available to him (Ariel, 2008, p. 4). These theories also draw on Grice's assumption of cooperative and rational communication and some version of his conversational maxims, which guide the inferential process (Zufferey et al., 2019, pp. 9–10):

Quantity:

1. Make your contribution as informative as is required [...].
2. Do not make your contribution more informative than is required.

Quality:

1. Do not say what you believe to be false.
2. Do not say that for which you lack adequate evidence.

Relation:

1. Be relevant.

Manner:

1. Avoid obscurity of expression.
2. Avoid ambiguity.
3. Be brief [...].
4. Be orderly.

(Grice, 1989, pp. 26–27)

In this context, theories inspired by Grice view conjunction and disjunction as involving pragmatic enrichment of their semantic/encoded meaning via generalized conversational (or scalar) implicature, such as in Horn's neo-Gricean approach. The notion of implicature is based on Grice's distinction between sentence meaning (the semantic *what is said*) and speaker meaning (the pragmatic *what is meant* or communicated meaning): A speaker can *say something* while *implicating* other content (Zufferey et al., 2019, p. 8). In generalized implicatures, “the use of a certain form of words in an utterance would normally (in the absence of special circumstances) carry such-and-such an implicature or type of implicature” (Grice, 1989, p. 37). Scalar implicatures can be distinguished from other conversational implicatures in that their generation and interpretation are dependent on the identification

of some salient relation that orders a concept that is referred-to in an utterance with other concepts that are not mentioned (Hirschberg, 1991, p. 2). That is, scalar implicatures rely on “what isn’t (but could have been) said” (Horn, 2014, p. 15).

Horn (1996) assumes that implicatures are calculable in the sense that, per Grice, speaker and hearer are observing Grice’s Cooperative Principle and its component maxims (in Horn’s partially-reduced form) (pp. 311–313). This, along with contextual information and background knowledge (Grice, 1989, p. 31), permits the exploitation of these maxims to generate inferences (Horn, 1984, p. 12).

Horn (2014) collapses Grice’s maxims into two mirror-image principles: Q and R, in deference to Grice’s maxims of Quantity and Relation (p. 27). Inferences may be generated by either the Q Principle, a hearer-oriented guarantee of the sufficiency of informative content (“Say as much as you can, modulo R,” subsuming Grice’s first Quantity submaxim and the first two Manner submaxims), or the R Principle, a speaker-based law of least effort dictating minimization of form (“Say no more than you must, modulo Q,” subsuming Grice’s second Quantity submaxim, Relation, and the last two Manner maxims) (Horn, 2004, p. 13). The inferential process is thus guided by quantity – or informativeness – principles (Horn, 1984, pp. 17–19).

Per the RT account, inferences are induced by the principle of *relevance*, which reduces the Gricean maxims to this single principle guiding verbal communication (Zufferey et al., 2019, p. 46). Horn’s context-sensitive Q and R Principles, while they reflect certain recurrent patterns of pragmatic inference, could be seen as somewhat superficial manifestations of the deeper or more general principle of relevance (Carston, 2013, p. 16).

According to the originators of RT, Deirdre Wilson and Dan Sperber (2004),<sup>4</sup> utterances raise expectations of relevance not because of communicative maxims or conventions but because the search for relevance is a basic feature of human cognition that communicators may exploit (p. 608). Humans have an automatic tendency to maximize relevance because of how our cognitive systems have evolved (Cognitive Principle of Relevance) (Wilson & Sperber, 2004, p. 610). We endeavor to achieve as many improvements to our representational content as possible – or positive cognitive effects – while minimizing the cost to our energy resources – or cognitive effort – as far as we feasibly can (Carston, 2013, p. 27).

RT’s notion of relevance is a potential property of any input to any perceptual or cognitive process. The type of cognitive effects of most interest here is that of contextual implications, which follow (inferentially) only from the new input in combination with a context of existing assumptions. New information is thus only relevant if it connects productively with contextual information. RT’s notion of context is a set of (highly-activated or -accessible) mentally-represented assumptions or propositions. These include both general world knowledge and specialized knowledge, such as judges’ legal knowledge (cf. Carston, 2013, pp. 27–31). Horn observes that (a special or marked) context can block implicatures, but he goes no further than this (Hirschberg, 1991, p. 140). In RT, contextual information, such as world knowledge, may override semantic information, mainly in the sense of a pragmatic broadening or loosening of the semantic meaning (Ariel, 2008, p. 280), but this requires

<sup>4</sup> For their earlier account, see Sperber and Wilson (1995).

extra effort. To justify such effort, the interpretation should convey even more cognitive effects (Carston, 2002, pp. 233–234).

In RT, verbal utterances (and other acts of ostensive communication) come with a presumption of optimal relevance – an implicit guarantee that the utterance is the most relevant the speaker could have produced, given her abilities and preferences, and that it is at least relevant enough to be worth processing (Communicative Principle of Relevance). This Communicative Principle, which follows from the Cognitive Principle of Relevance in conjunction with the overt/ostensiveness of the intention, establishes that the speaker openly requires effort (attention, processing...) from her addressee, who is thus entitled to expect a certain quality of information and no gratuitous expenditure of effort (Carston, 2013, p. 28).

This presumption of optimal relevance licenses RT's comprehension procedure for constructing a hypothesis about the speaker's meaning: "a. Follow a path of least effort in computing cognitive effects: Test interpretive hypotheses (disambiguations, reference resolutions, implicatures, etc.) in order of accessibility. b. Stop when your expectations of relevance are satisfied (or abandoned)" (Wilson & Sperber, 2004, p. 613). The procedure contains a sub-process of mutual parallel adjustment of explicit content and intended contextual implications. The first interpretation derived via the path of least effort, which is consistent with the presumption of optimal relevance, is normally the "correct" or, at least, a very plausible interpretation. Sometimes, however, this interpretation may not be the one intended, which is why miscommunication may arise (Carston, 2013, pp. 28–30).

In RT, what Grice refers to as *implicature* is part of implicit communication – that is, pragmatic enrichments that are not communicated explicitly in an utterance. Implicit meaning is derived during the adjustment of explicitly and implicitly communicated meaning up to the point where the interpretation satisfies the hearer's expectation of relevance (Zufferey et al., 2019, p. 59). Relevance theorists argue that, in many cases, the interpretation of scalar words (such as *and* and *or*) is not enriched via implicature at the level of implicit meaning but at the level of explicit meaning (Noveck & Sperber, 2012). RT calls pragmatic enrichments at the explicit level *explicatures* (Zufferey et al., 2019, p. 60).

Explicatures are introduced as a parallel to implicatures because RT claims that the explicit content of utterances is substantially underdetermined by the linguistically-encoded meaning. An explicature is a pragmatic enrichment/development of the logical form of an utterance – the form that can be accessed through decoding processes alone. Explicatures are forms of enrichment that must be performed to identify the proposition asserted by the speaker and which represent the truth-conditional content of the utterance (Zufferey et al., 2019, pp. 57–59). RT's level of explicitly-enriched meaning does, however, not correspond with Grice's framework: For Grice, the only types of enrichment occurring at the explicit level are reference assignment and disambiguation (Zufferey et al., 2019, p. 65).

Ariel (2008) draws a slightly different boundary between, and within, grammar and pragmatics: she defines grammar as a set of codes, and pragmatics as a set of non-logical inferences derived on the basis of these codes (p. xiii), yet, her theory aligns with RT. Ariel (2008) calls those inferences contributing to the construction of the explicature *explicated inferences* – inferences that are explicitly conveyed according to RT, despite being fully-fledged pragmatic inferences (p. 21). In Ariel's (2008) theory, added meanings

associated with *and* may be explicated or implicated, just as in RT, or merely potentially truth-compatible inferences (p. 89), the latter not falling under the speaker's communicative intention (p. 88). Ariel's (2008) notion of "Privileged Interactional Interpretation"/"the speaker's main intended message" (p. 302) is a more flexible version of *what is said*: it can (sometimes) be formed by, or include, an explicature or implicature or both (p. 301); while it often corresponds to the explicature, the intended message can be less enriched or the bare semantic meaning (pp. 302–305).

Both Ariel's approach and RT tend to look at communication from the hearer's side of utterance interpretation. Horn focuses on speaker meaning, considering it a category mistake to attribute implicatures to hearers (2004, p. 3) because speakers implicate and hearers infer (p. 6). In RT, the speaker's meaning is always inferred, even when it involves a literal interpretation of linguistic expressions (Noveck & Sperber, 2012, p. 316). RT questions the need for a separate concept of generalized conversational implicature, distinguishing, instead, between particularized conversational implicatures – which are not routinely generated under normal circumstances but depend on an active contribution from the context (Ariel, 2008, p. 20) – and inferences constituting part of the explicature (p. 21). For the present analysis, I will gloss over this debate and use the term *inference* to refer to all inferences, including implicatures and explicatures.

Horn's neo-Gricean approach offers principles derived from Gricean maxims to account for speaker meaning (Carston, 2005, p. 305). RT, by contrast, has formulated these principles as cognitive interpretive principles (Carston, 2013, p. 13). Horn and RT agree that utterance comprehension is "achieved by means of (defeasible) inferential processes, which are constrained, but not determined, by the linguistic evidence" (Carston, 2013, p. 13). However, Horn claims that, although defeasible, inferences regarding what an utterance means are normally drawn in default contexts, in the absence of any indication to the contrary or special circumstances (Carston, 2013, p. 14; Horn, 2009, pp. 22–23). In contrast, RT claims that there are no defaults: the drawing of inferences is always context-sensitive, guided by the principle of relevance. Ariel (2008) agrees that cognitive processes are involved in the drawing of inferences (p. 3) and are guided by relevance considerations (pp. 89, 210).

These frameworks describe the same inferential processes from different, yet complementary, angles. For my analysis, it will therefore not matter whether cognitive processes or conventions are involved in the drawing of inferences. I will compare only the aforementioned interpretive principles and predictions the three theories make regarding the pragmatic enrichment of *and* and *or*.

## And

Traditionally, approaches following Grice view *and* as the natural language counterpart of the operator & (Blakemore & Carston, 2005, p. 570) or  $\wedge$  in logic: The semantic meaning of *and* is viewed as identical to that of the logical operator. *And* thus has only minimal semantics (Blakemore & Carston, 2005, p. 588). The phrases or sentences conjoined by *and* form a single processing unit (Carston, 2002, p. 250) that is true if both of the phrases or sentences conjoined by *and* are true (Blakemore, 1992, p. 78). Semantically, *and*

encodes no more than the co-occurrence of the linked sentences or phrases, leaving room for a large number of inferred/pragmatic enrichments as long as they are compatible with *and*'s semantics – that is, when both conjoined phrases or sentences are true (Mauri & van der Auwera, 2012, p. 383).

*P & Q* is thus logically equivalent to *Q & P*. However, the conjunction can be used to convey a pragmatically modified, or enriched (i.e., more informative), meaning (Chevalier et al., 2008, p. 1742). Take, for instance, relations of contrast, temporal sequence, or causation (examples adapted from Moeschler, 2016, p. 125):

- (1) Mary is single and pregnant.

Pragmatically-inferred meaning of *contrast*: Mary is single *but* pregnant.

- (2) Mary married Paul and got pregnant.

Pragmatically-inferred meaning of *temporal sequence*: Mary married Paul *and then* got pregnant.

- (3) Mary married Paul and obtained Polish citizenship.

Pragmatically-inferred meaning of *causation*: Mary married Paul *and because of that* obtained Polish citizenship.

According to Horn (1996), these inferences can be calculated from these sentences when uttered in a particular context, given the view of conversation as a shared goal-oriented enterprise between speaker and hearer (p. 310). The aforementioned inferences are induced in the absence of a special or marked context (Horn, 1996, p. 310), such as, in (3), a context in which both speaker and hearer know that Paul is not Polish. As with all pragmatic reasoning, these inferences are defeasible and will not go through in all contexts (Carston, 2013, p. 14).

Pragmatic inferences relating to *and*, as in (1)–(3), are induced by the R Principle (Horn, 2004, p. 19). *And* and *or* are situated on a lexical “Horn scale” (Horn, 1984, p. 19), *<or, and>*, here with the weaker scalar value/element on the left and the stronger one on the right (Horn, 2014, p. 16). The use of the stronger value *and*, which unilaterally entails the weaker value (Horn, 2009, p. 17), may license the R-inference that the speaker meant *more than and*, which renders the assertion more informative than its logical form (Horn, 1984, pp. 14–15), thereby increasing both its informative content and rhetorical strength (Horn, 2009, p. 16). This inferential process does not depend so much on an inference from what was not said but, rather, counts on the hearer's knowledge of what need not be said (Horn, 2007, p. 166): the speaker makes her contribution relatively brief or uninformative, counting on the hearer to recognize the operation of least effort and fill in the missing material (p. 164), thus exploiting the partially-reduced Gricean maxims.

In Horn's Division of Pragmatic Labor, the Q Principle of informative sufficiency yields to the R Principle of least effort in a stereotypical/unmarked situation. The stronger expression on the scale tends to be the unmarked one and, therefore, to be R-associated with a particular unmarked/stereotypical meaning, use, or situation (Horn, 2004, pp. 15–16). As

Ariel (2008) puts it, if we assume *and* to be the unmarked mode of linking, we then tend to read more into *and*-conjoined sentences (p. 74).

In RT, the pragmatic enrichment of the semantic meaning of *and* – which is induced by the principle of relevance – is justified when it provides an interpretation that meets the addressee's expectations of relevance, that is, if the unit conjoined by *and* has cognitive effects over the relevance of each conjunct taken individually (Blakemore, 2002, p. 106). In (1), the contrastive meaning will only be inferred if both speaker and hearer have an accessible mentally-represented assumption that one should only have children when in a relationship or if such an assumption is relevant in the given communicative context.

Ariel (2012) follows RT's cognitive approach to conjunction (p. 1693) and disagrees with RT mainly regarding the characterization that *and*-conjoined elements always play equivalent inferential roles in the derivation of the intended cognitive effect (p. 1703): Ariel distinguishes between two distinct *and*-readings and (at least) two pragmatic strategies (p. 1703), a relational and an independent one (p. 1693):

On the relational strategy, the inferred relation between the conjuncts is computed first, and only then is relevance to the discourse sought for the two conjuncts taken as a single processing unit. On the independent strategy, each conjunct by itself makes a separate, but parallel contribution to the same discourse point. (Ariel, 2012, p. 1692)

Under the relational strategy, it is the integrated proposition – including the coherence relation between the two conjuncts – that is relevant. Such relations may involve temporal ordering (2) or causality (3). The implicit relation between some conjuncts is a potentially-foregrounded aspect of the message, and the conjuncts are often intimately connected to each other. The ordering between the conjuncts is often irreversible (if we wish to preserve acceptability and/or the original interpretation) (Ariel, 2012, p. 1694).

Under the independent strategy, the addressee processes each conjunct as independently contributing a relevant message to the discourse topic. It is their parallel relevance to the same discourse that justifies conjoining the two into one unit (Ariel, 2012, p. 1696), and it is the parallelism requirement that distinguishes independent conjunctions from any pair of independently-processed clauses (p. 1699). The relations between the conjuncts may not be inferred or may merely be truth-compatible inferences (Ariel, 2012, p. 1692; example from p. 1697):

- (4) My Client entered Israel legally and he was born here and you know it is his right to be here.

Pragmatically-inferred meaning: *There is no basis for a legal case against the client*, the conclusion being supported by both conjuncts although there is no (direct) connection between *entering Israel legally* and *having been born in Israel*.

While Ariel agrees that *and* is not semantically empty, she joins those researchers who challenge its one-to-one correspondence with the logical operator (cf. Carston, 2002,

pp. 255–257; Assimakopoulos, 2015, p. 64); because of *and*'s semantic weakness, one may reinterpret its encoded conceptual meaning as procedural meaning, such as “look for a cognitive effect by taking both conjuncts as premises” (p. 69). According to Ariel (2012), *and* has additive semantics but only at a high level of generalization: the conjuncts function together as premises, whether conjoined or not, in the derivation of cognitive effects (p. 1703). The existence of two types of readings for *and*-conjunctions does not rule out a unified analysis, because unified analyses can yield multiple readings, which, here, are associated with two corresponding pragmatic procedures – relational and independent (Ariel, 2012, p. 1703).

A complementary description can be applied to *or*, as the next subsection will show.

## Or

*Or*<sup>5</sup> is traditionally taken to be the natural language counterpart of the operator  $\vee$  in logic. The semantic meaning of *or* is deemed identical to that of the logical operator. Like *and*, *or* thus has only minimal semantics. It is part of a syntactic construction in which two phrases or sentences disjoined by *or* form a single processing unit (or utterance [Carston, 2002, p. 225]) that is true if one or both of the phrases or sentences disjoined by *or* is/are true. *Or* thus encodes an *inclusive* reading:  $P \vee Q$  is logically equivalent to  $P$  or  $Q$  or *both*. This minimal encoded meaning can be used to convey a pragmatically-modified (enriched or more informative) meaning:  $P$  or  $Q$  but not *both* – that is, an *exclusive* reading (Chevallier et al., 2008, p. 1742). The exclusive reading is compatible with *or*'s semantics in the sense that at least one of the disjoined elements is true.

In Horn's framework,  $\langle or, and \rangle$  constitutes a Q-relevant scale (2004, p. 16): the use of the weaker scalar value will, in default contexts (p. 20), Q-implicate that the stronger value is false or unknown (Hirschberg, 1991, p. 88). The speaker is expected to use the stronger value if she is in a position to do so (Horn, 2014, p. 16). Consider (5) (example from Ariel & Mauri, 2018, p. 962):

- (5) Would you like apple pie or cheesecake?

The use of *or* thus typically conveys a pragmatically-enriched exclusive meaning *apple pie or cheesecake, but not both*. The exclusive reading is more specific and, hence, informationally stronger but not rhetorically stronger than the utterance without the implicature, or with an R-based implicature (Horn, 2009, p. 16). This connects to the fact that Q yields to R in unmarked contexts – that is, when *and* is used.

According to RT, addressees adopt an enriched exclusive interpretation of *or* only when they have contextual reasons to do so. Otherwise, a literal/inclusive interpretation will do. The pragmatic enrichment of the semantic meaning of *or* is justified when it provides an interpretation that meets the addressee's expectations of relevance, in the sense that exclusive *or* has cognitive effects over the relevance of inclusive *or*. In other words, the processing benefit has to be worth the processing effort, as interpreting *or* exclusively involves

<sup>5</sup> I investigate only *or* – not *and/or* or other disjunctive constructions such as *either... or*.

deeper processing than interpreting it inclusively (Chevallier et al., 2008, pp. 1743–1744). The context thus determines whether sentences or phrases conjoined by *or* receive an inclusive or exclusive reading.

To Ariel and Mauri (2019), *or*’s core semantic meaning is not “inclusivity” but “alternativity”: an unresolved competition between multiple options over a single slot – that is, a single context-specific role where the options are mutually exclusive (p. 40). Ariel and Mauri (2019) offer six main readings in which *or* is silent about the truth of its disjuncts: “It only specifies that the explicitly mentioned disjuncts are associated with alternatives construed as mutually exclusive on *some* level” (p. 40), which is not limited to the propositional level (p. 58) but could be arguments at the discourse level (p. 41).

Different readings exist because speakers mobilize profiled alternatives for different discourse goals: to raise alternative options for discussion even if they cannot commit to even one of them (Raised Options); to refer to a higher-level category (HLC); to offer a single predication over alternatives they wish to construe as independent of each other (Conjunctive); to avoid zeroing-in on a single alternative, so they only narrow the options to a tight set (Narrowed); to profile an unresolved choice, typically to elicit such a choice (Choice); or because they wish to profile some alternatives as the only possible alternatives (Exhaustive). Table 1 summarizes these six readings, the associated explicatures, and the number of alternatives to which the speaker commits (Ariel & Mauri, 2018, p. 987).

**Table 1**  
*Or Readings and Alternatives Committed-to*

| Reading                      | Meaning                                                     | Alternatives Committed-to |
|------------------------------|-------------------------------------------------------------|---------------------------|
| <b>Raised Options</b>        | Possibly X, possibly Y                                      | 0                         |
| <b>Higher-Level Category</b> | Higher-level Category Z, comprising members such as X and Y | 0                         |
| <b>Conjunctive</b>           | Both/any of X and Y                                         | 2                         |
| <b>Narrowed</b>              | One of X and Y                                              | 1                         |
| <b>Choice</b>                | Unresolved choice between X and Y                           | 1                         |
| <b>Exhaustive</b>            | Only X and Y (other options ruled-out)                      | 1/2                       |

Example (5) corresponds to either a HLC (*a sweet treat*), for instance when (5) receives a *yes* response, or to Choice, where one option is to be chosen (Ariel & Mauri, 2018, p. 962, pp. 973–975). The intended reading is decided by relevance considerations (Ariel, 2008, p. 89). For lack of space, I cannot provide more illustrations; I will only apply the readings to my legal examples. Some of Ariel and Mauri’s readings likely occur more typically in law, but this remains to be empirically tested.

Analogously to *and*, Ariel and Mauri (2019) challenge *or*’s correspondence to the logical operator and propose that *or*’s semantic core is not conceptual but procedural, instructing the addressee to construe the listed options as alternatives to each other (p. 40). They propose that *and* and *or* inherit their features from “pure listing” (such as in “Coffee water tea!”

when announced by a flight attendant) but that they are each further specialized: *and* profiles additivity in addition; *or* profiles alternativity (at some level) in addition (Ariel & Mauri, 2019, p. 50).

Next, I will describe how the ROI can be integrated into Horn's, RT's, and Ariel's/Ariel and Mauri's accounts and delineate how this is relevant to the analysis of my examples.

## Pragmatics and Legal (Rules of) Interpretation

First, I will briefly address possible objections to applying pragmatics to the study of interpretation of (international) law, and then describe how the ROI can be integrated into my selected linguistic/pragmatic accounts.

I will only address three common objections, starting with the fact that an international legal communicator is not a single person but part of a group or chain of authors whose intentions may differ. Furthermore, their intended meaning, which is prescriptive or normative rather than descriptive, must carry over to distant times, places, and conditions (Carston, 2013, p. 19).

To tackle this collective-intention issue, Carston (2013) proposes that "anti-intentionalist" (p. 23) US Supreme Court Justice Scalia's view – according to which we look not for subjective legislative (or international treaty) content but for an objectified intent that a reasonable person would gather from the legal text and the context of the overall legal order – is compatible with that of any communication intentionalist: to recover the author(s)' intention (p. 25). According to RT's principle of relevance, the individual intentions within the collective intention need not be identical but merely similar: "to have a representation of a set of assumptions it is *not necessary to have a representation of each assumption in the set*. Any individuating description may do" (Sperber & Wilson, 1995, p. 58, emphasis added).<sup>6</sup>

With this type of deferred communication, one may expect a higher degree of verbal explicitness and fewer cases requiring pragmatic enrichment (Carston, 2013, p. 19); yet, given the extensive role that pragmatics plays in verbal comprehension (see previous section), it is doubtful that this is the case (p. 20). Besides, parties drafting a treaty may *prefer* to be indirect, delegating interpretation (their own or others') to a later stage (cf. Horn, 1995, p. 1152).

The second potential objection concerns the peculiarities of legal language. However, lawyers use the same cognitive mechanisms governing the relation between thinking and speaking as everyone else. Phenomena that are described by cognitive linguists/scientists are present in how lawyers cognize the world, make categorization cuts, and use their professional language (Wojtczak & Zeifert, 2024, p. 768). Legal knowledge, such as the ROI, can thus be described as background knowledge or a set of highly-accessible assumptions or propositions that are mentally represented (Carston, 2013, p. 29) in the mind of the legal expert.

While legal interpretation is special because, instead of being mostly unconscious and automatic (Carston, 2013, p. 30), it involves conscious, effortful scrutiny in high-stakes

---

<sup>6</sup> For an externalist view on collective intentions, see Skoczeń (2019, pp. 148–157).

contexts or explicit interpretive disputes (p. 32), in many cases, it arguably leans toward the automatic due to the professional skills of legal experts facing limited time and resources (cf. p. 27) or when general knowledge is used (p. 30).

Third, legal communication is sometimes seen as strategic and, therefore, not compatible with linguistic theories of non-specialized language interpretation, which is deemed cooperative. According to Horn (2009), it is plausible to take Gricean maxims and Q and R Principles to govern any goal-oriented rational activity (p. 29). Carston (2013) argues that a thin notion of cooperative, purposive activity might cover all kinds of linguistic communication, including legal language: the communicator wants to convey a certain meaning to an audience and the audience wants to grasp that meaning (p. 17).

I will now describe how the myriad legal ROI can be viewed as instantiations of Gricean maxims. To be brief, I will focus on the three main so-called linguistic rules, as enshrined in the VCLT (1969): “A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose” (Article 31(1)). The three main elements here are: the *ordinary meaning of the terms of the text*; its *context*; and the *object and purpose* of the treaty in question. They form a “general rule,” taking a holistic approach that establishes no hierarchical or chronological order (Dörr, 2012, p. 541), unlike NL, where ordinary meaning’s equivalent often takes precedence over the other rules (cf. Smolka, 2022). This holistic approach does not, however, preclude that, depending on the situation, one or two of the three rules play a more central role.

The textual element of ordinary meaning does not imply that there is a *single* ordinary meaning (Gardiner, 2010, p. 480); interpreting agents often use dictionaries or specialist books to locate a definition (p. 164). It is, however, unclear whether, in legal interpretation, the ordinary meaning of a word/phrase is to be equated with the encoded meaning or with the usual, most familiar interpretation (Carston, 2013, p. 19). Ariel (2008) notes that court decisions do not necessarily seem bound by a minimalist *what is said* (p. 276). Analysis of legal discourse (drafting and interpretation) reveals no consensus on the matter (Aher, 2013, pp. 18–19).<sup>7</sup>

The contextual element is defined in Article 31(2). Put very briefly, the interpreting agent must consider the treaty as a whole, including the preamble, protocols, its systematic structure (Dörr, 2012, pp. 534, 535), and, according to Article 31(3), any relevant applicable rules of IL. To establish the object and purpose of a treaty, the interpreting agent must assess its aims – for instance, by looking at the title, the preamble, or special clauses on its objectives (Dörr, 2012, p. 546) – and attempt to promote these throughout their interpretation of the treaty’s terms (Gardiner, 2010, p. 190).

Geoffrey Miller (1990) showed that Grice’s maxims “appear remarkably similar in form to many of the leading maxims of statutory interpretation” (p. 1182) and that there is sufficient continuity to suggest that the maxims reflect some relatively universal principles for interpreting statutes (p. 1182); like Gricean maxims, legal maxims will often not yield one single unambiguous result, since competing inferences are involved (p. 1202; for a detailed discussion, see Smolka, 2022). Sean Murphy (2019) showed that this tendency similarly

<sup>7</sup> For an IL example, see the semantic analysis in Judge Tomka’s separate opinion (2019, pp. 620–621).

applies to rules of IL (pp. 15–17); for instance, *ordinary meaning* and *object and purpose* constitute competing/opposing rules. Consider the aforementioned *no vehicles in the park*: according to the *ordinary meaning* of *vehicle*, even ambulances are prohibited; according to *object and purpose*, ambulances may be allowed (cf. Horn, 1995).

*Ordinary meaning* corresponds to the first Quantity submaxim, as well as to the first two Manner submaxims (Miller, 1990, pp. 1226–1227); *purpose* corresponds to the Relation maxim – that is, *do not say anything irrelevant* (p. 1227) *to the purpose of the treaty*. I would argue that *context* similarly corresponds to this maxim – that is, *do use all relevant treaty context* (cf. Skoczeń, 2019, p. 114). There is thus a twofold tension: the ROI conflict, like Gricean maxims; and there is no one-to-one correspondence when one maxim corresponds to several ROI.

One rule of interpretation may also correspond to conflicting maxims: *Ordinary meaning* (and probably any rule) corresponds to Horn’s Q and R Principles, which explains why the application of one rule may lead to exactly contradictory results regarding the ordinary meaning of a given term (Carston, 2013, pp. 21–23; Horn, 1995). Reconsider *no vehicles in the park*: “vehicle” may not only trigger a Q-implicature covering any vehicle, but also an R-implicature evoking the normal/default/stereotypical “motor car” (cf. Carston, 2013, p. 16). This tension is further reflected in the fact that, on the one hand, ignoring a scalar inference is possible only when warranted by an interpretive rule (Skoczeń, 2019, p. 77), and, on the other, rules can be overridden by some aspect of salient extra-linguistic context or background (Carston, 2013, p. 26). In sum, the ROI and the corresponding maxims/principles can be integrated into Horn’s, RT’s, and Ariel’s/Ariel and Mauri’s accounts as additional interpretive principles or manifest assumptions.

## Applying Pragmatic Frameworks to IL Examples

I will now analyze two examples taken from legal norms contained in international treaties, based on how legal agents have interpreted them.<sup>8</sup>

### Example 1: And

Article 294(2) of the Treaty on the Functioning of the European Union (TFEU, 2016) reads (emphasis added):

The Commission shall submit a proposal to the European Parliament *and* the Council.

<sup>8</sup> I use EU law examples. While international legal orders – like the EU legal order or the United Nations legal order – are inherently different, they all rely on the same categories as the linguistic ROI in the VCLT (1969) while ascribing slightly different weights to the respective rules (see discussion in Smolka, 2022), which is not of concern for my present analysis.

Horn's prediction: since the present legal context seems to be a normal/default/stereotypical one, *and* licenses the R-inference that the communicator meant *more than and* – for instance, a temporal or causal reading.

RT's prediction: the positive cognitive effects of knowing the relation between the conjuncts in this legal context are worth the extra effort of pragmatically enriching *and* to a more informative meaning.

Ariel's prediction: the relational strategy will be used because the coherence relation between the two conjuncts is relevant here.

In my analysis, all three accounts make the right prediction in accordance with the ordinary meaning rule, corresponding here to Grice's second Quantity submaxim, Relation, and the last two Manner maxims. The latter Manner maxim, *be orderly*, makes us look at the conjuncts' ordering/relation. The rule of contextual interpretation – in Gricean terms: *be relevant* or *do use all relevant treaty context* – provides the relevant type of pragmatic enrichment: a temporal one. There is a legal principle of treating the two institutions equally that can be brought in to decide the matter. Based on this principle, the proposal has to be submitted to both institutions *simultaneously*, which corresponds to the predominant view in legal doctrine (von Achenbach, 2014, p. 170).

### **Example 2: Or**

Article 260(2) of the TFEU (2016) reads (emphasis added):

If the Court finds that the Member State concerned has not complied with its judgment it may impose a lump sum *or* penalty payment on it.

Horn's prediction: the present legal context contains the negation *not* in the if-clause preceding the main clause containing the disjunction. Scalar implicature to an exclusive *or*-reading is blocked in environments where "scale reversal" applies, that is, in the context of downward-entailing operators such as negation (Horn, 2004, p. 13), which, here, has scope over the main clause. *Or* thus remains inclusive: *lump sum or penalty payment or both*.

RT's prediction: the addressee/judge may consider whether an exclusive interpretation "lump sum or penalty payment, *but not both*" better fulfills relevance expectations. Exclusive *or* would require a justification: *why not both*? Inclusive *or* requires less cognitive effort and produces more relevance, or cognitive effects, in terms of sanctioning options in this legal context, there being no rule of contextual interpretation constraining the interpretive process. *Or* thus remains inclusive.

Ariel and Mauri's (2018) prediction: two readings are feasible, the most applicable being a conjunctive reading – the communicator shows commitment to both/all alternatives in some sense (p. 965); conditional antecedents are prime candidates for this reading (p. 966); so are modals (here, *may*) (p. 968), where the communicator commits to the possibility of each of the alternatives to be realized, in the sense that possibly only one will actually be realized, and the communicator is impartial as to which alternative is realized (p. 970); and negation is also strongly associated with this reading (p. 989).

A possible, though less pertinent, alternative reading is a narrowed one, which focuses on scope-limiting to a tight set of similar alternatives: only a lump sum or penalty payment is available, other sanctions being excluded (Ariel & Mauri, 2018, p. 973).

In my analysis, all accounts make the right prediction of an inclusive possibility reading in accordance with the ordinary meaning rule, here corresponding to Grice's second Quantity submaxim, Relation, and the last two Manner maxims. It is an interpretation based centrally on object and purpose – in Gricean terms: *be relevant* – that supports this reading: the imposition of sanctions is intended to place the Member State concerned under economic pressure, which corresponds to the reading adopted by the European Court of Justice (Radivojević & Raičević, 2017, p. 180).

## Conclusion

Among the numerous pragmatic theories, I have selected three prominent frameworks in the neo-Gricean and post-Gricean traditions whose authors have applied their theories to legal interpretation. I have illustrated that the ROI can be viewed as instantiations of Gricean maxims and how they fit into the respective models. My analysis of two legal examples shows that (i) the legal meaning of *and* and *or* can be a pragmatically-enriched one and (ii) all three theories make adequate predictions in accordance with the ROI.

While previous studies have offered binary theoretical comparisons of neo- versus post-Gricean theories and their applicability to legal interpretation (Skoczzeń, 2019; Smolka, 2022), the novelty of the present approach lies in combining such a comparison with an application of *three* theories to practical examples, with a focus on connectives in IL, and in demonstrating their equal applicability, contrary to previous studies.

It remains to be empirically tested in larger samples or experiments whether one theory makes more adequate predictions than the others and is, thus, potentially more helpful to legal interpreters determining the legal meaning of lexical items.

## References

- Aher, M. (2013). Deontic contexts and the interpretation of disjunction in legal discourse. *Canadian Journal of Linguistics/Revue canadienne de linguistique*, 58(1), 13–42. <https://doi.org/10.1017/S0008413100002504>.
- Ammann, O. (2020). *Domestic courts and the interpretation of international law*. Brill Nijhoff. <https://doi.org/10.1163/9789004409873>.
- Ariel, M. (2008). *Pragmatics and grammar*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511791314>.
- Ariel, M. (2012). Relational and independent *and* conjunctions. *Lingua*, 122(14), 1692–1715. <https://doi.org/10.1016/j.lingua.2012.09.001>.
- Ariel, M., & Mauri, C. (2018). Why use *or*? *Linguistics*, 56(5), 939–993. <https://doi.org/10.1515/ling-2018-0020>.
- Ariel, M., & Mauri, C. (2019). An 'alternative' core for *or*. *Journal of Pragmatics*, 149, 40–59. <https://doi.org/10.1016/j.pragma.2019.06.004>.

- Assimakopoulos, S. (2015). Motivating the procedural analysis of logical connectives. *Nouveaux cahiers de linguistique française*, 32, 59–70.
- Blakemore, D. (1992). *Understanding utterances: Introduction to pragmatics*. Blackwell.
- Blakemore, D. (2002). *Relevance and linguistic meaning: The semantics and pragmatics of discourse markers*. Cambridge University Press. <http://dx.doi.org/10.1017/CBO9780511486456>.
- Blakemore, D., & Carston, R. (2005). The pragmatics of sentential coordination with *and*. *Lingua*, 115, 569–589. <https://doi.org/10.1016/j.lingua.2003.09.016>.
- Börjesson, K. (2014). *The semantics–pragmatics controversy*. Mouton de Gruyter. <https://doi.org/10.1515/9783110333411>.
- Carston, R. (2002). *Thoughts and utterances*. Blackwell. <https://doi.org/10.1002/9780470754603>.
- Carston, R. (2005). Relevance Theory, Grice, and the neo-Griceans: A response to Laurence Horn's "Current issues in neo-Gricean pragmatics." *Intercultural Pragmatics*, 2(3), 303–319. <https://doi.org/10.1515/iprg.2005.2.3.303>.
- Carston, R. (2013). Legal texts and canons of construction: A view from current pragmatic theory. In M. Freeman & F. Smith (Eds.), *Law and Language* (pp. 8–33). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199673667.003.0010>.
- Chevallier, C., Noveck, I., Nazir, T., Bott, L., Lanzetti, V., & Sperber, D. (2008). Making disjunctions exclusive. *The Quarterly Journal of Experimental Psychology*, 61(11), 1741–1760. <https://doi.org/10.1080/17470210701712960>.
- Consolidated version of the Treaty on the Functioning of the European Union*, 2016 O.J (C202) 1.
- Dörr, O. (2012). Article 31. In O. Dörr & K. Schmalenbach (Eds.), *Vienna Convention on the Law of Treaties: A commentary* (pp. 521–570). Springer. <https://doi.org/10.1007/978-3-662-55160-8>.
- Feteris, E. T. (2017). *Fundamentals of legal argumentation* (2nd ed.). Springer. <https://doi.org/10.1007/978-94-024-1129-4>.
- Gardiner, R. (2010). *Treaty interpretation*. Oxford University Press. <https://doi.org/10.1093/law/9780199597048.001.0001>.
- Grice, H. P. (1989). *Studies in the way of words*. Harvard University Press.
- Hart, H. L. A. (1958). *Positivism and the separation of law and morals*. *Harvard Law Review*, 71(4), 593–629. <https://doi.org/10.2307/1338225>.
- Hirschberg, J. L. B. (1991). *A theory of scalar implicature*. Garland Publishing.
- Horn, L. R. (1984). Toward a new taxonomy for pragmatic inference: Q-based and R-based implicature. In D. Schiffrin (Ed.), *Meaning, form, and use in context: Linguistic applications* (pp. 11–42). Georgetown University Press.
- Horn, L. R. (1995). Vehicles of meaning: Unconventional semantics and unbearable interpretations. *Washington University Law Quarterly*, 73, 1145.
- Horn, L. R. (1996). Presupposition and implicature. In S. Lappin (Ed.), *The Handbook of Contemporary Semantic Theory* (pp. 299–319). Blackwell Reference.
- Horn, L. R. (2004). Implicature. In L. R. Horn & G. Ward (Eds.), *The handbook of pragmatics* (pp. 3–28). Blackwell. <https://doi.org/10.1002/9780470756959.ch1>.
- Horn, L. R. (2007). Neo-Gricean pragmatics: A Manichaeian manifesto. In N. Burton-Roberts (Ed.), *Pragmatics* (pp. 158–183). Palgrave Macmillan. [https://doi.org/10.1057/978-1-349-73908-0\\_9](https://doi.org/10.1057/978-1-349-73908-0_9).
- Horn, L. R. (2009). WJ-40: Implicature, truth, and meaning. *International Review of Pragmatics*, 1(1), 3–34. <https://doi.org/10.1163/187731009X455820>.
- Horn, L. R. (2014). The roots of (scalar) implicature. In S. P. Reda (Ed.), *Pragmatics, semantics and the case of scalar implicatures* (pp. 13–39). Palgrave Macmillan. [https://doi.org/10.1057/9781137333285\\_2](https://doi.org/10.1057/9781137333285_2).

- Mauri, C., & van der Auwera, J. (2012). Connectives. In K. Allan & K. M. Jaszczolt (Eds.), *The Cambridge handbook of pragmatics* (pp. 347–402). Cambridge University Press. <https://doi.org/10.1017/CBO9781139022453.019>.
- Miller, G. P. (1990). Pragmatics and the maxims of interpretation. *Wisconsin Law Review*, 1179–1227.
- Moeschler, J. (2016). Where is procedural meaning located? Evidence from discourse connectives and tenses. *Lingua*, 175–176, 122–138. <https://doi.org/10.1016/j.lingua.2015.11.006>.
- Murphy, S. D. (2019). The utility and limits of canons and other interpretive principles. In J. Klingler, Y. Parkhomenko, & C. Salonidis (Eds.), *Between the lines of the Vienna Convention? Canons and other principles of interpretation in public international law* (pp. 13–24). Kluwer Law International.
- Noveck, I., & Sperber, D. (2012). The why and how of experimental pragmatics: the case of ‘scalar inferences.’ In D. Wilson & D. Sperber (Eds.), *Meaning and relevance* (pp. 307–330). Cambridge University Press. <https://doi.org/10.1017/CBO9781139028370.018>.
- Radiojević, Z., & Raičević, N. (2017). Financial sanctions against member states for infringement of EU law. *EU and Comparative Law Issues and Challenges Series (ECLIC)*, 1, 171–191.
- Separate Opinion of Judge Tomka, *Application of the International Convention for the Suppression of the Financing of Terrorism and of the International Convention on the Elimination of All Forms of Racial Discrimination (Ukraine v. Russian Federation)*, Preliminary Objections, Judgment, I. C. J. Reports 2019, p. 614.
- Skoczeń, I. (2019). *Implicatures within legal language*. Springer. <https://doi.org/10.1007/978-3-030-12532-5>.
- Smolka, J. (2022). Argumentation in the interpretation of statutory law and international law: Not *ejusdem generis*. *Languages*, 7(2), 132. <https://doi.org/10.3390/languages7020132>.
- Smolka, J., & Pirker, B. (2018). International law, pragmatics and the distinction between conceptual and procedural meaning. *International Journal of Language & Law*, 7, 117–141. <https://doi.org/10.14762/jll.2018.117>.
- Sperber, D., & Wilson, D. (1995). *Relevance: Communication and cognition* (2nd ed.). Blackwell.
- Vienna Convention on the Law of Treaties*, 23 May 1969, 1155 U.N.T.S. 331.
- von Achenbach, J. (2014). *Demokratische Gesetzgebung in der Europäischen Union*. Springer.
- Wilson, D. (2003). Relevance theory and lexical pragmatics. *Italian Journal of Linguistics*, 15(2), 273–291.
- Wilson, D., & Sperber, D. (2004). Relevance theory. In L. R. Horn & G. Ward (Eds.), *The handbook of pragmatics* (pp. 607–632). Blackwell. <https://doi.org/10.1002/9780470756959.ch27>.
- Wojtczak, S., & Zeifert, M. (2024). Statutory interpretation and levels of conceptual categorisation: The presumption of legal language explained in terms of cognitive linguistics. *International Journal for the Semiotics of Law – Revue internationale de Sémiotique juridique*, 1–16. <https://doi.org/10.1007/s11196-024-10118-2>.
- Zeifert, M. (2018). Grammatical issues in judicial interpretation – does legal practice needs linguistic theory? based on Polish courts’ decisions. *Comparative Legilinguistics*, 34, 51–68. <https://doi.org/10.14746/cl.2018.34.2>.
- Zufferey, S., Moeschler, J., & Reboul, A. (2019). *Implicatures*. Cambridge University Press. <https://doi.org/10.1017/9781316410875>.