
Keywords: context, mental models, social interaction, communication

1. Introduction

The book under review (Context as Other Minds: The Pragmatics of Sociality, Cognition and Communication) was written by Talmy Givón, who is widely noted for his work on functionalism in linguistics (e.g. Givón (1984, 1989, 1995)). Givón is also among those with the broadest perspectives in linguistic typology, having written numerous articles on language dealing with communicative, cognitive, cultural, and biological constraints. In this book, he suggests re-casting pragmatics (or more specifically, the pragmatics of sociality and communication) from a neuro-cognitive, bio-adaptive, and evolutionary perspective. It has been well known since Aristotle, Kant and Peirce that context is a mental construct (i.e. framing operation) that is undertaken on the fly by taking into account relevance (i.e. through judgment of relevance). In this book, the author proposes to put forth the traditional view so far as to argue that the (construed) context relevant to sociality, culture and communication is in fact the mental representation of other minds. That is, the context most relevant for social interaction and communication is suggested to be the mental model of the interlocutor’s current

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rapidly shifting belief-and-intention states.

2. Synopsis

2.1. Theoretical Orientation

The book consists of ten chapters. Chapter 1 (Perspective, pp. 1-37) provides a condensed intellectual history of pragmatics. Givón starts the chapter by discussing the conundrum of context. He notes that the core action of pragmatics (i.e. selecting the relevant frame) is the “source of its ancient conundrum” (p. 1). He writes that “[t]he challenge facing sentient organisms is how to, somehow, cobble the right frame around the picture, set the figure in its proper ground, choose an apt point-of-view for a description, zoom onto the relevant perspective” (p. 1) (note that throughout this paper those words originally written in italics in the literature have been marked in italics). The contextual judgments involved in the act of framing are, he continues, “adaptively indispensable,” although they may be “logically arbitrary” (pp. 1-2). He then moves on to discuss briefly “Russell’s (1908) paradox” (e.g. the celebrated Epimenides), “objectivism” (e.g. Carnap (1963)), “relativity” (direct descent from Kant, Peirce and Wittgenstein), and “other minds” (or more specifically, the mental construal of the others’ minds). He then turns to discuss the notion of context and context-dependency on the basis of recurrent themes of pragmatics. The issues discussed in the rest of the chapter include those of “relevance and importance,” “similarity, analogy and metaphor,” “categories and classification,” “abductive inference and analogical reasoning,” “explanation and understanding,” “teleology, purpose and function,” “figure/ground,” “gradation, continuum and non-discreteness,” and “the semiotic relation.” The chapter also contains a discussion on the early roots of pragmatics, with an introduction of the insights of the important antecedents of modern Pragmatism such as Plato/Socrates, Aristotle, Kant, Peirce, and Wittgenstein. The historical overview is followed by an overview of the modern strands in pragmatics. Recounted here are “cultural relativism” (e.g. Whorf (1956), Geertz (1973)), “early functionalism” (e.g. Bolinger (1977), Chafe (1970, 1994)), “speech-acts” (e.g. Austin (1962), Grice (1968/1975), Searle (1970)), “logical presupposition” (e.g. Keenan (1969)), “modal logic and possible worlds” (e.g. Montague (1970), Lewis (1972)), “ethnography of speech” (e.g. Labov (1972), Gumperz (1982)), “developmental pragmatics” (e.g. Bates (1976)), “pragmatics
and the machine" (e.g. Winograd (1970), Dreyfus (1972), Schank and Abelson (1977)), "cognitive psychology" (e.g. Koffka (1935), Swinney (1979)), and "evolutionary biology" (Darwinian). Givon ends the chapter by expressing his firm conviction that pragmatics holds "the key to an integrated understanding of life, behavior, cognition and communication, and thus ultimately to an understanding of the biological constraints on the evolution of sentient social beings" (p. 36).

Chapter 2 (Categories as prototypes: The adaptive middle, pp. 39–64) provides an investigation of the mechanism of how generic (lexical-semantic) mental categories (called "semantic memory" in cognitive psychology) are constructed. Chapter 1 discusses mental categories primarily in terms of their "source," namely whether they are "innate" (Plato) or "acquired by experience" (Aristotle) (section 1.7.4). In Chapter 2, the central focus is given on the "adaptive pragmatics" of lexical-semantic categories. Givon first provides an outline of the two extreme traditional approaches to categorization (i.e. "extreme discreteness" and "extreme graduality" of mental categories), tracing their roots in philosophy (Platonic vs. Wittgensteinian), linguistics (Chomsky's (1961) generativity vs. Hopper's (1987) emergence), and psychology (the feature-based model of Smith et al. (1974) vs. the semantic networks cum spreading activation model of Quillian (1968), Collins and Quillian (1972), and Collins and Loftus (1975)). He argues that between the two extremes there is Kant's (Kemp (1968)) middle-ground epistemology, which Givon calls "the pragmatic—interactive, constructivist—middle" (p. 39). He notes that prototype-based categories (Rosch (1973, 1975)) are "a hybrid system, a quintessential adaptive compromise (Posner 1986)" (p. 46). He formulates the pragmatic middle as the "adaptive" middle, noting that the pragmatic middle has a high adaptive value. It is suggested that "[t]he hybrid nature of mental categories—partly Platonic, partly Wittgensteinian—is not a philosophical caprice but an adaptive strategy, a compromise designed to accommodate two conflicting demands on biologically-based information processing" (pp. 47–48). The prototype-like nature of mental categories is an adaptive compromise between two conflicting but equally valid adaptive imperatives, one of which is "rapid uniform processing of the predictable bulk," and the other "contextual flexibility in dealing with exceptionally highly-relevant cases" (§2.5). Each of the two extreme approaches to categorization can only take care of one of the demands. It is only the hybrid (i.e. the pragmatic middle-ground approach) that
The issue of how generic (lexical-semantic) mental categories are constructed is further pursued in Chapter 3 (Semantic networks and metaphoric language, pp. 65–89) with a special interest in the adaptive underpinnings of metaphoric language. In this chapter, Givón first returns to take a closer look at the cognitive design of lexical-semantic categories that are culturally shared with members of the relevant social group. He outlines the general design of the human communication system, suggesting that well-coded human communication can be divided into two sub-systems of “the cognitive representation system” and “the communicative codes.” The former is comprised of three levels: “the conceptual lexicon,” “propositional information” and “multi-propositional discourse.” The communicative codes are comprised of two coding instruments: “the sensory-motor codes” and “the grammatical code.” The sensory-motor codes are used to code the conceptual lexicon (i.e. words) and also an important part of grammar such as morphology. It is argued that the grammar code (or simply, “grammar”) is primarily used to code “discourse coherence,” which in turn translates into the coding of “communicative intent,” which translates into mental models of “the interlocutor’s current states of belief and intention” (p. 69).

Givón suggests formulating communication as merely “a sub-species of cooperative transaction” (p. 69). He then turns to highlight the view where meaning (conceptual/semantic) is represented in the mind/brain as a “network of nodes and connections” (e.g. Quillian (1968), Collins and Quillian (1972), Collins and Loftus (1975)). He notes that analogical-abductive reasoning is “the most natural means we have for construing contexts in a novel way, and thus for reinterpreting erstwhile outlier members of an entrenched category as central members of a new category” (p. 40). It is suggested that a discussion of metaphoric meaning is thus essential for a thorough account of mental categories.

To recapitulate the discussions so far, the main points made in the preceding chapters are 1) that context is not an objective entity, but a mental construct, the construed “ground” against which tokens of experience attain mental representation that is relatively stable as salient “figures,” and 2) that it is not possible for either social cooperation or interpersonal communication to proceed meaningfully and efficiently without one taking it for granted that one’s “generic” mental categories are shared mostly with those of one’s interlocutor.
2.2. An Adaptive Approach to Grammar

Givón in Chapter 4 (Grammar and other minds: An evolutionary perspective, pp. 91–123) goes deeper (i.e. from the generic to the specific) into the central topic of the book (i.e. the notion of the other mind) by discussing in detail “mental models of the mind of particular interlocutors at particular times during on-going communication” (p. 92). This chapter provides a framework where grammar is taken to be an essential instrument for automated, streamlined information processing. It is suggested that the interlocutor’s mental models of his/her epistemic and deontic states are constructed rapidly on-line in grammar-coded human communication.

In the chapter, Givón first describes the three mental representation systems of “the generic lexicon,” “the current text” and “the current speech situation” in light of such systems in the human mind/brain study as “permanent semantic memory,” “episodic memory” and “working memory and/or attention,” respectively. Then, arguing against a structuralist methodology where grammatical structures are studied in isolation from their communicative context (Chomsky (1965)), Givón proposes an adaptive approach to grammar where grammar is taken to have adaptive function. He illustrates how the discourse-coherence functions coded by grammar are re-interpreted as “perspective-shifting operations” (MacWhinney (1999, 2002)), which in turn can be further re-interpreted as “systematic manipulation (in production) or anticipation (in comprehension) of the interlocutor’s current states of belief and intention (Givón 2001)” (p. 96). It is argued, for example, that a referent marked by a definite grammatical cue is grounded to one (or more) of the representation systems. He explains that in using definite grammatical cues (e.g. the English definite article the) the speaker assumes that the hearer is mentally accessible to the referent, and that such accessibility may be dependent upon one of the three cognitive systems (i.e. the shared context). Another case Givón illustrates in the chapter is the grammar of speech-acts. In considering this aspect of grammar, he attempts to show how one accesses other minds, suggesting that while speakers seem to possess a shifting mental model of the epistemic (knowledge) states of the hearer’s, they must also possess a shifting mental model of the deontic (intention) states of the hearer’s.

Moving onto the second part of the chapter, Givón introduces the concepts of “Theories of Mind” (Premack and Woodruff (1978)), discussing the issue of consciousness by considering mainly the brain areas
most likely involved in consciousness and also the type of consciousness considered necessary for a representation of other minds. He suggests that the most important adaptive capacity for a social cooperating species is the ability to forecast one’s conspecifics’ behavior, stating that “the systematic on-line construction of mental models of the current epistemic and deontic states of one’s interlocutor is the central adaptive motivation for the evolution of grammar” (p. 121). “Specific grammatical constructions,” he continues to argue, “are used to code (in the speaker’s mind) and cue (in the hearer’s mind) specific mental models of the interlocutor’s current (and rapidly shifting) mental states” (p. 121).

2.3. Referential Coherence, Propositional Modalities and Discourse Coherence

The adaptive approach to grammar laid out in Chapter 4 is fleshed out in the three subsequent chapters with discussions on three major issues in grammatical structure. Chapter 5 (Referential coherence, pp. 125–147) discusses the grammar of referential coherence, probing mainly into the two mental representation systems of “working memory/attention” and “early episodic memory” (“semantic memory” is taken for granted as being involved in discourse coherence operations, and hence here it is not discussed in detail). By “coherence,” Givon refers to “grounding” (the concept to be discussed in §3 of this review article). Following Kintsch and van Dijk (1978) and Kintsch (1994), for instance, Givón takes the mental text represented in episodic memory as a sequential-hierarchic network structure. In this view, coherent episodic representation is considered to guarantee rapid on-line access and also retrieval of specific episodic-memory nodes in production and comprehension of discourse. Givón suggests that such access is highly dependent upon the nodes’ connectivity to other nodes in the relevant network. He suggests that the speaker and the hearer are busy trying to connect (or grounding) incoming lexical and propositional nodes to the episodic structure of the pre-existing current text. In order to illustrate the use of grammar as a means of cueing the grounding of incoming information into the episodic representation of the currently available text, Givón considers “anaphoric (retrospective) grounding” and “cataphoric (anticipatory) grounding.” He argues that the former grounds incoming information into the mental text that exists already. That is, it plays the role of cueing the hearer as to the way the current
referent should be grounded onto its co-referent node in the pre-existing mental representation. On the other hand, the latter (i.e. cataphoric grounding), so Givón suggests, establishes the structural foundations of the text that has arrived newly. That is, it is useful for the speaker to cue the hearer to attentional activation of the referent in the hearer’s currently-assembling episodic memory. He notes that a surprisingly large portion of the grammatical machinery participates in the cueing of referential coherence. It is suggested that grammatical devices that cue primarily cataphoric coherence include those such as “indefinite articles,” “grammatical case-roles,” “existential-presentative clauses” and “role-changing constructions,” and those that cue primarily anaphoric coherence include “zero, pronouns, pronominal agreement” (p. 135).

Chapter 6 (Propositional modalities, pp. 149–177) discusses the grammar of propositional modalities. It is considered in linguistics (e.g. Palmer (1986)) that the propositional modalities are not logical properties of propositions. Rather, it is considered that it codes the speaker’s attitude toward the proposition. In this chapter, Givón further elaborates the traditionally held linguistics view by suggesting that “the speaker’s attitude is, in turn, never just—not even primarily—about the proposition itself, but rather about the hearer’s attitude towards the proposition as well as toward the speaker” (p. 149). Throughout the chapter, he makes a case for this suggestion, discussing topics such as epistemic and deontic modalities, tense, aspect, NEG-assertions, and evidentiality. He concludes the chapter by suggesting that the deployment of these grammar-coded propositional modalities in natural communication shows “fine-tuned sensitivity on the part of speakers to the informational and social reality around them, most conspicuously to the constantly shifting epistemic and deontic states of their interlocutors” (p. 177). He argues that the use of these propositional modalities is part of our evolved, habituated skills (as a social species), and that the adaptive scope of such skills is pervasive, pertaining to how we live, behave, interact and communicate with our conspecifics.

In Chapter 7 (Discourse coherence and clause chaining, pp. 179–194), Givón turns to discuss the grammar of clause chaining. This chapter ends his survey of grammar as a conventionalized tool for representing the interlocutor’s mind in communication. Givón defines the grammatical devices used during natural on-line discourse production and comprehension as “coherence signals” (p. 180). He notes that the most general features of clause-chaining in coherent discourse pertain to the
four most salient positions a clause can occupy within the chain: “pre-initial (or grounding),” “chain-initial,” “chain-medial” and “chain-final” (p. 180).

“Pre-initial” clauses include three grammatical devices that all share the same general property of double grounding. Namely, they furnish “local cataphoric links” to the following chain-initial clause and signal “global anaphoric links” to the preceding discourse. The grammatical devices include “pre-posed adverbial clauses,” “pre-posed adverbial phrases,” and “left-dislocation clauses.” Below are examples of pre-posed adverbial clauses (taken from p. 182):

(1) **Explicitly marked temporal links:**
   a. **Precedence:** After she entered, she saw him.
   b. **Subsequence:** Before she entered, she saw him.
   c. **Simultaneity:** While she was entering, she saw him.

“Chain-initial” clauses launch a topical argument (a new chain) into the discourse, an example of which includes the existential-presentative clause as given in (2) (taken from p. 186):

(2) ... **There’s something I’ve been meaning to ask you...**
   Thing is, I’m not sure how to say it, it’s a bit embarrassing... Fact is, I’m not sure how you’re going to take this...
   Well, heck, it’s been bothering me for such a long time, I reckon I better tell you about it...

“Chain-medial” clauses are the most frequent and unmarked in coherent discourse, examples of which include the case of aspectual change from imperfective to perfective as given in (3) below (taken from p. 187):

(3) **Maximally-coherent imperfective aspect chain:**
   a. **She was** writing to her parents,
   b. **telling** them about her new flat,
   c. **describing** the furniture
   d. **and poking** fun at the neighbors.
   **Break in aspectual coherence:**
   e. **She also** told them...
   **Unacceptable alternative following the break:**
   e. *, also **told** them...

“Chain-final” clauses terminate the thematic chain. The grounding properties of these clauses are mostly anaphoric and only marginally cataphoric. An example of chain-final clauses is given in (4) below, where it is shown that only the chain-final clause is finite and is fully
marked both for referent (she) and tense-aspect (i.e. perfective-past) (example taken from p. 192):

(4) Coming into the room, looking around and finding no place to sit, she finally perched herself on the window sill.

In the chapter, it is argued that discourse coherence (cross-clause and cross-chain coherence) is established by the grammatical cues (those as discussed in chapters 5 and 6). Givón maintains that what emerges with all coherence-cuing devices taken together is “an elaborate system of cues that speakers give hearers about highly-specific mental structures and operations, all directed at the three major cognitive systems in which the current text is represented during on-line communication: working-memory, attention, and early episodic memory” (p. 193).

2.4. Extending the Scope of Pragmatics beyond Its Traditional Bounds

Givón, in the final three chapters of the book, extends the scope of pragmatics somewhat beyond its traditional bounds, discussing the field’s interdisciplinary implications for domains such as philosophy of science, theory of personality, and social interaction. Chapter 8 (Community as other mind: The pragmatics of organized science, pp. 195–220) discusses the close parallelism between the pragmatics of individual cognition (i.e. epistemology) and the pragmatics of organized inquiry (i.e. philosophy of science). Givón claims that epistemology and philosophy of science have in common the dynamics of “being always in the midst of the endless process of accretion of knowledge” and “having always a dialogic interaction with some relevant interlocutor whose beliefs and intentions must be reckoned with” (p. 196). It is suggested that the scientist’s relevant interlocutor whose mind is to be anticipated is “the community of scholars” (p. 196). Discussing two reductionist extremes: “deductivism” (Rationalist, e.g. Popper (1934/1959)) and “inductivism” (Empiricist, e.g. Carnap (1963)), he argues that pragmatic/abductive inference is employed not just at one particular phase but actually at a number of other phases during empirical investigation. He recapitulates the Peirce-Hanson rendition of the low-level cycle of empirical investigation as follows (cf. Hanson (1958), Peirce (1940)) (pp. 215–216) (here the other details have been omitted due to lack of space):

(5) a. Fact-driven initial impetus (‘the puzzle’)
    b. Leaping to hypothesis (‘the mystery’)
    c. Abductive inference (‘gambler’s leap to faith’)

d. Deductive consequences (‘predictions’)
e. Testability (‘ways and means’)
f. Relevance (‘where to start’)
g. Inductive testing (‘roll of the dice’)
h. Inductive inference (‘validity’)
i. Failure to falsify
j. Falsification (‘modus tollens’)
k. Reconsideration and modification (‘back to square one’)

Givón argues that pragmatic judgments/inferences of various sorts are intervened at a number of points during the cycle summarized in (5) (i.e. in 5a–c, e, f, h, i, k). He concludes by stating that “the practice of scientific inquiry is undertaken, at each phase of the empirical cycle, within the context of an anticipated communal mind-cast,” and that “[t]he scientist, whether explicitly or implicitly, is always engaged in a dialog with one or more putative interlocutors in his/her relevant community of science” (p. 219). In Givón’s view, the scientist is the social organism who is engaged in learning from his/her conspecifics through social interaction and communication (a relevant issue to be raised again in §3).

Chapter 9 (The adaptive pragmatics of ‘self’, pp. 221-238) is concerned with the concept of ‘self’ (or personality). It discusses context as the construed mind of the other. When encountering a stranger, it is not uncommon for one to make a quick judgment regarding what the stranger is really like (e.g. at job interviews). In many cases, people only expose themselves to a limited range of the stranger’s rich behavioral repertoire, and tend to make immediate judgments about the ‘essence’ of the person they have just encountered. This popular theory of personality is called in this book “the essentialist theory of the self” (p. 222). From an evolutionary perspective, until recently, Givón argues, such an essentialist theory of self was “highly predictive” and “adaptive” (p. 223). Givón contrasts the essentialist theory of the self with a different theory called “the contextual theory of the multiple self” (p. 224), which holds the proposition that “a person’s social communication with his/her conspecifics, most conspicuously with strangers, is nothing but an elaborate stage performance; and that people as a matter of course tailor their self-presentation to fit the—perceived, construed—current social context (‘setting’),” namely “to fit what they perceive as their audience’s expectations” (p. 225). Comparing the two theories, Givón argues that the twain would never part, the one being
"an ur-Platonic invariant essentialist, the other an ur-Aristotelian context-adjusting empiricist" (p. 229).

In that chapter, he goes on to discuss two well-known personality disorders of schizophrenia and autism, suggesting that in each case "one of the twin aspects of the self—the context-adjusting multiple or the invariant essence—has taken sway to the relative exclusion of the other" (p. 229). Discussing the extreme case of schizophrenia and also the milder case of the so-called "borderline personality disorder" (aka BPD), he argues that they are due to "a disruption of the central, controlling, essentialist component of the self" (p. 231). As for autism, he makes an observation that "[a]utistic-Asperger people appear to operate from a fixed, rigid perspective, and have a great difficulty adjusting their perspective to fit the vagaries of the rapidly-shifting context," namely that "they have difficulty in contextual construal, or re-framing" (p. 234). It is suggested that the two personality disorders are caused by problems with the "controlling `self'" (p. 234). The disorders are identified as the respective clinical expressions of the two extreme poles of the self. The neurological basis for the two disturbances has been reported to be found at two distinct loci within the "attentional networks" (p. 233; Posner and Fan (2004)). It is noted that an unimpaired self must accommodate both extremes (i.e. the anterior cingulate cortex and the posterior/dorsal parietal cortex). Givón suggests that here evolution appears to have created a "classical complex, hybrid ... adaptive compromise" (p. 236). That is, "[t]hat our representation of the mind of the other (3rd order) rebounds and eventually transforms our own self-representation (2nd order) into a 4th-order construct is but an adaptive consequence of being a social, cooperative, communicating species" (p. 236).

In the final chapter of the book (Chapter 10: The pragmatics of martial arts, pp. 239-254), Givón discusses the contextual pragmatics of the martial arts. More specifically, he addresses the role of other minds in martial arts, discussing Tai Chi Chuan as a stand-in for social interaction. Givón suggests that an important difference between communication and martial arts is that the interlocutor in martial arts is an adversary. He admits that one might find the inclusion of martial arts in a book on pragmatics rather an odd choice. He, however, notes that a closer examination reveals the fact that the inclusion of martial arts is really a natural fit in the volume, because "[i]n both communication and warfare, one's moves depend, at any decision-making juncture, on the
ever-present—explicit or implicit—mind of the other, a mind crammed-full of currently-relevant but ever-shifting epistemic and deontic states” (p. 239). He argues that whether in hostile or cooperative interaction, one’s action is always motivated by the opponent’s action (or its anticipation, to be more exact). One’s every move is, he argues, transacted in the context of the adversary’s putative current states of belief and intention. He refers to his late teacher Marshall Ho’o, who had faith in Tai Chi Chuan as a martial art but would always revert to “Outer School” (Kung Fu, Judo) moves (not “Inner” Tai Chi such as yoga) while demonstrating martial applications (conspicuously so during sparring with an opponent).

3. Critical Evaluation and Conclusion

Having recapitulated the main points of the book, one thing would appear for sure. That is, there is no doubt that Context as Other Minds would attract many students, not to mention professional scholars as well, who have an interest in pragmatics, communication, language evolution, and the mind. The book provides a wealth of necessary background knowledge about the topics with detailed discussions of theory and methodology, making cases that apparently support Givón’s suggested theory. Pragmatics is concerned with the meanings (e.g. implicatures) that sentences have in particular contexts. It concerns how people understand utterances (e.g. how people construe a context, how people choose a perspective). Understanding is highly contextual. As Givón shows in the book, pragmatics has an inseparable relationship with culture, sociality, and communication. The nature of pragmatics thus essentially calls for an interdisciplinary approach, and Givón in this book provides a direction into it. He aims at advocating a theory of context as other minds. Throughout the book, he convincingly makes a case for such a theory. It seems thus that the aim of the book has been attained on the whole, and also that the book seems appropriately titled. There are, however, some critical points that I would like to make.

3.1. Necessity for More “Concrete” Discussions

There is first the problem that the book may leave an impression that it could have been improved on if it included a more careful examination of the suggested hypothesis on various levels. The main point of
the book, as I understand it, is to illustrate that the speaker constantly takes into consideration the interlocutor's mental models, and Givón provides an evolutionary/adaptive account for it. As interesting as this claim might be, given the type of argumentation the book provides, it is difficult to evaluate the validity of the claim for various reasons.

First, it appears that the book fails to provide a large enough number of instances so that the reader would feel fully convinced by the discussions it offers. Chapter 6 provides an exceptionally reasonable amount of data in the book, but for the scale of the suggestions the author makes, it seems that more examples could/should have been presented. In that chapter, for example, in discussing tense, Givón, citing clause chains that are characterized by high continuity of reference, notes that the same is true of the temporal continuity of the chain, arguing that this is why once the chain has been temporally grounded by explicit tense-marking of its initial clause, reduced marking (including zero) is used in the rest of the clauses in the chain in most languages (as long as no further temporal re-orientation is added). He illustrates this by citing some examples from Swahili, where the so-called "consecutive tense" is used following initial grounding to certain temporality (e.g. past, future, progressive). The following examples show the case of past (taken from p. 154):

(6) a. ...wa-Ingereza wa-li-wa-chukua wa-le maiti
   P1-British 3p-PAST-3p-take 2p-DEM corpses
   '...then the British took the corpses

b. wa-ka-wa-tia Katika bao moja,
   3p-CONS-3p-put on board one
   put them on a flat board,

c. wa-ka-ya-telemesha maji-ni kwa utaratibu w-ote.
   3p-CONS-them-lower water-LOC of in-order 3p-all
   and lowered them steadily into the water...'

Givón simply notes that it is often the case in many languages that an invariant marker is used to cue the hearer that the same temporality (or aspectuality) remains as in the preceding clause. His discussion of this aspect of grammar is thought-provoking. It seems to show a convincing case to argue that in grammar-coded human communication, explicit tense-marking of the initial clause temporally grounds the chain, and that an invariant marker cues the hearer that the same temporality remains as in the preceding clause. Admitting the value of the points Givón makes here, it seems, however, to me that the reader would not
be left fully convinced due to the fact that too little data has been provided in the discussion. Here, only Swahili is referred to with a very limited number of examples (pp. 154–156), which makes a reader wonder if what he argues for is really the case across languages in the world. Overall, it seems that the book provides too small an amount of actual linguistic data for one to feel strongly that the suggestions Givón makes are guaranteed empirically.

In addition to the lack of data, there is the issue of how much one should/could take at face value the type of explanation (i.e. evolutionary) which Givón proposes in the book. Namely, there is the empirical issue as to whether the claim that speakers constantly take into consideration the interlocutor’s mental models is in fact true. Do speakers really build up representations of other minds? And if so, then what do these representations consist of? What about the case where speakers just cannot infer the interlocutors’ mental models on the basis of their own (e.g. in the case of interaction with infants or people whose cultural background is very different to the speakers’)? When do speakers make use of others’ mental representations? In order to discuss if context does consist of representations of other minds, all these questions need be addressed and some evidence should be provided. Nevertheless, in the book none of these questions are discussed squarely. It is indeed true that it is not easy to test the validity of the suggestions Givón proposes in the book, but the suggested claim being so important and thought-provoking, leaves the reader with the questions as noted above.

Today, the issue of how people engage in conversation is attracting much attention in psychology. An important concept in conversation studies is “grounding” (e.g. Clark and Brennan (1991), Wilkes-Gibbs and Clark (1992)). Clark and Krych (2004), for example, note that in conversation speakers try to ground their communicative acts as they go along. The speakers’ goal in working with their partners is, so they suggest, to reach the mutual belief that the partners have understood them appropriately for the current purposes. Consider a spontaneous exchange as given below (taken from Clark and Krych (2004: 63); pairs of asterisks mark overlapping speech):

(7) Alan were you there when they erected the new signs? - Beth th- which new *signs*? 
Alan *litt*le notice boards, indicating where you had to go for everything.
Beth no.
Clark and Krych suggest that in (7) for Alan and Beth to ground Alan’s question regarding “the new signs,” they need to deal with four levels of “joint action” (Clark (1996)) as follows (Clark and Krych (2004: 63)):

(8) **Level 1.** Alan must get Beth to *attend* to his vocalization. They would ordinarily try to establish this as common ground. If she had missed it, she might say “What?” or “Pardon?” and he would repeat it.

**Level 2.** Alan must get Beth to *identify* the words, phrases, and sentence he has presented. They would ordinarily try to establish her identification as common ground. If she was uncertain of “erected,” she might ask “Did what to the new signs?” to which he would respond “erected.”

**Level 3.** Alan must get Beth to *understand* what he means by those words. What does he mean by “there,” and which signs is he referring to? They would ordinarily try to establish this, too, as common ground. In fact, Beth asks “Which new signs?” and Alan explains, “Little notice boards, indicating where you had to go for everything.”

**Level 4.** Alan must get Beth to *consider* answering his question. Should she reveal she was there or not? Does she remember? They would ordinarily try to establish this as common ground as well. She could reply “I don’t recall” or “I’ll never tell.” In fact, she answers “no.”

Clark and Krych mention that there are a number of ways for people to ground at these four levels. They argue that speaking is a bilateral process in the sense that people do not only speak, but they also nod, smile, point, and gaze at each other (moreover, also exhibit and place things) during communication. They suggest that such gestural acts are often tied to what people are doing while talking. In the kitchen, for example, people may do something like pointing at utensils, showing the ingredients to each other, and handing each other pots and pans. At the dinner table, on the other hand, people might point at salt shakers, pass food, and exhibit empty plates. The important point made by Clark and Krych is that it is the vocal and gestural acts together that
comprise people’s talk, and that both of these aspects must be put under scrutiny when studying how they speak. In the book under review, Givón does discuss the concept of “grounding” when he considers the grammar of referential coherence (Chapter 5), but unfortunately the importance of studying both the vocal and gestural acts is not emphasized as much as it should be.

Today, in addition to these psychological studies on grounding, there are psycholinguistic studies on how people interact with each other in conversation, in which issues such as the effects of speaker’s knowledge on addressees’ interpretations are addressed (e.g. Metzing and Brennan (2003), Schober and Brennan (2003)). It seems that the book could have been improved on if it included more “concrete” discussions by referring to these recent psychological and psycholinguistic studies on communication. Givón advocates an adaptive (or evolutionary) approach to explaining communicative contexts. His adaptive explanation does seem interesting indeed, but it appears that taking an “adaptive” approach without referring to any of the psychological and psycholinguistic literature as introduced above unfortunately resulted in making the issue (i.e. the nature of pragmatics and contexts) more highly abstract than necessary. It is true, as Comrie (1989) rightly points out, that “any explanation necessarily pushes the problem back one stage further, since the explanation itself then becomes an object requiring explanation” (p. 25), but amongst the various types of explanations, one that appeals to adaptive motivations as hard as Givón does in the book is among the most abstract type of explanations. After all, it is probably not such an unreasonable idea to argue that adaptive motivations underlie communication, but it is also true that it is very hard to empirically test the validity of the adaptive claim which Givón makes in the book. This book would have been less abstract and more convincing if the author had included discussions of recent psychological and psycholinguistic studies along with his suggested adaptive approach.

In addition to the way Givón advocates an adaptive approach to communication, there is another abstract argumentation in the way he illustrates grammar. He holds the view that grammar has the function of anticipating or influencing others’ minds. He suggests that grammar has evolved as an adaptation to our need for inducing others to comprehend what we have in our mind (i.e., grammar is taken to have an adaptive function). A series of attempts are made to provide evidence for the adaptive view of grammar (Chapters 4–7). His claim is very
suggestive, but it is again difficult to test the suggested adaptive view of
grammar due to the fact that the explanation only appeals to the con-
cept “adaptive” without providing a large enough amount of actual lin-
guistic data (as noted above).

In discussing grammar theoretically, one might expect a more con-
crete argumentation on grammatical theories than just an adaptive view. On a personal note, I wonder what the implication of Givón’s adaptive
approach to grammar has for other syntactic frameworks, in particular
for “construction grammar” (e.g. Fillmore and Kay (1993), Goldberg
(1995), Croft (2001)). Construction grammar is a cognitive-functional
approach that studies semantic and discourse functional properties of
constructions (broadly taken) without assuming such formal theoretical
constructs as those found in generative grammar, for example (e.g.
struction grammar and generative grammar as follows (p. 219):

[C]onstructionist approaches contrast sharply with the mainstream
generative approach. The latter has held that the nature of lan-
guage can best be revealed by studying formal structures inde-
pendently of their semantic or discourse functions. Ever in-
creasing layers of abstractness have characterized the formal rep-
resentations. Meaning is claimed to derive from the mental dic-
tionary of words, with functional differences between formal pat-
tterns being largely ignored. Semiregular patterns and unusual
patterns are viewed as ‘peripheral,’ with a narrow band of data
seen as relevant to the ‘core’ of language. Mainstream genera-
tive theory argues further that the complexity of core language
cannot be learned inductively by general cognitive mechanisms
and therefore learners must be hard-wired with principles that
are specific to language (‘universal grammar’).

In construction grammar, constructions are defined as pairings of form
and (semantic or discourse) function. There are a number of empirical
reasons for one to follow construction grammar. For example, today a
number of researchers in the construction grammar framework hold that
constructions are learned pairings of form and function. This is the
usage-based model view of grammar (e.g. Barlow and Kemmer (2000),
Langacker (1988, 2000)). The usage-based view is empirically support-
ed by language acquisition research by Tomasello and his collaborators
(see e.g. Tomasello and Brooks (1999), Diessel and Tomasello (2001),
Tomasello (2003)). Another solid support for construction grammar is
provided by Croft’s (2001) Radical Construction Grammar, where he presents a number of pieces of empirical evidence for this approach from a typological perspective. Construction grammar takes language use seriously, and so does Givón’s approach to grammar. It is thus naturally expected that the reader interested in construction grammar would wonder what Givón’s adaptive approach to grammar and a construction grammar approach would suggest to each other. In the book, however, unfortunately no remark on construction grammar is found, and the discussions on grammar remain abstract.

3.2. Some “Incomplete” Discussions

The second problem I address concerns the fact that some parts of the book appear not as thoroughly written as they should have been. That is, there is the problem that the book sometimes fails to refer to some very important works available in the existent literature which are relevant to the discussions it offers. The second problem is related, but still discrete to the first one addressed in the preceding section, in that the second one is not due to the “abstractness” of the argumentation but simply due to the “incompleteness” of it.

In Chapter 3, for example, utilizing a network model, Givón discusses metaphoric meaning, focusing on “the process of abductive-analogical reasoning by which senses are extended” (p. 72). He argues that the on-line use of metaphor (or metaphorical senses) is marked by “a certain measure of serendipity,” because “a context is not there objectively, waiting to be noticed” (p. 72). A context is instead, he argues, “constructed on the fly, for the occasion” (p. 72). As for the fact that there are some analogies or similarities that are more likely to be construed than others during live communication, he explains that they are more “cognitively transparent” and thus more “adaptively valid” (p. 73). He suggests thus a contextual-adaptive basis for metaphoric language use.

Givón discusses critically Lakoff et al.’s notion of “conceptual metaphors” (e.g. ‘learning is eating,’ ‘understanding is perceiving’) (e.g. Lakoff and Johnson (1980), Lakoff (1987)). He makes a critique that conceptual metaphors are identified out of context when the felicity of metaphors crucially does depend on the serendipity of the context. He goes so far as to claim that the analytic method employed in Lakoff et al.’s framework is that of the logician-philosopher, stating that “[t]he vast collection of out-of-context metaphors, together with their classifiers, are obtained through the study of competence rather than of per-
formance” (p. 79). The alternative approach Givón suggests is a network model account, where senses (both literal and metaphoric) are co-activated in discourse (the former sense by the expression itself; and the latter by the discourse context). In his model, specific activation of conceptual metaphors is not necessary.

Givón’s discussion of how one should analyze metaphors is insightful. Yet, there seem to be further points that should be addressed for a more detailed study of metaphors. First, he does not discuss a motivational foundation for metaphors, but it seems very important to address such an issue in metaphor research. Nozawa and Shibuya (in press) study metaphors such as *He is a wolf*, and argue for a social-behavioral motivation for metaphors. They suggest that communication that makes use of a certain type of metaphor is a type of strategy whereby the speaker evokes the source concept in the hearer’s mind in the way the speaker could perform illocutionary acts and/or perlocutionary acts effectively.

In addition to the motivational foundation of metaphors, it is also important to consider constructional properties in studying metaphors (and metonymies as well). Through a corpus-based study of English adjectives, Shibuya (2005) makes a case that the attributive construction (e.g. happy people, a loud explosion) allows more metaphorical and metonymic senses to be available than the predicative construction does (see also Shibuya (2006)). Take happy for instance. In Shibuya (2005), distinguishing the senses of happy into “direct” (non-metonymic) and “indirect” (metonymic) types, it is revealed in a corpus study that the indirect uses (both literally and metaphorically) of the adjective are only found attributively (e.g. happy faces, the happy sobs of the water, a happy place, happy years, a happy marriage) (Shibuya (2005: 210–212)). In Lakoff et al.’s theory, it is not clear why some metonymies and metaphors are (or are not) available in a particular construction. Shibuya (2005) emphasizes the importance of taking a constructional approach to the study of metaphor and metonymy. He argues that the high availability of metaphorical and metonymic senses in the English attributive construction is due to the fact that this construction activates a relevant frame more actively than the predicative construction, therefore allowing highly flexible conceptualization of the referent (literally, metaphorically and metonymically). That is, according to Shibuya (2005), if a construction does not have a certain frame element within its frame activation range, then senses related to the element will not be available in the construction. Metaphor and
metonymy are not only issues concerning concepts, but also crucially an issue of constructions. The constructional approach to adjectival semantics as taken by Shibuya (2005) provides an insight to the theory developed by Lakoff et al. and also Givón’s network model account.

Turning now to another issue, there is also the issue of how one differentiates between semantics and pragmatics. Consider the following examples (taken from p. 168):

(9)  a. There was once a man who didn’t have a head.
    b. ?There was once a man who had a head.
    c. ?There was once a man who didn’t look like a frog.
    d. There was once a man who looked like a frog.

Givón makes an observation, in the discussion on NEG-assertions (Chapter 6), that (9b, c) are “pragmatically” odd as they merely restate the norm and hence are tautological. It depends on ones’ definition of pragmatics as to how one analyzes the infelicity of (9b) and (9c). If one holds the view that semantics deals with truth-conditional meanings while pragmatics deals with cultural background knowledge (or world knowledge), then s/he would ascribe the infelicity of (9b) and (9c) to pragmatics, which is what Givón does here. Yet, it is here that the now-classic question arises immediately. How does one clearly differentiate between “cultural background knowledge” and the so-called “truth-conditional meanings” (or more precisely, “dictionary meanings”)? In cognitive linguistics, one holds the theoretical assumption that in order for us to understand a concept properly we need to call on our “encyclopedic” knowledge (for a discussion on the dictionary view and the encyclopedic view, see Haiman (1980)). Given the encyclopedic view, the infelicity of (9b) and (9c) is considered a problem of our conceptual structure or knowledge structure, and is dealt with in relation to theoretical concepts such as “frames” (e.g. Fillmore (1982, 1985), Fillmore and Atkins (1992)), “domains” (e.g. Langacker (1987)), and “idealized cognitive models” (e.g. Lakoff (1987)). Thus, from a cognitive linguistics perspective, considering the inseparability of dictionary knowledge and encyclopedic knowledge, an encyclopedic view of concepts might appear preferable.

Finally, moving now onto the issue of “cycles of empirical investigation,” Givón fails to include a discussion of David Hull’s (1988) work. As noted in §2.4, Givón argues that the scientist is the social organism who is engaged in learning from his/her conspecifics through social interaction and communication (Chapter 8). Hull (1988) proposes a
selection model of conceptual change from the perspective of the philosophy of science. He studies carefully the process of science (or to be more precise, the social and conceptual development of science), illustrating the social and intellectual dynamics of science taking an evolutionary account (e.g. the ways how research is actually done by scientists, how science develops). Hull's model, in fact, provides such a general enough framework that Croft (2000) applies the model to linguistics, bringing a new perspective to the study of language change. It would have been interesting if Givón included Hull's (1988) work and also Croft's (2000) in his discussions.

3.3. Typographical Errors

In addition to the main problems that I raise about the content of the book, there are also some typographical matters which I noticed while reading it. As is usually the case with any literature, several typographical errors can be found in the book (e.g. "metal" representation in the brain in stead of "mental" [p. 92], Once grammar is "studies" in its natural adaptive context instead of "studied" [p. 96], (20A-i) and (2A-i) should be (16A-i) [p. 105], "sort-term" working memory buffer in stead of "short-term" [p. 107], ... it would "seems" that ... in stead of "seem" [p. 130], A "clauses" in this position performs ... in stead of "clause" [p. 180], Schank and Abelson (1977) is missing in the references).

3.4. Final Remarks

The critical points that I have made above should not detract from the fact that Context as Other Minds is a very valuable work. As Givón notes in the preface of the book, the book is meant to be "only an opening sketch" (p. xiv). The theoretical and methodological problems that I raised above should not thus dismiss, by any means, the main points Givón addresses in this book, as it is not reasonable at all to dismiss such an insightful theory as Givón's just because it cannot be tested empirically (not yet anyway). Overall, throughout the book, Givón insightfully exemplifies and discusses the issues, providing an apparently good argument in favor of his theory of context as other minds. Context as Other Minds is thus destined to become one of the most important works on the issues of language and communication in general for years to come. The scope of the book is so far-reaching that it would no doubt attract attention from many students and profes-
sional scholars interested in not only linguistics proper (e.g. semantics, pragmatics and syntax), but also areas such as cognition and language, philosophy and sociology. I strongly agree with the point Givón makes in the book that social factors need to be seriously taken into consideration in language and communication research. In fact, today the importance of taking a social view is increasingly emphasized by more and more researchers (e.g. Clark (1996), Croft (2000, 2006), Tomasello (1995, 1999)). I hope that the book will be read widely, and stimulate further discussions.

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