Research Article

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Rethinking the Role of Invited Inferencing in Change from the Perspective of Interactional Texts

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Abstract: The hypothesis that "invited inferences" are factors in change and challenges to it are reviewed. In light of recent work on historical construction grammar and interactional discourse analysis, I suggest that at least three types of inferences play a role in interactional contexts: local inferences associated with specific expressions; discourse structuring inferences pertaining to factors like coherence, backgrounding and foregrounding; and turn-taking inferences associated with turn relevant positions. A case study tests this suggestion: the development of discourse structuring uses of a family of *Look* expressions. Turn-taking has been regarded as a trigger in related changes. However, in this case not turn-taking, but rather a profile shift associated with non-use of complementizers is hypothesized to be a crucial enabling factor.

Keywords: discourse structuring markers, interactional discourse, language change, profile shifts, projectors, turn-taking, *Look* expressions.

1 Introduction[1]

In this programmatic paper I revisit what I have called "invited inferences" from a constructionalist perspective on interactional discourse as represented in historical texts. Invited inferences were originally conceptualized as arising in conversational settings and as enabling grammaticalization (e.g. Traugott and König 1991). Despite the hypothesized importance of interaction in change, the concept of invited inferences was not specifically tested against interactional texts, partly because of the paucity at the time of relevant historical corpora. Now that such corpora have become readily available in electronic form, it is possible to test the idea against discursive data.

Utterance-initial and utterance-final position outside the core argument, which are often referred to as left periphery (LP) and right periphery (RP), are key in interaction, as are the pragmatic markers that occur there (see e.g. Beeching and Detges 2014, Haselow 2016). As is fairly well known, most pragmatic markers originate as lexical expressions used in argument structure (e.g. *in fact*, *indeed*, *actually* discussed in Traugott and Dasher 2002), or as clauses (e.g. *I guess, I mean*; see Brinton 1996; 2008). The question therefore arises how constructions that can occur at the periphery come to be used there. One hypothesis, to be explored

1 I would like to thank the participants in the Colloquium on Inferences in Interaction and Language Change for discussion of the issues, especially Ekkehard König and Richard Waltereit. Laurel Brinton and Graeme Trousdale gave very helpful and insightful comments on an earlier draft of this paper, as did two anonymous reviewers. Many thanks also to the editors, Oliver Ehmer and Malte Rosemeyer, for constructive comments and thought-provoking questions.

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further in this paper, is that pragmatic inferences and implicatures play a role in the recruitment of core material to the periphery (e.g. Traugott and Dasher 2002; Hansen 2005; Degand and Evers-Vermeul 2015, among many others). Assuming that there are various types of inferential meaning (e.g. Hansen 2008), the question is which, if any, inferences might have enabled the rise of pragmatic markers in initial or final position. Focus in this paper is on three types of inference that by hypothesis enable the rise of pragmatic markers in clause-initial position: a) local linguistic inferences associated with particular constructions, b) discourse inferences associated with text structuring strategies, and c) inferences associated with turns and interactional exchanges. Detges and Waltereit (2011:175) suggest that "turn-taking ... is a highly privileged pragmatic context" for "novel usages of a form". I test this claim with particular attention to the types of inferences that are by hypothesis involved in the development of discourse structuring *Look* expressions.

The paper is structured as follows. Section 2 introduces the original conception of invited inferences and some challenges to it. Section 3 presents an updated view of invited inferences that takes turn-taking into account. Section 4 outlines the data and methodology for the case study investigated. Section 5 is devoted to the evolution of *Look* expressions used in initial position. Section 6 concludes.

2 Background: the original conception of invited inferences

In the late 1980's and 1990's I started investigating the role of pragmatics and especially implicatures in grammaticalization (e.g. Traugott 1982, 1999). These studies addressed historical aspects of two then-current threads of research on pragmatics and semantics.

Thread 1. Pragmatics. Grice had said "It may not be impossible for what starts life, so to speak, as a conversational implicature to become conventionalized" (Grice 1989[1975]: 58). In what has come to be known as Neo-Gricean work, Horn (1984) had recast Grice's Quantity and Quality Maxims as Q(uantity)- and R(elation)-Principles, and Levinson (2000) had distinguished between utterance-token, utterance-type, and coded meanings. Questions that arose included:

i) Did the processes of morphosyntactic change known as grammaticalization provide robust evidence for Grice's conjecture?
ii) If so, could processes of grammaticalization be motivated by Gricean implicatures and maxims?
iii) Were Levinson's distinctions between utterance-token, utterance-type, and coded meanings valuable in accounting for grammaticalization?

Thread 2. Semantics. The then-current assumption was that metaphor is the basis of semantic change. Sweetser (1990) had proposed that the development of verbs of the senses (e.g. *see, grasp, hear*) to verbs of understanding and of deontic to epistemic modals (e.g. *must*) involved the metaphorical mapping of the concrete world onto that of reasoning. This mapping had been interpreted as an abrupt metaphorical process. Questions that arose were:

i) When micro-steps of change are taken into account, as had become possible with the release in 1991 of the historical electronic Helsinki Corpus (HC), do they suggest that metaphor is in fact not the basic mechanism of semantic change but rather the outcome of small and gradual metonymic changes?
ii) Is change in grammaticalization more likely to be based in implicatures metonymically associated with syntax in the flow of speech than to be metaphorical in origin?

Answers to the questions associated with the two threads appeared to be affirmative. Studies such as Traugott and König (1991) hypothesized that one factor enabling change is association of implicatures with syntax, a kind of conceptual metonymy. Implicatures were conceived as potential syntax-based pragmatic contexts for semasiological change not only in grammaticalization but also in some types of lexical change such as the rise of performative uses of verbs like *promise*. Seeking to acknowledge the dyadic, interactive as well as cognitive nature of change from a functional perspective, I developed the Invited Inferencing Theory of Semantic Change (IITSC) (Traugott 1999; Traugott and Dasher 2002) and proposed that Speakers,

usually unconsciously (Keller 1994), invite Addressees to infer certain meanings. These inferences were hypothesized to arise as utterance token meanings that may, over time, gradually become conventionalized among a community of Speakers as utterance-type meanings, called Generalized Invited Inferences (GIINs), and may eventually become coded ("semanticized"). This last stage involves a process of neoanalysis that was later formalized by Eckardt (2006) and Deo (2015).[2] GIINs are somewhat similar to Levinson's (2000) Generalized Conversational Implicatures (GCIs), but differ in that GIINs are conceptualized as more interactive and as conventionalized among a community of speakers.

The term "invited inferences" was chosen to implicate that:

i) Speakers communicate with Addressees and Addressees respond to Speakers (see Duranti and Goodwin 1992; Bybee 2010).
ii) Meanings do not change, nor does language. Speakers and language users enable change in interaction (see Bybee et al. 1994; Croft 2000; Bybee 2010; Pons 2014).
iii) Change involves production as well as perception during acquisition throughout life (by contrast, most generative linguists, e.g. Lightfoot 1991, privilege children's perception).

The hypothesis that pragmatic implicatures play a significant role in change has been widely accepted. Some researchers have regarded pragmatic implicatures as necessary for the onset of grammaticalization (e.g. Diewald 2002; Heine 2002; Bybee 2010). When they lead to ambiguity, such implicatures are referred to as "bridging" contexts (Evans and Wilkins 2000; Heine 2002).

But unsurprisingly the specific role of pragmatic inferences in change has been debated. What Horn (2009: 70) has called "the landscape of implied meaning" has changed over the years. Whereas "implicature" and "inference" were often conflated, more recently attempts have been made to distinguish them (e.g. Bach 2006; Potts 2015). Horn (2009) attempts to tease apart implicatures (Speaker meaning) from inferences (Hearer interpretations), but admits leakage between the two. In this paper I continue to conflate implicatures and inferences as I doubt that it is feasible to do more than speculate about the roles of Speaker and Addressee in specific changes from evidence provided by written historical texts (but see Eckardt 2009, Schwenter and Waltereit 2010 for sharp distinctions between Speaker and Addressee roles in some particular changes).

Several problems for the IITSC and for neo-Gricean work on inferences in general have been raised in the last few years. Among them are the following :

i) The relation of GIINs in the IITSC model to GCIs in Levinson (2000). In the IITSC model, change is conceptualized not as innovation but as gradual conventionalization in a community of Speakers (Milroy 1992; Croft 2000). However, apparently assuming that change is innovation rather than conventionalization, and equating GIINs with GCIs, Hansen and Waltereit (2006) argue that utterance type meanings (GCIs) are not normally a factor in change.[3]
ii) In a volume edited by Hansen and Visconti (2009), several questions are posed regarding which pragmatic entities are involved in change. Eckardt (2009) proposes that unwarranted presuppositions as well as implicatures are needed to account for the development of e.g. *even* and Ital. *perfino*, both originally meaning 'exactly' but now in some contexts used as scalar particles meaning 'scalar extremity'.
iii) Drew (This Special Issue) notes that "inference is ubiquitous" and all speech activates inferences. It should be noted, however, that some inferences are stronger than others because they are replicated more often in certain contexts, and may therefore enable change (Degen 2015). Furthermore, there are different types of inferences (e.g. Ariel 2008; Hansen 2008; Haselow 2016). Which inferences are relevant to a particular change and why has become a crucial question for the historian of change.

2 Andersen (2001: 231, ft.3) suggested the term 'neoanalysis' instead of reanalysis. It is preferable because language learners cannot 're-analyze' a structure not available to them; they can, however, make an analysis that is new compared to the input.

3 That GIINs are involved in change is supported by arguments in favor of cancellable "short-circuited implicatures" that may come to be conventionally associated with certain constructions (Cappelle and Depraetere 2016, drawing on Morgan 1977).

iv) Hilpert (2013) and Petré (2015) have argued that frequency and metatextual pattern activation may be equally or more important than inferences as prerequisites to morphosyntactic change. So may interactional turn-taking (Waltereit 2006; Detges and Waltereit 2011; Haselow 2014).
v) The Gricean perspective in general has come under scrutiny, especially in the work of Relevance Theorists, starting with Sperber and Wilson (1995 [1986]). The very notion of conversational implicature has been questioned from a synchronic perspective by Lepore and Stone (2015).

Despite these challenges, the Neo-Gricean enterprise is still very much alive (Horn 2016; Szabó 2016). What follows is based in Neo-Gricean pragmatics, and suggests modifications to the IITSC. In particular I elaborate on the idea that there are different types of inferences.

3 The IITSC updated

In recent years my interest has shifted to constructionalization. Unlike that of most work on grammaticalization, the perspective of construction grammar addresses change in expressions of all kinds, including largish, chunked expressions, such as the ditransitive construction (e.g. *Kim gave Jane a novel*). Traugott and Trousdale (2013: 22) define constructionalization as the development of $form_{new}$-$meaning_{new}$ combinations that can be contentful (lexical) as well as procedural (grammatical). The approach is onomasiological and paradigmatic, paying attention to changes in available choices of constructions in particular slots in the clause, as well as semasiological and syntagmatic, paying attention to changes to particular constructions. This model therefore requires IITSC to be rethought and enriched. At the same time my attention has shifted to discourse analysis, in particular, evidence for semantic and pragmatic change in interactional texts (see e.g. Jucker et al. 1999; Fitzmaurice 2016). This requires rethinking invited inferences in terms of discourse structuring and turn-taking, among other things.

Interactional discourse typically involves turn-taking, which is organized in sequential turn-constructional units (TCUs). That is, Speakers alternate beginning a turn and completing one and the sequential structure of turns has its own constraints (e.g. Selting 2000; Schegloff 2007; Heritage 2016). A TCU may consist solely of "core" argument(s), or of "core" argument(s) + pragmatic markers that may serve as morphosyntactic marker of a turn.[4] In this paper I am particularly concerned with inferences involved in the development of discourse structuring expressions that mark an upcoming topic shift at a TRP.

Discourse structuring markers (DSMs) are a subset of pragmatic markers (e.g. Fraser 2009),[5] also known as discourse particles (Fischer 2006) and projectors (Auer 2005).[6] In English DSMs usually occur clause initially and clause finally in positions often referred to as left periphery (LP) and right periphery (RP) outside the core argument (see Beeching and Detges 2014). Building on Sawada (2015), I define periphery as "the site in initial or final position of a discourse unit where metatextual and/or metapragmatic constructions are favored and have scope over that unit" (Traugott 2017: 63).

In English DSMs typically occur clause-initially[7] as turn-taking elements and have one or more functions such as the following:

i) 'this is a shift of the topic at hand' (*look, what happened was*),
ii) 'this is an aside' (*by the way*),
iii) 'this is my counterstance' (*but, yet*),
iv) 'this is an extension of my turn' (*see, moreover*).

4 Some markers may be prosodic, but this will not be discussed here since prosody is mostly not recoverable from historical texts.

5 Fraser (2009: 297) refers to 'discourse structure markers'. The term 'discourse structuring markers' is used here to highlight the dynamic nature of interaction.

6 See Maschler (2012) for arguments in favor of combining pragmatic markers and projectors in one category. She suggests discourse markers are a grammaticalized subset of projectors in Hebrew (p. 786).

7 Some may also be used clause-finally, e.g. *anyway, by the way*. Some may be used with a TCU consisting of only a word, e.g. *Oh* in *Oh, the kids*. I am concerned here only with those in clause-initial position, as that appears to be where the inferencing that enables change into DSM status occurs.

They are all subjective and emotive-affective in the sense of expressing Speaker's intentions and acts. In this paper I consider only *look* in type i).

With these factors as background, what might be the role of invited inferencing in interactional discourse viewed from a historical constructionalist perspective? First, it may be useful to note that the original principle: "Speakers communicate with Addressees and Addressees respond to Speakers" might be specified more strictly as:

> Speakers communicate with Addressees and may implicate more than is said; Addressees respond to Speakers and may infer more than was said.

In other words, invited inferences involve joint construction of meaning.
I suggest that there are at least three types of inference:[8]

I. Local inferences associated with specific expressions. They may be of the traditional kind discussed in work on grammaticalization—linguistic, syntagmatic, metonymic, semasiological—but also onomasiological and frame-oriented, as in work on constructionalization. The frames may be metaphorical, but often they are not (e.g. the transitivity frames in which the impersonal ceased to be used, Trousdale 2010).
II. Discourse structuring inferences pertaining to coherence, backgrounding and foregrounding, etc.
III. Turn-taking inferences associated with TRPs. These are inferences about relevant transitions at particular points in an interaction, floor control actions, backchannels, etc. that can follow (or sometimes interrupt) a TCU (Sidnell 2007).

It has been suggested that interactional language use and joint construction of discourse is not only a locus for change (e.g. Jespersen 1940; Haiman 1978), but a "trigger" for it (e.g. Detges and Waltereit 2011; Pons 2014; Haselow 2014). I assume that "trigger" is equivalent to "determinant", in other words, a cause of change. In what follows I will show that there is evidence that the three types of inferences mentioned above played a role in the development of DSM uses of *Look* and its precursors, but turn-taking and the inferences associated with it, did so only relatively late in its history. Turn-taking was therefore an outcome, not a trigger.

The three types of inferences, most especially the third type, are social as well as cognitive in that they assume participants in roles of reciprocity (Speaker-Addressee) and ratified mutual access (Levinson 2006). They are less strictly cognitive than those originally postulated, on the assumption that cognitive, pragmatic, social, and emotive-affective forces all have an impact on usage and therefore on change. The hypothesis is that similar utterances "give rise to similar pragmatic associations in similar contextual and cotextual environments" (Schmid 2016: 554). If associated inferences arise frequently enough they may become stronger (Degen 2015) and enable conventionalization of new patterns, among them the development of primarily pragmatic, metatextual uses out of literal, contentful expressions.

4 Data and methodology

Historical texts for testing claims about the role of interaction in change include dramas, trials, and represented conversation in fiction, diaries, etc. Such data rarely evidence the wealth of false starts, overlap and interruptions typical of conversation (Bublitz 2017),[9] but nevertheless provide more insight into interactional practices of the past than might be anticipated (Jucker et al. 1999, Culpeper and Kytö 2010).

The methodology in this paper is qualitative, and examples were drawn manually from electronic databases: mainly prose drama in CLMET 3.0 and fictional texts in COHA. CLMET is divided into three

8 An anonymous reviewer commented that this typology of inferences is "reminiscent of (though not completely identical with)" what I take to be Halliday and Hasan's (1979: 26) three "functional-semantic components": ideational, textual, and interpersonal. Local, discourse and turn-induced inferences are clearly associable with ideational, textual and interpersonal components respectively, but arise in use out of combining elements of these components in context.

9 Many thanks to Andreas Jucker for providing me with a copy of Locher and Jucker (2017) in which Bublitz's paper appears.

periods: 1710-1780 (CLMET 3:0_1), 1780-1850 (CLMET 3:0_2) and 1850-1910 (CLMET 3:0_3). By contrast, COHA is divided into decades from 1810-2009, and COCA by years from 1990-2015. Wherever possible, examples were selected from represented conversation. Comparisons with contemporary English usage are drawn from the spoken part of COCA. Data from COCA are television interviews, and as such somewhat structured and not unlike historical data. In all cases not only what appears to be relevant prior text was extracted, but also at least one further contribution, whether by the same Speaker or a different one.

For my study, the expressions investigated were the main members of the *Look*-family:[10] *Look* + comma;[11] *Look ye/you* and spelling variants *Lookee/looky;* and *Look here*, each followed by a clause with finite verb (see Brinton 2008). I call *Look* without *here* or *ye/you* "bare *Look*". As would be expected in a situation of ongoing change, some examples are undecidable with respect to whether they are instances of the lexical verb or of the pragmatic marker. These were coded as undecidable and considered to be evidence of the kinds of utterances that could have preceded neoanalysis. As discussed in Section 5.1 below, *Look* expressions used as pragmatic markers derive from *Look* + clause, meaning 'consider'. In (1) *look* could be a literal imperative: 'look carefully: the young man seems older than the boy referred to would have been at the time'. But it could also mean 'consider/think about it: the young man/…'. Which one is intended is undecidable:

(1) "Do you remember," said Grace, "how she used to chatter about Alick, when she first came to us, at six years old… Can this be the same?"
"That's one of your ideas, Grace. **Look**, this youth could have been hardly born when Fanny came to us."
(1865 Yonge, *The Clever Woman of the Family* [CLMET 3.0_3_197])

However, most examples proved decidable with adequate context. For example, in (2a) *Look here* is undecidable out of context, but given the context (the speaker is gazing at a corpse), it is a literal vision use: 'Look at this corpse here'. In (2b) the conditional following *Look here* unequivocally suggests a pragmatic marker meaning of impatience and dissonance, despite the prior 'see me' (note that there are different subjects, *my friends* and *you*):

(2) a. I gaze on that once matchless form, and all vanity dies within me: who was ever lovely like her … **Look here**, ye proud and be humble! which of you all can vie with her?
(1763 Brooke, *History of Lady Julia Mandeville* [CLMET 3.0_1_20])
b. *ALBERT*. Suppose some of my friends see me?
MAGGIE. **Look here**, my lad, if you're too proud to do a job like that, you're not the husband for my sister.
(1916 Brighouse, *Hobson's Choice* [CLMET 3.0_3_323])

Examples were coded for whether they occurred at the continuation of a turn within a TCU, as in (2a), or at the beginning of a new turn after the end of a TCU, as in (2b).

5 A case study: Look

Detges and Waltereit (2011) discuss imperative Italian *Guarda* 'look' and its main uses as an imperative to look and as a "discourse particle" promising "high noteworthiness and immediate relevance" (p. 179). They show that in contemporary Italian lexical imperative *Guarda* is associated with two conversational implicatures (p. 179). I characterize these as local (associated with the verb):

a) The Speaker knows of some visual object present in the situation unknown to the Addressee.
b) It is highly important for the listener to immediately look at that object.

10 I use *Look* with a capital for the category or type of expression, lowercase *look* for individual examples.
11 In trial runs *Look* without a comma was searched, but all metatextual uses turned out to have a comma, therefore the final analysis was based on *Look* + comma.

These implicatures license the Speaker to interrupt and not wait for the end of a TCU and an accompanying TRP. Detges and Waltereit suggest that Speakers found implicature (b) so useful that they used *Guarda* to self-initiate an abstract idea even at the risk of "using the coded meaning not truthfully". They regard this as an "illegitimate" use because there is nothing to look at and Grices's Quality Maxim is violated (p. 181). The Quality maxim is "Do not say that for which you lack adequate evidence" (Grice 1989[1975): 27), and a Speaker saying *Guarda* in the absence of something to see lacks evidence for the interlocutor's ability to see something. The hypothesis is that this illegitimate use led to the rise of the turn-taking marker use *Guarda!*, which now "draws the attention of the addressee to a new referent" and typically introduces a new topic. As a turn-taking marker its legitimacy has been restored (p. 181). It should be noted that most examples of the development of pragmatic markers could be said to violate the Quality Maxim (as indeed could most semantic changes), especially if it is assumed that the original, lexical meaning is referential, fixed and autonomous at some time t. However, from a cognitive perspective, meanings are conceptualized as potential and contextually dependent (e.g. Langacker 1991; Evans and Wilkins 2000; Paradis 2011). Linguistic structures are interpreted as dynamic "reflections of general conceptual organization, categorization principles, processing mechanisms, and experiential and environmental influences" (Geeraerts & Cuyckens 2007: 3). From this perspective one could propose that, as inferences strengthen via repetition, Speakers and Addressees gradually come to associate expressions with these meanings in certain contexts. These associations typically entail generalizations beyond the original meaning. I view developments that are enabled by inferences as natural paths of change resulting from Speakers' and Addressees' tendency in interaction to:

i) invite and make inferences of various kinds, including those associated with turn-taking and turn design,
ii) generalize and analogize to extant schemas,
iii) expand their repertoire.

Detges and Waltereit's (2011) hypothesis seems plausible that Speakers found implicature (b) from imperative *guarda* so useful that they used it to self-initiate an abstract idea and that it eventually came to be used as a topic-shifter. However, no historical data supporting this trajectory is provided. Assuming Detges and Waltereit's analysis is correct for Italian, at least in broad brush-strokes, is it true for the development of *Look* in English? The history of *Look*, used to (re)launch a course of action or to redirect talk (Sidnell 2007: 387), is considerably more complex than that posited for *Guarda!*, and has been investigated, along with the history of *see*, in Brinton (2008), from which I draw. Part of the complexity is that *Look* is only one of a set of *Look* expressions: *Look, Look ye/you*, and *Look here* that have arisen over the centuries. Part of the complexity is also that there is considerable disagreement about how best to characterize contemporary *Look*. Brinton (2008: 185-186) points out that if they mention the pragmatic use at all, dictionaries typically treat it as an attention-getter. She follows suit. Other researchers, however, have characterized *Look* among topic-shifters. For example, Fraser (1996: 338) lists it along with *alright, here, listen, now, so, well, y'see* as a marker "focusing or refocusing on the topic at hand". More recently Sidnell (2007: 387) has also characterized it as a topic-shifter (for further discussion see below). I adopt the view that *Look* is a topic-shifter that draws attention to what is usually a disjunct new topic.

In contemporary English imperative *Look*, like Italian *Guarda*, has two main uses. One is literal, having to do with vision, as in (3):

(3) *W.G.* Everybody's back from vacation. *N.M.* Yeah. *T.H.* Yeah. *W.G.* And **look** who all is here. *A.R.* Wow. (2015 NBC [COCA])

The other use is non-literal and pragmatic. According to Sidnell (2007) it is used to initiate an action sequence in conversation "characterized as 'high-priority'" (p. 391) or to redirect talk away from the prior

topic and indicate that a "dispreferred turn is on the way" (p. 389).[12] In other words, it is used as a projector. (4a) illustrates "high priority" and justification for the speaker's prior *Absolutely*, and (4b) illustrates redirection and disagreement.

(4) a. *T.* ... Do you still feel the same way? *H.* Absolutely. **Look**, we force by law people to go to school in our states. (2015 NBC [COCA])
b. *C-R.* ... It was sort of a -- you can call it a gotcha question but he chose to answer and he left it open. Is that a mistake? *B.* **Look**, Scott Walker has a great record as governor of Wisconsin ... He shouldn't take the bait on this kind of stuff. (2015 NBC [COCA])

The fixed phrase *Look here* is also used to draw attention to upcoming talk (5a) or as a marker of a shift in perspective and of justification for prior talk (5b):

(5) a. *M*: (From audiotape) Yeah. *F*: (From audiotape) Hey, this is Bobby. **Look here.** Everything's done. I'm in Houston right now. (2007 CBS_48Hours [COCA])
b. I think the president was right when he said that Colin Powell opened the path for peace, and now there has to be follow-up. **Look here**, we are facing an enormously difficult situation there. (2002 CNN_OnStory [COCA])

The use of *Look here* as DSM appears to be somewhat genre dependent. Out of 105 hits of *Look here* in spoken COCA for the years 2000-2015, only 8 function as DSMs. In COCA fiction during the same period, however, it appears relatively frequently (70 DSMs out of 170 hits).[13] It cues impatience and often introduces disaffiliation from what has been said:

(6) when she asked me what was wrong with Lurleen, I said, 'Now, **look here**, Mrs. Higgenbottom, that's the woman who helped kill my step-daddy.' (2015 Phillips, *Shell Game* [COCA])

In (6), combined with the DSM *now*, *look* focuses the Addressee's attention on the here and now of the interaction and cues the misalignment between the interlocutors.

5.1 Initial steps in the development of discourse structuring *Look*

To turn to the history of *Look* expressions as DSMs, in Old English[14] *locian* 'to look' was associated with several directionals, including *æfter* 'after, following the line of vision', *forþ* 'forth, out', *on* 'on', *to* 'at', *ongean* 'against, at' (Bosworth-Toller, *Locian*). It was agentive (the subject engages in the activity of looking) and contrasted, as in contemporary English, with *seon* 'to see' (the subject experiences vision) as in (7):

(7) He þa forþ **lociende** **geseah** þa in gangendan
He then forth looking saw then in walking
weras & hi þa sona gecneow.
men & them then immediately recognized
'then, looking out, he saw men walking in and recognized them immediately'
(*Gregory Dialogues*, GDPref and 4 (C) B9.5.6 [DOEC])

12 Sidnell associates initiation of an action with "first position" in a turn sequence and redirection with use in "second position" in a sequence (see Schegloff 2007; Heritage 2016 among others on sequences of turns). In what follows I do not distinguish position in a sequence of turns as this information is not always accessible in my data.

13 The higher frequency of *Look here* in fiction does not support some earlier findings that discourse markers are among oral features less likely to occur in fiction than in conversation (Bublitz 2017: 248).

14 The periods of English are traditionally as follows: Old English 650-1100, Middle English 1100-1500, Early Modern English 1500-1750, Modern English 1750-1970, Present Day English 1970-present.

Brinton (2008) argues that the use of attention-getter *Look* expressions originated when *loc-* 'look', a verb of vision, was extended to complementation contexts. These are propositional, and here *loc-* is a cognitive verb of understanding and paying attention, meaning 'look to it that/consider how/pay attention to how'. It is often used in homilies or "rules", as in (8):

(8) Þonne **loca** ðu here **hu** þu scealt þin gear rihtlice gedafian.
then look you here how you shall your year rightly arrange
'then consider how to organize your year correctly'
(*Rules for Finding Movable Feasts* [Brinton 2008: 189; DOEC])

Use in (8) illustrates advice in a monologue, not in a turn-taking environment. Being an imperative in form, *loca(ð)* normally occurs clause-initially or close to clause-initial position, and therefore after a TRP, but the function is lexical. It does not invite a discourse structuring meaning. Note, however, that a new topic is introduced.

According to Brinton, a second step in the development of pragmatic *Look* expressions was a partial syntactic profile shift in the 14th century. The shift can be inferred from non-use of the complementizer. An example is (9), where a shift in perspective is cued by *but*, and zero complementizer weakens the distinction between main and subordinated clause function.

(9) Bot **look** thou dele noght withal.
but see to it you deal not therewith
'but make sure that you do not deal with it'
(1390 Gower, *Conf. Amant*. [Brinton 2008: 189])

EEBO provides an interesting later example in which *look* is used both without and with *that* in parallel warnings. The situation is that a treaty has been drawn up between King Arthur and Sir Mordred. They plan to meet, each with fourteen men, who carry swords. The warnings are presented in indirect reports that then shift to first person direct speech:

(10) whan arthure shold departe he warned al hys hoost
when Arthur was-to depart he warned al his army
that and they see ony swerde drawen **look** ye come
that if they see any sword drawn look-to-it you come
on fyersly and slee that traytour syr mordred for I in noo
on fiercely and slay that traitor Sir Mordred for I in no
wyse truste hym / in lyke wyse syr mordred warned
way trust him / in like manner Sir Mordred warned
his hoost that and ye see ony swerde drawen **look**
his army that if you see any sword drawn look-to-it
that ye come on fyersly... for in no wyse I wyl not
that you come on fiercely... for in no way I will not
truste for thys treatyse
trust for this treaty
'When Arthur was about to leave he warned all his army that if they saw a drawn sword, 'Be sure to attack fiercely and slay that traitor Sir Mordred, because I in no way trust him'. In similar manner Sir Mordred warned his army: 'If you see a drawn sword, be sure to attack fiercely ... for in no way do I trust this treaty'.
(1485 Malory, *Le Morte Darthur* [EEBO-BYU])

Brinton suggests that non-use of the complementizer enabled a more radical shift to parenthetical, pragmatic uses in the late 16th century. I suggest that, absent a complementizer, and therefore of a distinct marker of

subordination, the focus on *look* 'take notice' was reduced and the following clause was interpreted as the main focus. This interpretation was particularly favored at a TRP, where a new topic is often found, introduced by a pragmatic marker.

Although clause-initial position undoubtedly allowed an inference that *Look* in the cognitive sense could, like any other imperative, be used at the beginning of a turn, this in itself did not enable the development into a DSM. It is the syntactic profile shifts, including loss of complementizer, and especially use as a parenthetical, that appear to have been the crucial contexts in which projector use of *Look* gradually arose and became entrenched.[15] So was the development of fixed phrases with *look*, specifically *Look ye/you* and later *Look here*.

5.2 The rise of topic-shifting DSMs with *look*

5.2.1 Look ye/you

The first member of the metatextual *Look* family to be attested with any frequency is *Look ye/you*. It appears with variants *Lookee/Looky* from the 1600s on. It means 'listen, notice' (note the explicit reformulation, *take Notice of what I say* in (11c)), and directs toward a course of action. If *look* in the examples in (11) were the lexical verb meaning 'take notice', a subordinator would be possible, *ye* would be the subject of the following clause (see (9), (10)), and a modal auxiliary would not follow since the lexical verb has modal force. However, in *looke ye, you must be all felt* (11a), there is no subordinator, *ye* is not the subject of the following clause, and *must* appears. In (11a) Maquerelle, a lady in waiting, satirically comments on the demand to be fashionably dressed. This diatribe is the first thing said at a change of scene after the men depart and represents the speech of others whom Maquerelle mocks. The first *looke ye* launches a quoted directive on how to dress. Whether *looke ye* is actually a quotation or a cue to Maquerell's assessment of the directive is undecidable. The second *looke ye* is her own comment redirecting the quoted argument—she claims that those who demand felt are out of date themselves.

(11) a. by my troth beauties, why do you not put you into the fashion, this is a stale cut, you must come in fashion: **looke ye**, you must be all felt, fealt and feather, a fealt vpon your bare haire: **looke ye**, these tiring thinges are iustly out of request now.
'Truly, beauties, why do you not dress in fashion? This is an out-of-date cut. You must come dressed fashionably. Look, you have to have felt, felt and feathers, a felt hat on your bare hair. But look, these tiring things are rightly not in demand any more'.
(1604 Marston's version of Webster's, *The Malcontent* [EEBO-BYU])

b. *Simon* Dear Heart, Sir, you won't give a Body Time.
Wingate Zookers! an whole Month missing, and no Account of him far or near, Wounds! it's unaccountable. **Look ye** Friend, don't you pretend.
(1756 Murphy, *The Apprentice* [CLMET 3.0_1_55])

c. *W.* Mind me, Friend, I have found you out. I see you'll never come to Good. ....
D. A Critic too! [whistles] Well done old Square-toes.
W. **Look-ye,** young Man, take Notice of what I say: I made my own Fortune, and I could do the same again.
(1756 Murphy, *The Apprentice* [CLMET 3.0_1_55])

As these examples show, *Look ye* can occur after a TRP within a monologue (11a, b) or at the beginning of a turn (11c). Nine of the twenty-four prose dramas in CLMET 3.0_1 attest the expression, as do five of the sixteen prose dramas in CLMET 3.0_2. The examples in (11) illustrate the way in which the Addressee's attention is typically drawn to an upcoming disagreement, counter-argument, or face-threatening contribution.

15 The importance of loss of complementizers cross-linguistically in the development of pragmatic markers is shown by Maschler (2012) on the development of Hebrew "discourse markers" with *yada* 'know'.

5.2.2 Look here

Look ye/you and its variants continue to appear in CLMET 3.0_2, but are replaced by *Look here* in the nineteenth century prose dramas in CLMET 3.0_3.[16] By hypothesis literal *Look here* highlights the proximity of the object to be looked at, and immediacy in both time and space is implicated:

(12) miss i: oh, law, oh, law; but how shall i gt down t'ye tho'?
coop: oh, easily, easily, my dear: **look here,** i've brought a ladder for thee
(1691 D'Urfey, *Love for Money* [EEBO-BYU])

Like *Look ye/you*, DSM *Look here* cues some aspect of disaffiliation, typically the stance that what follows is a rebuttal or a different line of argumentation. It often conveys impatience, as in (2b), repeated here for convenience as (13):

(13) (=2b) *ALBERT*. Suppose some of my friends see me?
MAGGIE. **Look here**, my lad, if you're too proud to do a job like that, you're not the husband for my sister.
(1916 Brighouse, *Hobson's Choice* [CLMET 3.0_3_323])

The data from CLMET prose drama might give the impression that there was an abrupt change, since all the pragmatic marker examples with *Look* in CLMET 3.0_2 are *Look ye/you* (latest example in 1835), while all in CLMET 3.0_3 are *Look here* (first example in 1889, a gap of 45 years). However, several examples of *Look ye/you* continue to appear in fiction during those years, which suggests that both markers were in speakers' repertoire and the development was gradual.

5.2.3 Look

Just as *Look ye/you* was replaced by *Look here*, *Look here* was eventually largely replaced by bare *Look*, which is found in pragmatic uses from the late 1600s on, but is very rare until the twentieth century. Brinton's earliest example is from fiction (14). Brinton refers to this use as a "parenthetical with non-literal meaning":

(14) Dame. O Pious Mary, I say unto thee, come forth and Administer unto thy Master; O how the number of the Ungodly increase? come forth I say.
Mary. Lo, thy Hand-maid is even here.
Dame. **Look, look**, I say, nay, again I say unto thee, **look**, nay, Administer as a Holy Sister ought unto thy Master.
(1684-87 Pepys, *Penny Merriments* [Brinton 2008: 194; HC])

Here *Look* expresses impatience (highlighted by the reduplication *Look, look*), and implies that Mary (the maid) is not acting fast enough; it counters not her words, but her (non)actions. Bare *Look* does not appear in prose dramas in CMLET 3.0_1 and only twice in prose dramas in CLMET 3.0_2, once in each of two excerpts from Sheridan, both cited in (15). In (15a) *look* is used to draw attention to the upcoming derisive comment on the situation and in (15b) to introduce a rejection of Charles's prior assertion (hedged, however, by the aside which Charles does of course not hear).

(15) a. *Ld. F.* Strike me dumb, Tam, thou art a very impudent fellow.
N. **Look**; if the varlot has not the frontery to call his Lordship, plain Thomas.
(1781 Sheridan, *A Trip to Scarborough* [CLMET 3.0_2_94])

16 *Look there* is always literal.

b. *Charles*. No hang it, the old gentleman has been very good to me, and I'll keep his picture as long as I have a room to put it in.
Sir Oliver I forgive him every thing (Aside). **Look**, Sir, I am a strange sort of a fellow, … I'll give you as much for that as for all the rest.
(1781 Sheridan, *School for Scandal* [CLMET 3.0_2_95])

In CLMET 3.0_3 (1850-1920), unambiguous metatextual examples of bare *Look* are not attested in prose dramas, but there are four examples in fiction, suggesting a possible genre constraint (see mention in section 5 of preference for *Look here* in fiction in COCA 2015).

A search for bare *Look* in COHA shows scattered examples of metatextual marker use in the early years, but suggests that it came to be entrenched in the US only in the mid-twentieth century, see (16):

(16) Stan faced him, his feet a few inches apart …. He folded his arms without interlacing them. "**Look**, Vernay," he said. "I'm not looking for any fight, but if you force one, I'll break you all to pieces."
(1960 Cole, *Alarm Clock* [COHA])

To summarize, metatextual uses of *Look* expressions became entrenched along the timeline in Table 1 (see also Brinton 2008: 196).[17]

Table 1. Timeline for entrenchment of metatextual *Look* expressions

century	Look ye/you	Look here	Look
17th	X		
18th	X	X	x
19th	↓	X	x
20th		↓	X

5.3 Inferences involved in the development of metatextual *Look* expressions

All of the three inference types listed in Section 3 are relevant in the history of the *Look* family. Old English *locian* invites a local inference of active watchfulness that may derive from the association of *loc*-expressions with a directional phrase (OED glosses it as 'to direct one's sight'). The initial enabling factor in the development of DSM uses of *Look* was probably its use as a main verb with a complement clause, presumably inviting the discourse-based inference that what needs attention is not a concrete object but a linguistic contribution. The semantic shift from literal vision > cognitive understanding is often interpreted as a metaphorical shift. For example, Sweetser (1990) conceptualizes this kind of change as a case of metaphorical mapping from the socio-physical world of sense-perception, and vision in particular, to the world of reasoning, knowledge and intellection. However, as suggested in section 2, individual cases in individual languages may also arise by metonymic shifts in particular contexts. The context in English was use with a complement clause. Such metonymic shifts are presumably so common that they hardly count as violations of the Gricean maxim of quality, as Detges and Waltereit (2011) suggest, but rather as typical generalizations in the flow of talk.

Subsequently, there was a profile shift that resulted from non-use of the complementizer. By hypothesis this syntactic shift allowed the inference that in such contexts *Look* (meaning 'take notice') was no longer the main point of the expression. This inference in turn opened up the possibility that a *Look* expression could be used metatextually after a TRP with a function like that of many elements in clause-initial position (e.g. *well*, *now*). That it could be a discourse structuring, metatextual DSM followed from the meaning 'take

17 Upper case 'X' indicates high frequency, lower case 'x' low frequency, and the downward arrow ↓ decline of the construction.

notice that X'. The default and background intersubjectivity of imperatives came to be foregrounded by overt use of second person *Look ye/you*. Subsequently Speakers started to express a more subjective stance with *Look here*, drawing attention to the upcoming contribution. Bare *Look* is weaker than *Look here* in countering a prior contribution, but all the same most *Look* expressions also imply some disalignment with prior text.

In sum, the development of the *Look* family into DSMs discussed in this paper involved, in the order given below, the three kinds of inferences proposed in section 3. These inferences were not deterministic "triggers" but offered the potential for change:

I local inferences from the source, e.g. from *locian* 'direct one's sight' (enabling),
II discourse-structuring inferences, e.g. inferences associated with a profile shift (enabling),
III turn-taking inferences from use of the profile-shifted expression within a TCU (enabling).

The resulting DSMs (*Look ye/you*, *Look here*, and *Look*) in turn invite their own local and turn-taking inferences. Turn-taking was not a trigger for the metatextual use of *Look* expressions. Rather, the textual evidence suggests that turn-taking inferences came to be relevant only after a particular discursive change had taken place, specifically a profile shift.

Inferences were clearly by no means the only factors in the development of the *Look* family. For one, it was part of the general expansion of the English pragmatic marker repertoire from the 16th century on (Brinton 208). How exactly it fits into this larger set is a topic for further study. So too are various construction-specific factors, such as genre constraints. For example, the use of OE *loc-* with complementation is largely favored in homilies (section 5.1), and of *Look here* and *Look* in present-day-English in fiction (sections 5, 5.2.3). Another construction-specific factor appears to be the role of vocative collocates such as the chunked *ye/you* in *Look ye/you*, and optional ones like *Friend* in (11b), *young Man* in (11c), *my lad* in (13), *Sir* in (15b) and *Verney* in (16).[18] This distinguishes the *Look* family from other topic-shifters like *by the way*.

6 Conclusion

I have shown that the original IITSC was correct in principle: invited inferences can play a role in linguistic change. However, distinctions should be drawn between different types of inferences. I have argued that three: local, discourse-structuring, and turn-taking played a role in the development of the *Look* family of discourse structuring markers.

Without question, turn-taking is "a privileged pragmatic context" for "novel usages of a form" as Detges and Waltereit (2011:175) argue. However, it may not be an initial trigger in change (and it is probably relevant mainly for the development of pragmatic markers that occur clause-initially or –finally, since this is where TRPs occur).

In future work, attention should be paid to whether there are other types of inferences that may be relevant for these and other kinds of morphosyntactic changes. Work on inferencing does not exclude thinking about the many other factors that enable change, such as frequency and social context. Therefore, ways of combining the various threads of research need to be explored (see Schmid 2016).

Studies of the rise of a larger set of topic shifters not only in English but also cross-linguistically are needed to verify the generality of the proposals in this paper. Research on the extent to which the development of DSMs in general is constrained by genre at one or more points in their history would give insights into the cultural embedding of the rise of DSMs. Finally, despite the problems of projecting experimental findings onto Speakers' and Writers' behaviors in the past that might have led to changes, experimental pragmatics may help shed light on the role of inferences in change (see proposals in Grossman and Noveck 2015).

18 Thanks to Oliver Ehmer for drawing attention to the number of examples with vocatives.

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COCA *The Corpus of Contemporary American English*. 1990–2015. Compiled by Mark Davies. Brigham Young University. http://corpus.byu.edu/coca/

COHA *Corpus of Historical American English*. 1810–2009. Compiled by Mark Davies. Brigham Young University. http://corpus.byu.edu/coha/

DOEC *Dictionary of Old English Corpus*. 2009. Compiled by Antonette diPaolo Healey, Joan Holland, Ian McDougall & David McDougall, with Xin Xiang. University of Toronto. (Original release 1981 compiled by Angus Cameron, Ashley Crandell Amos, Sharon Butler & Antonette diPaolo Healey.) http://www.helsinki.fi/varieng/CoRD/corpora/DOEC/index.html

HC *The Helsinki Corpus of English Texts*. 1991. Compiled by Matti Rissanen (Project leader), Merja Kytö (Project secretary); with Leena Kahlas-Tarkka, Matti Kilpiö, Saara Nevanlinna, Terttu Nevalainen, Helena Raumolin-Brunberg & Irma Taavitsainen. Department of English, University of Helsinki. http://www.helsinki.fi/varieng/CoRD/corpora/HelsinkiCorpus/

OED *Oxford English Dictionary*. http://www.oed.com/

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