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Citation for published version:

Digital Object Identifier (DOI):
10.1017/S0140525X03330158

Link:
Link to publication record in Edinburgh Research Explorer

Document Version:
Publisher's PDF, also known as Version of record

Published In:
Behavioral and Brain Sciences

Publisher Rights Statement:
doi: 10.1017/S0140525X03330158

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these semantic representations independently of the syntax and then have
the problem of relating the two independent representations.

Linguistics fit for dialogue

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Abstract: Foundations of Language (Jackendoff 2002) sets out to reconcile
generative accounts of language structure with psychological accounts of
language processing. We argue that Jackendoff’s “parallel architecture” is
a particularly appropriate linguistic framework for the interactive align-
ment account of dialogue processing. It offers a helpful definition of lin-
guistic levels of representation, it gives an interesting account of routine
expressions, and it supports radical incrementality in processing.

It is easy to argue that dialogue is the basic setting for language use (Clark 1996). Yet historically, generative linguistics has devel-
oped theories of isolated, decontextualized sentences that are
used in texts or speeches, in other words, in monologue. In turn,
this failure to address dialogue at a linguistic level is one of the
main reasons why psycholinguistics have also ignored dialogue. In
contrast, Pickering and Garrod (in press) propose a specific mech-
nanistic account of language processing in dialogue, called the in-
teractive alignment model. This account assumes that in dialogue,
interlocutors align their linguistic representations at many levels
through a largely automatic process. It also assumes that align-
ment at one level can promote alignment at other levels. This ex-
plains why coming to a mutual understanding in dialogue is gen-
erally much easier than interpreting or producing utterances in
monologue. In this commentary we consider how Jackendoff’s
framework in Foundations relates to this account.

Jackendoff considers how linguistic theory can elucidate lan-
guage processing (Ch. 7), a surprisingly fresh approach from a
generative linguist. However, he does not explicitly consider how
his “parallel architecture” might relate to language processing in
dialogue. Here, we argue that the architecture turns out to be par-
ticularly helpful in understanding how interactive alignment comes about. First, it is consistent with multiple independent lev-
els of representation with links between the levels. Second, it of-
ers interesting insights into the linguistic representation of semi-
fixed or routine expressions such as idioms, which we argue play an
important role in dialogue processing. Finally, it is consistent with
incrementality in both production and comprehension, which appears necessary for understanding dialogue.

Independent levels and the interfaces between them. Jack-
endoff assumes that phonological, syntactic, and semantic forma-
tion rules generate phonological, syntactic, and semantic struc-
tures respectively, and these are brought into correspondence by
interface rules, which encode the relationship between different
systems (Ch. 5). This produces an architecture which is “logically
non-directional” and hence not inherently biased toward either
perception or production (Ch. 7, p. 198). These two general fea-
tures of Jackendoff’s account make it especially attractive as a lin-
guistic framework for interactive alignment. First, interlocutors can
align representations at different linguistic levels (e.g., Brani-
gan et al. 2000; Garrod & Anderson 1987). These researchers ar-
gue that the alignment process is largely automatic (operating
through so-called alignment channels) and that alignment at one
level (e.g., the syntactic) reinforces alignment at other levels (e.g.,
the semantic) (e.g., Cleland & Pickering 2003). Hence, alignment
channels can affect the application of the formation rules, and
interface rules are encoded in the links between the levels. It would
be difficult to find such a correspondence with traditional gener-
ative approaches where only syntax is generative and where
phonology and semantics are “read off” syntactic structures (e.g.,
Chomsky 1981). Second, the non-directional character of Jack-
endoff’s architecture explains how perception of structure at one
level can enhance subsequent production of structure at that level
as the literature on alignment in dialogue demonstrates. In other
words, so long as the linguistic structures called upon in compre-
ension and production are the same, there can be priming from
comprehension to production and therefore alignment between
interlocutors.

The structure of routine expressions. Pickering and Garrod (in
press) argue that the interactive alignment process naturally leads
to the development of routine expressions in dialogue. In other
words, dialogue utterances become like stock phrases or idioms
with semi-fixed structure and interpretation. This is reflected in
the degree of lexical and structural repetition in dialogue corpora
(Aijmer 1996; Tannen 1989). We argue that routinization greatly
simplifies language processing because it allows interlocutors to
call upon stored representations, which already encode many of
the decisions normally required in production or comprehension,
rather than having to compute everything from scratch.

Jackendoff provides an interesting discussion of the contrast be-
tween lexical storage and on-line construction (Ch. 6). In section
6.5 he specifically addresses the structure of idioms, and in sec-
tions 6.2-6.3 what he calls constructional idioms. Constructional id-
ioms are weakly generative constructions such as take NP to task
or put NP in (his, her, or their) place. These behave like complex
VPs but include a free variable position inside the complex struc-
ture. Of course, all such idioms are assumed to be represented in
long-term memory, either as complete packages (i.e., for standard
idioms) or as frames with variables (i.e., for constructional idioms).
In our framework we assume that routines of all these kinds are
constructed through alignment processes. They can therefore be
“set up” for a particular conversation, with a particular meaning
that holds for that interchange alone. In other words, routines can
be transient.

Radical incrementality in processing. A crucial feature of Jack-
endoff’s account for dialogue is that it supports radically incre-
mental processing. Of course, there are good reasons for assum-
ing incrementality in monologue comprehension, as well. Here,
we merely point out that the fact that interlocutors can complete
each other’s utterances or clarify what they have just heard
strongly suggests that it must be possible to comprehend frag-
ments of language as they are encountered, and the fact that such
contributions are constrained by the syntax of the original frag-
ment indicates that incremental syntactic analysis must occur (see
Pickering & Garrod, in press).

Where is the lexicon?

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Abstract: In an attempt to provide a unified model of language-related
mental processes, Jackendoff puts forward significant modifications to the
genenerative architecture of the language faculty. While sympathetic to the
overall objective of the book, my review points out that one aspect of the
proposal – the status of the lexicon – lacks sufficient empirical support.

In Foundations of Language, Jackendoff (2002) proposes a sub-
stantial “reconceptualization” of the generative architecture of
language in order to better integrate linguistics into the study of
the mind and the brain. This move is attractive because it allows
the author to embrace a wide range of findings within the broader
framework of cognitive neurosciences. Thus previously unrelated
phenomena, such as grammaticalization in Creole languages, tip
of the tongue states, or referential dependencies within sentences
are discussed in a unified mental model. While I am in perfect