
Anything not in text is bracketed (my thoughts or reactions); kept to a minimum here.

I) Nature of Univ. Grammar (UG)
Gov’t/Binding after 1981; then principles and parameters theory. What is knowledge about language, how acquired.
4- structure-dependency. based on phrase structure. S > NP VP VP > V NP passivization by movement. of obj to subject position.
Not a certain word, but phrase.
The manager who will fire Barnes will succeed.
*Will the manager who fire Barnes will succeed?
gotta move the right will.

Famous S Is the man who is here tall? *Is the man who [the is is moved incorrectly from this place] here is tall?
Languages never move single words. John is tall never is inverted to *Tall is John?

Children never hear s’s like this. How do they learn s-dependency?
Other languages do the same. Q’s, passives, etc.
Hans wurde von Marie gesehen > Wurde Hans von Marie gesehen?

14- heads and complements. education for life, showed her the way, read the book, play the flute. But Japanese in a head last lang. Postpositions. Language may have a head-first parameter or a head-last parameter.
Exceptions to head-first or last: German (see later).

Lexical entry projects upward into the syntax the subcategorization of an entity. like: Verb, [ _ NP]
also built-in innate knowledge of grammar. The projection principle states that syntax must take lexical specifications into account. The properties of lexical items project into the syntax. Verbs may or may not take complements, and may or may not take two complements: give a dog a bone, *faint a dog a bone.

want Verb, [ _ NP/to-phrase]
believe Verb, [ _ NP/that-phrase]

competence ~ performance (cf. langue ~ parole). Competence is indep. of situation. vs. his pragmatic competence: in its institutional setting and social context. Chomsky is not interested in externalized language. He considers it an epiphenomenon of UG.
Grammatical context: the mentalization (cognition) of form, meaning and their relations

24- purpose of language. Expression of thought, not communication.
Creativity: novel sentences.

Knowledge of the highway code does not convey the ability to drive along the street.
Learned skills of driving are indirectly related to knowledge of the code.

movement: a parameter. English has it, Japanese does not. But doesn’t break the principle.
This vs. (28) implicational hierarchy or accessibility hierarchy, Keenan and Comrie.
Relativization. Subj > obj > ind obj > obj of P > gen > obj of comparison. Start at left and go down.
John was the man they gave the prize to (not in Welsh) — ind obj
the building that Canary Wharf is taller than is St Paul’s — obj of comparison
the other thing that he was not more of than Sneezy was strong

Not all languages’s have them all, but go in this hierarchy. Data-driven, observational, vs. UG: theory-driven, may not be breached but need not be present.

the man who discovered
the house that Jack built
the man they gave the prize to
the car from which the plate was missing
man whose picture was
the building that Canary Wharf is taller than is St. Pauls

but Ch. will make U’s out of one language alone.
31- not cognitive, vs. Piaget’s continuity of cognitive processes.
Ch – module, a language organ, like the heart.

rules do not exist in their own right, they are interaction of principles and lexical properties.

“language is a set of specifications for parameters in an invariant system of principles of UG” – 1995b. “Generative” is a synonym for explicit and formal. Key is not psychology but truth about knowledge. [see the innateness]
Rules are merely the interaction of principles and lexical properties.

2) Principles and parameters


43- sound-meaning bridge is syntax. Phonetic rep. and semantic rep. PF and LF, phonetic form and logical form. Key problem is how child gets the syntactic interface; the others are incidentals (!) LF is only the part of meaning inv. to syntax., e.g “it’s right across the bridge” – how you bracket this determines its meaning, e.g. it’s [right opposite] or its right [opposite], take a right.

S-structure with traces: What(1) are(2) you t(2) seeing t(1) at the cinema?

D-structure: you are seeing what at the cinema

surface: What are you seeing at the cinema? (46)

T-model: D-structure, movement, S-structure, bridging PF and LF.

modularity of the theory: parts that all fit together. X-bar syntax deals with phrase structure and integrates the lexicon with the syntax via the projection principle. Theta-theory. Agent, patient, goal: Sally gave Jim the ball.

No isolated phenomena. Not passives, or questions.

Government. N, V, A, Prep, all lexical heads can be governors. Kate likes me. Case theory.

Interesting problem of the subject. What actually is the subject and where does it go in D structure? INFL and IP, dealing, among other things, with tense and agreement. plays – play, played. Inflection is seen as an independent element, as it can occur with auxiliaries: is playing, was, played, has played, had played.

Finite and non-finite clauses:

53- he considers Mervyn to play the piano well. Inside other clauses. to is also an independent element. (cf. French aux.)

54- what governs the subj? It is Nom only if there is a finite V; a finite INFL governs the subject, non-finite INFL does not (it is acc. – consider him.) (to be examined later).

INFL is an independent functional element between the Subject and VP. When finite, it can contain tense and AGR; when non-finite, it can have to. Only finite INFL governs the subj and determines its case as Nominative.

55- Pro-drop. English in child speech, telegraph style, diaries, signs. Italian is pro-drop and can have VS order in declaratives: cade la notte. Never Eng *falls the night.

Subjectless and inverted declaratives in Sp, Ital. [but Slavic, Cz vs. Russian!!] Chinese appears to be pro-drop. Shi ge haixian, Am the walrus. without subject wo. But Chinese does not have SV inversion, unlike Italian and Arabic. German, French and English are non-pro-drop and do not have VS inversion.

Also : one can say in Italian: Che credi che verra? *Who do you believe that will come?

empty category e. Posit in D-structure pro cade la notte. This is from the Extended Projection Principle: sentences must have subjects. (Cf. Czech, Russian – the latter is not prodrop but does not require a subject.

Principle of proper government (59): lexical categories govern properly, non-lexical categories do not. INFL is not a proper governor, as it is non-lexical. An empty category must be properly governed.

In prodrop languages, pro is properly governed. finite INFL is like a lexical category. pro is licensed by AGR feature. In non-pro-drop, pro is not properly governed. Whether AGR acts like a lexical category or not. Not in Eng.

Many prodrop have rich inflections, like Latin. Unfortunately Chinese, prodrop, has no inflection and certain verbs are SV only, never inversion (60). So problems here.

Prodrop is sometimes called null subject parameter. Either INFL is proper gov or not. Engl *speaks he, Ital parla lui.

The empty category pro is licensed by the AGR feature of INFL, The parameter setting is: for prodrop, AGR is a proper governor, for nonprodrop, it is not.

Latin has a rich inflexion and is prodrop: Amata est ‘she is loved’. But a rich inflexion does not guarantee prodrop, see Russian.
Binding Theory
names: referring expressions. –self and each other are so-called ‘anaphors’. he: pronominal.
65) anaphor is bound in a local domain
pronominal is free in a local domain
referring expression is free
McCabe said that Smith shot him – can be McCabe or someone outside.
use local domain q: Henry believes himself to be innocent. Henry is outside clause and yet there is anaphor. It is a complex matter of what the local domain is determined to be. McCabe said that he shot himself. The he could be McCabe or someone else. the self has he as antecedent.
he + pron, - anaphor
himself – pron. + anaphor
each other – pron + anaphor

70- Core and Periphery. UG specifies what a language may not be like. The Core is totally specified by UG. [ RJ ‘must’: languages differ, he said, by what they must express, not by what they are capable of expressing] . Limits various possibilities of languages. small subset of possibilities of the vast number that are possible. Periphery: irregular verbs, odd examples of subjectless S, inversion. A continuum of markedness. [cf. Jakobson] . Departure from the neutral is marked. Central core is unmarked. Learnability: unmarked to marked. Less info needed to change the setting.
74- term ‘language’ is epiphenomenal, unimportant. (Golly!) Grammar is important. Grammar and knowing a grammar. (ha) The grammar in a person’s brain is real, the language is not.

3) General Concepts of Language Acquisition
This is a programmatic chapter, very contentious but very interesting.
Ch. crushes the behaviorists (Bloomfield, BF Skinner). not stimulus – response.
creativity of possible responses, eg to a Dutch painting: hideous, did you remember to 
order the flowers, I think this is a forgery, etc. Sent a man to grocery with German 
conversational store phrases, but instead of pat phrases he hears: “could you read this 
label for me, I forgot my glasses?”

Last contribution of Chomsky to psychology. Ha.

Initial state So and steady state Ss. ‘static competence’ (!!) Language development is seen 
as a logical problem.

The LAD – Language acquisition device, like a black box. Input > LAD > output.

80 – older theory had observational, descriptive and explanatory adequacy. Now only 
explanatory is considered important. Plato’s problem: the black box seems to be 
contributing things of its own. (Plato: memories or archetypes of past existence.) Poverty 
of the stimulus argument by Ch. How do they know *Is Sam is the cat that brown? 
Must be built-in if they know it, eg binding.

85 – cf. religious arguments. The world is so beautiful that it must be made by design. 
That designer is God. The principles of UG are the principles of the initial state, So. 
The L1 learner cannot learn syntax from input alone. Just as the snooker player can’t 
learn what is not allowed by watching the game on TV. Head-first or head-last comes 
from positive examples.

The principles of UG are principles of the initial state So. In the black box the child gets 
the massive lexical data needed to set the parameters.

Jakobson believes the child uses abduction to arrive by hit and miss to generalized 
principles.

Also indirect negative evidence may be relevant.

91 – occurrence and uniformity. It must be shown to occur, and uniformly so, in all 
classes and cultures. Some parents correct kids, others do not, yet all learn the L1.

92 – need positive evidence; occurrence; uniformity; take-up (children must actually use 
the evidence.)

imitation. Not sufficient. Repeat it a million times and the kid can’t extract the point.
explanation. Same problem. Conscious understanding is different from the intuitive grasp of the L1 learner. “No one has enough explicit knowledge to provide explanation and instruction [for an L2 learner, for example]” (ha – 95).

Correction: children rarely make errors in word order. vs. eg. I broked it, what did my mummy do at you, etc. Rare errors in structure-dependency. Cf. the oddity What does sheep make a noise, where ‘what’ seems to have moved and not the whole ‘what noise’. Oddities of correction. (98). Child: Nobody doesn’t like me. Mother: No, say ‘nobody likes me.’ (Repeat ad lib.) One is slightly disturbed by the mother not reassuring the child here (ha).


Pragmatic competence, he concedes, does depend on some social environment. (ha) Piaget (101) on general cognitive semiotics. Ch. denies this for UG.

Thus imitation, explanation, correction, social interaction all fail uniformity requirement. The initial state is (104) a “function that maps experience onto the steady state.” A triggering and partially shaping effect. “John ate an apple” is all the kid needs for UG (ha!!) It is more like growing than learning, like a preset biological clock. Biology. General cognitive development is insufficient for language acquisition.

Washoe the chimpanzee. Seems to show VO order, new utterances, use language to communicate, etc. (108). Koko, given a stale bun, called it a ‘cookie rock’. But what this meant to her we cannot know.

Chomsky’s ironic comment on apes: “perhaps the distinction between jumping and flying is arbitrary, a matter of degree; people can really fly, just like birds, only not so well.” (ha)

Study of L1. Children seem to learn anaphors more easily than pronominals. Why? Referring expressions are free: *He complained after John had the accident. John here is bound, no good. Children chose a referent for he inside the sentence, such as When he closed the book, Cookie Monster lay down. Permitted. But children don’t accept He turned round when Snuffles found the penny. So Principle C of reference known as a young age.
110 – prodrop. Switch can be in neutral, or set to nonprodrop, or set to prodrop. Nina Hyams (1986) makes a celebrated study of this. Finds lots of prodrop in English kids, but they could also use subjects. She concludes that prodrop is the initial setting. To look a man. Later it is reset. Lack of a subject is well documented in young learners of English. Hyams suggests that the default setting is prodrop. Evidence for changing comes from the dummy expletives.

Note presence of expletives there and it in nonprodrop. Italian can’t have them.

[gmc—this is indefiniteness, to. Russian can have zero, as in impersonals, but is a nonprodrop. Cz is prodrop, but also has impersonals, or to.] Her work shows that actual study of childrens’ language is important.

Degeneracy of the data. Children need phonological clues, intonation, word boundary, what Morgan 1986 calls bracketed data so the phrases can be cued: The dog [bites the cat].

The unmarked setting is the starting point (119). Peripheral grammar needs more evidence, eg. irregular verbs. Morgan’s study from the point of view of formal learnability theory.

Very special use of ‘markedness’ in UG. If the value minus generates a proper subset of the grammatical sentences generated with the value plus, then minus is the unmarked value selected in the absence of evidence. Children stay as close as possible to the data they hear.

They prefer a language that is a subset of a larger language than leaping immediately to the larger version.

UG acquisition is not to be confused with development, the complex interaction of language with other maturing cognitive faculties. Acquisition is instantaneous. But it is plausible that UG matures. Early child language is hardly capable of breaking principles like binding or structure dependency.
The complex and abstract grammatical competence possessed by the native speaker.

What about wild grammar? (122) Children would resist this if UG were fully developed in the initial state. Perhaps it takes time to develop.

124 – L2 acquisition. Few become as good as with L1. What is different about L2 learning? Children already possess one grammar, or when L1 is incomplete. Most are substantially less efficient in L2 than in L1. Neither the initial nor the final stage are the same as So – Ss. Instead it’s Si > St. St is variable, all learners are variable. Imitation is not sufficient. Nor is explanation, though learners demand it. No one knows the deep truth, it can’t be conveyed. Natural social exchanges are a clear route to L2, but they can’t help UG acquisition any more than they did in L1. Mental processes often are used. Interesting data in parameter setting acquisition.

4) X-bar Theory
‘consists of’ can be rewrite rules or bracketing. Immediately dominate. All phrases must be endocentric, at least a head. NP contains a N, etc. XP > …X… (135)
4 lexical phrases VP NP AP and PP. drink milk is V, NP > N milk. Phrase level XP and category level, X, are insufficient. Need an intermediary level.
The education minister will resign her post on Tuesday. on Tuesday is an adjunct, try the so test: And so will the Prime Minister (on Weds.)
139 – see diagram. VP > V’ > V resign, NP her post. V’ and PP on Tuesday are sisters, V and NP complement are sisters.
We have X’’ > X’ > X. Complements: X’ > X complement(s) OR complements X played – the flute, proof – of his guilt, with – a stick. English is head-first, Japanese is head-last. See 142-3.
Specifier belongs alongside the X’. Determiner – the. Order is parametrized. NP > Det, N’.
Two cell-like structures: X’’ consists of the head and possible specifiers, X’, the head and possible complements (144). XP”’ has a specifier and X’. X’ has a lexical head and a complement.
The man who paid the bill was John. The rel clause is also an adjunct, not a specifier (the), not a complement, since man has no complement. Can be infinitely expanded by a recursion rule, a rule calling on itself. (146) each adjunct is added onto. Note N’ and the adjunct are sisters.
146 – the subject is in the specifier of the VP.
link between head and its sister complements; link between specifier and head.
148 – Structure of functional phrases
IP > I’ > I Tense, Agr
and > VP the child find the toy
functional phrases are built around funcional heads, tense, agr
150 – whether is a CP > C’ > C whether
then the IP. The CP can be an empty place for, eg., auxiliary to move to, eg in are you going to the concert?
154 – see tree of the child finds the toy. subj moves to empty spec position of IP, leaving a trace (see tree 155). How does the verb get up to its I constituent? See later chapter.
156 the invisibility of the trace can have exceptions. Eg who do you want to visit has ambiguity, with t before or after to visit. But “who do you wanna visit” can only occur if visit – t. This may not be significant in itself but one indication that the invisible t is actually there, as it is reflected in S.
157 – the IP is built on top of the VP and contains the inflectional head. CP in turn is built on top of IP and contains a head complementizer in embedded clauses and an empty head position in matrix clauses.
VP is taken to be the smallest representation of a clause, since at D it contains all the lexical elements of a clause. On top of it the IP contains the inflectional functional head, tense and agreement. CP is built on top of that.
Look especially at the trees on pp. 154 and 155. The NP to the left of sister V’ on 154 is the subject, to be moved up to IP, as a sister to I’. It leaves a trace of itself, t.