Figure 1: Heim & Kratzer static Semantics and Pragmatics

available information   **rules and constraints**

lexical Content
    Semantic value

Presuppositions   **compositional semantics**
                                                    (function-argument application, etc.)

syntactic structure
         Logical Form

                              Contextualized Logical Form   **Gricean maxims**

context: assignment function + CG

                                            what is meant$_{nn}$
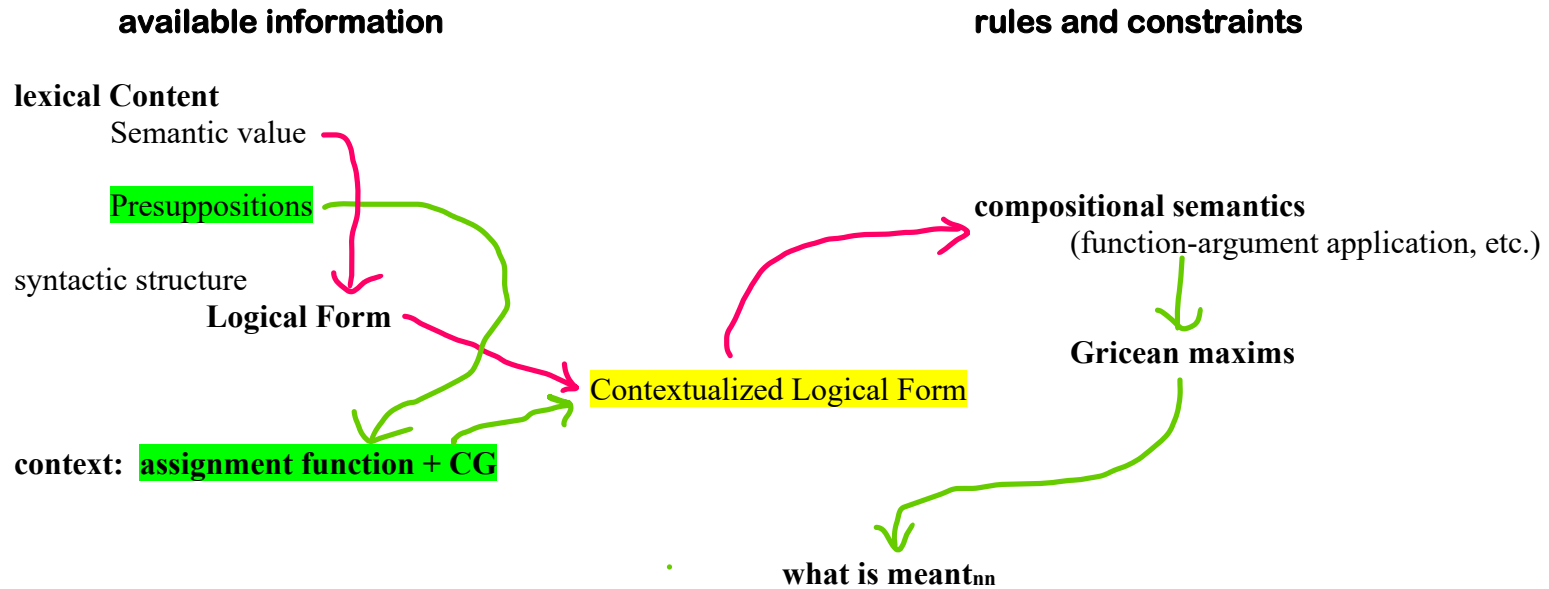
Presuppositions act as constraints on contextual felicity: Given an indexed definite NP_i, $g(x_i)$ must satisfy any presuppositions
        triggered by NP_i, e.g. its grammatical gender, number, etc. must be in accord with $g(x_i)$.
        H&K do not discuss, but following Heim (1983) they presumably intend a globally accessible Common Ground as part
            of the context of utterance, e.g. for satisfaction of the presuppositions of factives, etc.

Contextualized LF: syntactically given (static) LF annotated with a partial assignment function.
        Utterance felicity requires that the values of anaphoric triggers satisfy any presuppositions associated with the trigger
            (e.g. grammatical gender).

Figure 2: Dynamic Semantics (Kamp, Heim, Muskens)

available information   **rules and constraints**

lexical content
Semantic value (CCP)

Presuppositions   **compositional semantics**
                                                             (CCP takes context as argument)

syntactic structure

Logical Form

                                                   accommodation, Gricean reasoning?

context of interpretation

                         what is meant_{nn}?
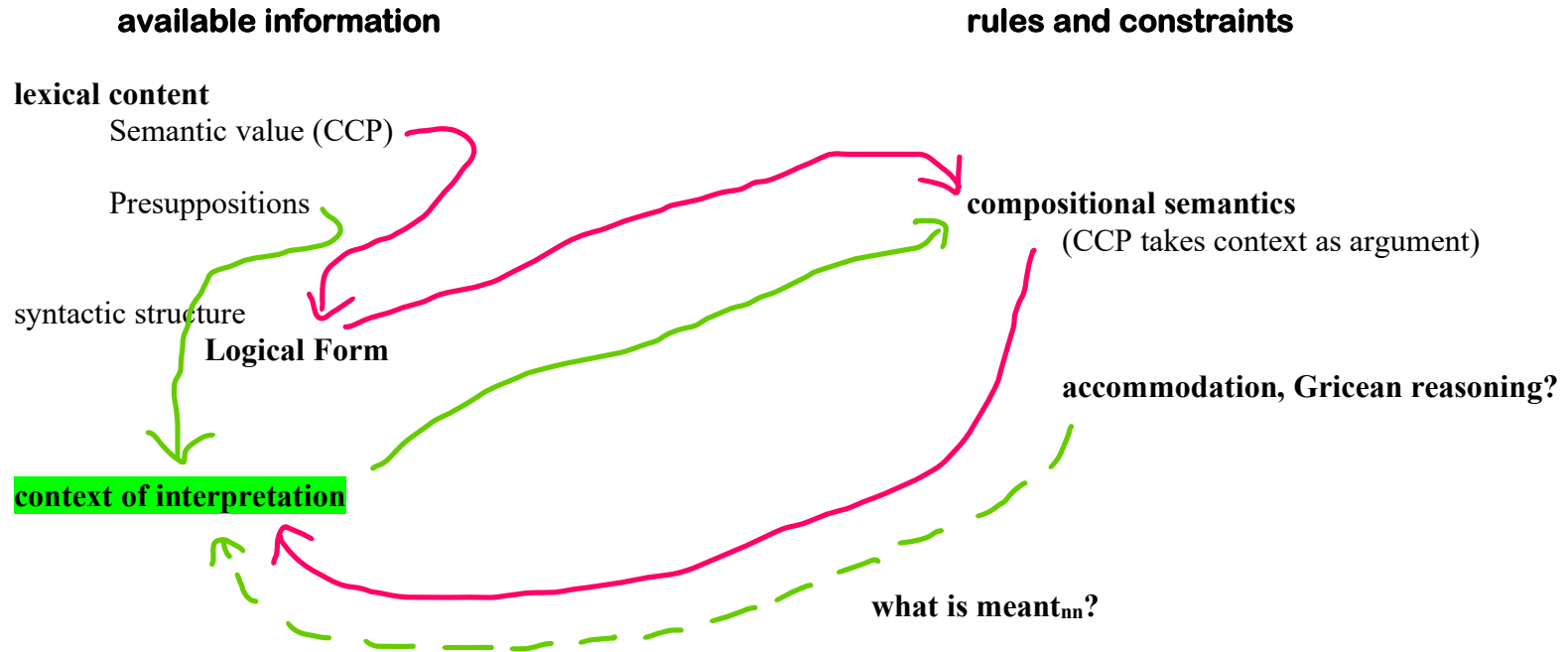
context: a dynamically updated Discourse Representation K or File F
    K = <DRef,Conds>
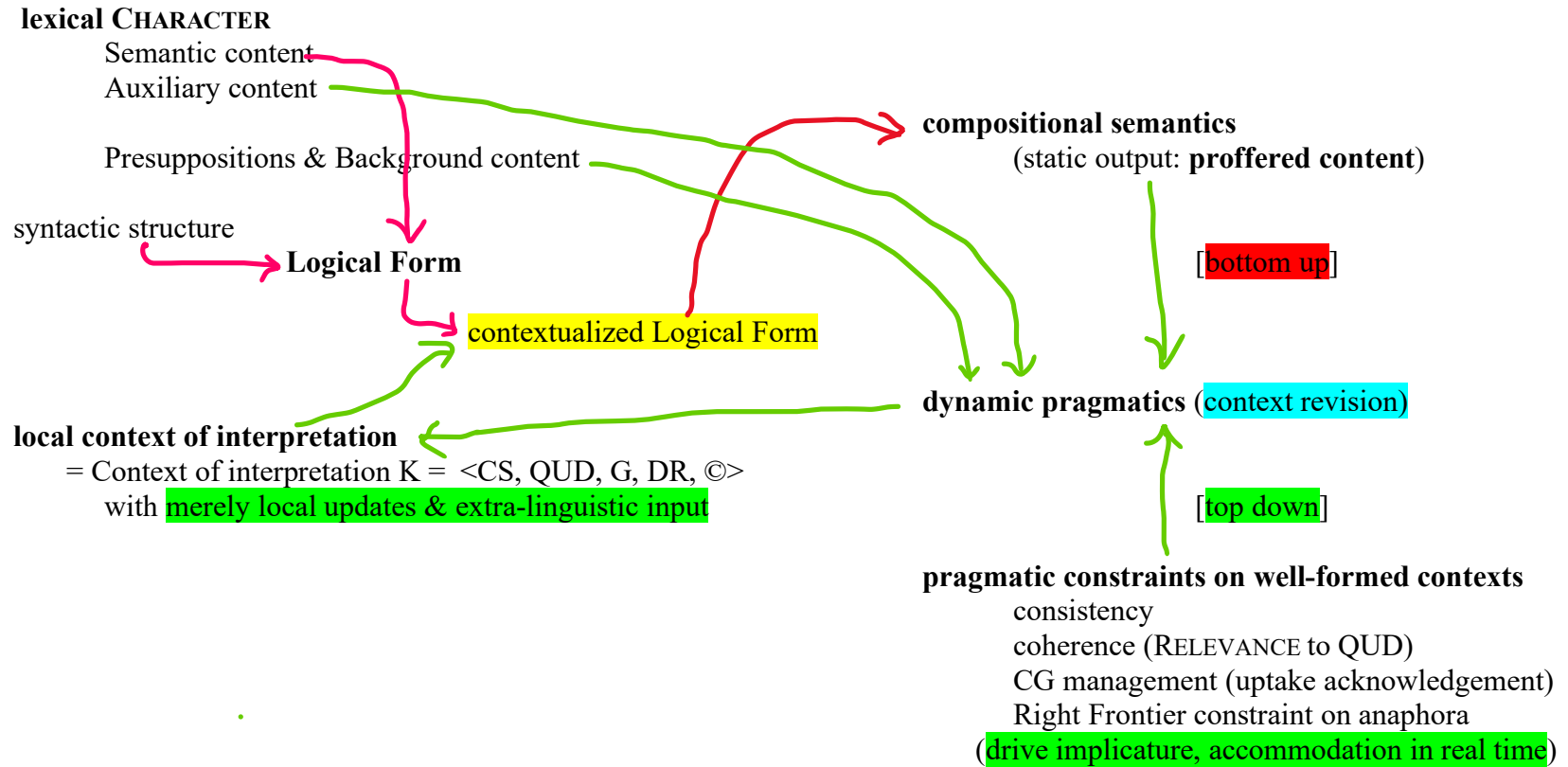   F = < set of dRefs, set of world/assignment pairs>
    Pro:
- Context is no longer arbitrary: updated as a function of what is said, the CCP of prior content (full and partial utterances)

Con:
- Context contains some non-linguistically given information, but the theory makes no allowance for non-CCP update. E.g. for modal subordination and other contextually given domain restriction, intrusive implicatures, and intrusive Conventional Implicatures (coming up).
- Assumption that output of an indicative sentence acts to update CG is inconsistent with Speech Act theory.

Figure 3: The Architecture of Interpretation: static Semantics and dynamic Pragmatics

lexical CHARACTER
Semantic content
Auxiliary content

Presuppositions & Background content

syntactic structure

Logical Form

contextualized Logical Form

compositional semantics
(static output: **proffered content**)

[bottom up]

dynamic pragmatics (context revision)

local context of interpretation
= Context of interpretation K = <CS, QUD, G, DR, ©>
with merely local updates & extra-linguistic input

[top down]

pragmatic constraints on well-formed contexts
consistency
coherence (RELEVANCE to QUD)
CG management (uptake acknowledgement)
Right Frontier constraint on anaphora
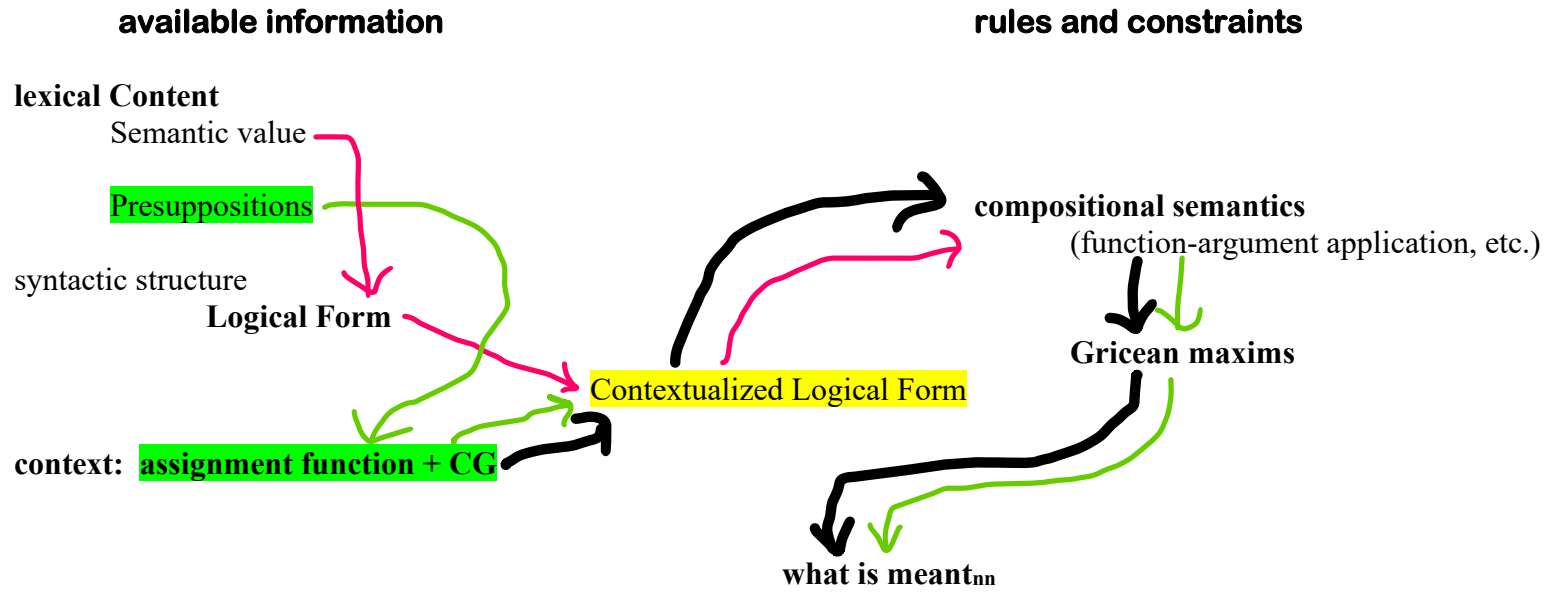(drive implicature, accommodation in real time)

Contextualized LFs: syntactically given (static) LFs annotated with the pragmatically given contexts of interpretation for their parts.
For simple declarative S, given a local context of interpretation K, we update CS_K as follows

Heim's (1983) CS updates follow from the contextualized LFs + semantics of any functors:

S^K $\quad K + S^K$ updates K with proffered $\|[S]^K\|$, so updated $CS_{K+S} = CS_K \cap \|[S]^K\|$

$[not [S]^K]^K$ $\quad K + [not [S]^K]^K = K \setminus K + \|S\|^K$

$[[S_1]^K \ and \ [S_2]^{K+S1}]^K$ $\quad K + [[S_1]^K \ and \ [S_2]^{K+S1}]^K = (K + \|[S_1]\|^K) + \|[S_2]\|^{K+S1}$, so $CS \cap \|[S_1]^K\| \cap \|[S_2]^{K+S1}\|$

$[if [S_1]^K \ then \ [S_2]^{K+S1}]^K$ $\quad K + [if [S_1]^K \ then \ [S_2]^{K+S1}]^K = K \setminus (K + \|S_1\|^K \setminus K + \|S_1\|^K + \|S_2\|^{K+S1})$

Figure 1b: Heim & Kratzer static Semantics and Pragmatics

available information   **rules and constraints**

lexical Content
    Semantic value

    Presuppositions   compositional semantics
                                   (function-argument application, etc.)
syntactic structure

        Logical Form
                          Gricean maxims
                   Contextualized Logical Form

context: assignment function + CG

                           what is meant$_{nn}$

The Flow of Contextual Information

Figure 2b: Dynamic Semantics (Kamp, Heim, Muskens)

available information   **rules and constraints**

lexical content
    Semantic value (CCP)

    Presuppositions   **compositional semantics**
                                                  (CCP takes context as argument)

syntactic structure
     Logical Form

                                         accommodation, Gricean reasoning?

context of interpretation

                                  what is meant$_{nn}$?

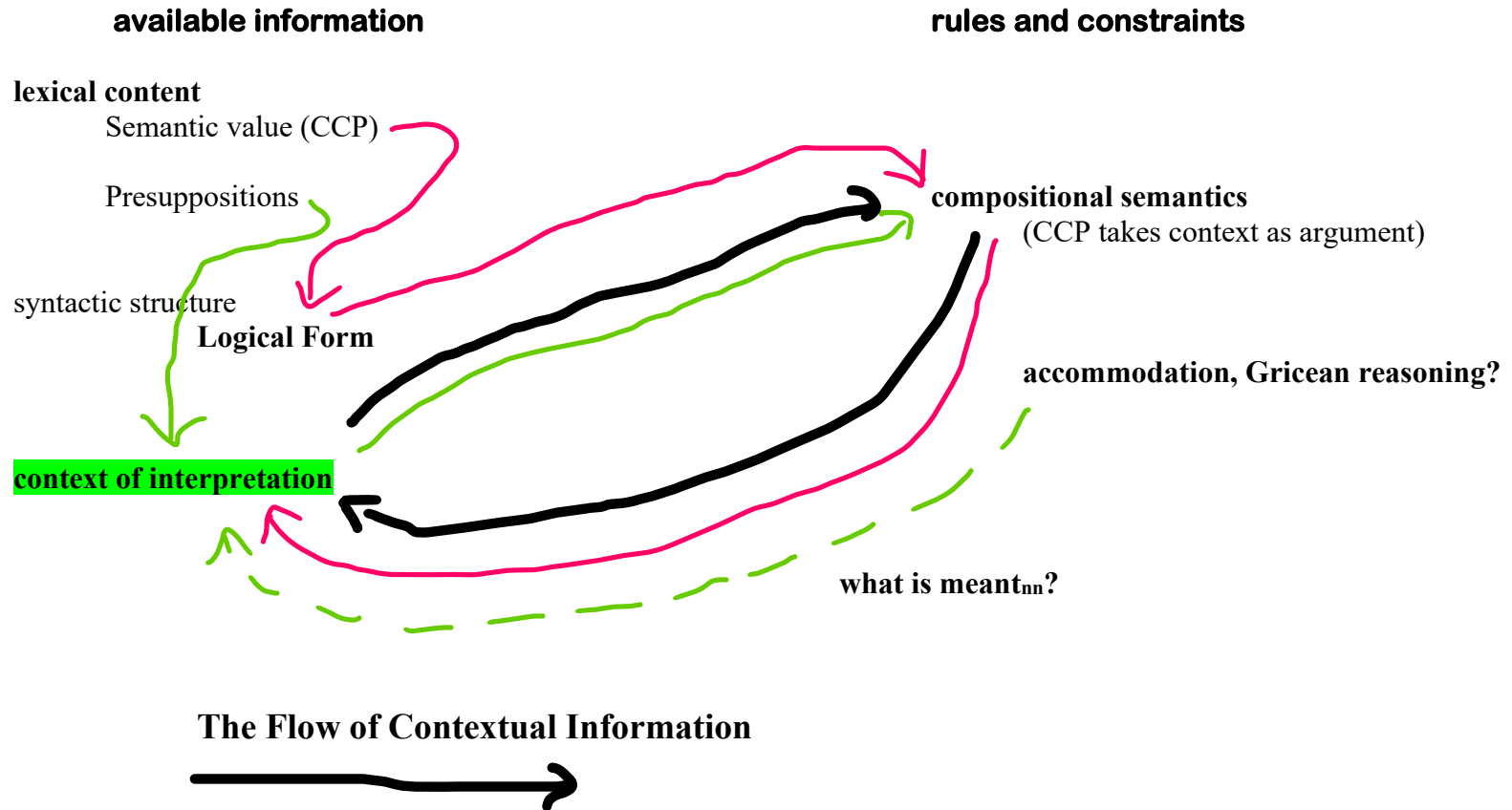**The Flow of Contextual Information**

Figure 3b: The Architecture of Interpretation: static Semantics and dynamic Pragmatics

available information   **rules and constraints**

lexical CHARACTER
    Semantic content
    Auxiliary content
                                  compositional semantics
    Presuppositions & Background content   (static output: **proffered content**)

syntactic structure

      Logical Form

          contextualized Logical Form

                                   dynamic pragmatics (context revision)

local context of interpretation
    = Context of interpretation K = <CS, QUD, G, DR, ©>
      + merely local updates (as below) + extra-linguistic input   **pragmatic constraints on well-formed contexts**
                                     consistency
                                     coherence (RELEVANCE to QUD)
                                     CG management (uptake acknowledgement)
    Indirect contributions to semantics   Right Frontier constraint on anaphora
        (not reflected in LF)   (drive implicature, accommodation in real time)