Based on Stalnaker’s notion of common ground and Robert’s model of context in dynamic interpretation, I will first of all come up with the essentials of a complete utterance interpretation:

1. **The explanatory task** at a particular time for an interpreter. It indicates what we call the “meta-context”. A meta-context includes the intended goal in the task and the (direct or indirect) questions needed to answer for achieving the goal.

2. **The contextual-information-in-use set** whose elements are pieces of contextual information constrained by the explanatory task. They are constrained in the sense that they are or can be actually used for the explanatory task. And each piece of contextual information is defined in Stalnaker’s way.

3. **The Stalnakerian context set** whose elements are possible worlds among which the interlocutor intends to distinguish. It also represents the possibilities of the result of utterance interpretation. This set is constrained by (and possibly updates) the contextual-information-in-use set: which of the possible worlds can be distinguished depends on the pieces of contextual information.

I will then respectively introduce two major notions which can be deployed for grasping the manner every piece of contextual information contributes to the interpretation process.

The first notion is what I call the “**connecting force**” of contextual information. It is rooted in the etymology of the term “context” and can be derived from the metaphor “context is an onion” proposed by Brézillon, et al (1997, 1999): A piece of contextual information has a connecting force just as each layer of onion skin has a “wrapping force”. The connecting force leads to two sorts of connections: 1. It permits a connection (or connections) between a piece (or pieces) of contextual information and an explanatory task; 2. Given the explanatory task, it permits a connection (or connections) between the first piece of contextual information and other piece(s) of contextual information. Again, it will be argued that the connecting force typifies the “explanatory force” of a piece of contextual information for a given explanatory task and that it is theoretical desirable.

The second notion is what I call the “**efficiency**” of using context for achieving a given explanatory task. Given an explanatory task like figuring out an implicature, an interpreter can use fewer pieces of contextual information for securing the implicature than others can do. It is plausible to think that she uses the contextual information more efficiently. If the fulfillment of a given explanatory task may need fewer pieces of contextual information for some interpreter than other tasks need, this means that the interpreter could use fewer pieces of contextual information relative to the task than he could do in other tasks. If a specific piece of contextual information can be used by the interpreter in
different explanatory tasks, it will be used more efficiently in the very explanatory
task that requires less contextual contribution, because it appears to be more
decisive in such a task than in others. Thus, the intuitive idea behind the notion of
efficiency of using context is that if we have to use more (or fewer) pieces of
contextual information for fulfilling an explanatory task, the explanatory power of
every piece of contextual information relative to the task will be weaker (or
stronger). Based on this intuitive idea, I put forward a preliminary definition of
the “efficiency”: given an explanatory task and an interpreter, the efficiency
denotes the proportion of a fulfillment of the task to the quantity of pieces of
contextual information used by the interpreter for fulfilling the task. With the
notion of efficiency so defined, the use of a piece of contextual information can have
an efficiency value.

Finally, based on all above, a model of utterance interpretation can be
recapitulated as follows:

Assume an utterance U to be the explanandum of a given explanatory task
at a particular time during a talk exchange. For figuring out what is meant by the
speaker’s uttering U, the interpreter needs some contextual information. The
interpreter begins by using a piece of contextual information which is picked up
from the common ground relevant to the explanatory task. The identification and
use of the piece of contextual information give birth to its connecting force making
a link between itself and the explanatory task, and if it is the unique piece of
contextual information that is required in dealing with the explanatory task, it is
then the unique element in the contextual-information-in-use set. The context-
based cognitive process leads to distinguishing the possible world, say, Wi, among
others in the Stalnakerian context set whose elements represent possible answers
to the very task, and given that the proposition Pi is the propositional counterpart
of Wi, Pi would be the propositional result. Since the connecting force of the piece
of contextual information does not establish any connection between this piece and
other possible piece(s) of contextual information for obtaining the propositional
result Pi, using this piece of contextual information gains its maximum efficiency
value.

REFERENCES

knowledge. Paper presented at the Proceedings of the First International and
Heim, I. (1982). The semantics of definite and indefinite noun phrases. (PhD), University
of Massachusetts

JC. Pomerol & Brézillon, P (1999). Dynamics between Contextual Knowledge and
Proceduralized Context. In P. Bouquet, L. Serafini, P. Brézillon, M. Benerecetti, &
F. Castellani (Eds.), Modeling and Using Context (pp. 284-295): Springer-Verlag
Berlin Heidelberg.

339-359.