1 *Introduction*

1.1 What this book is about

There is a difference between liberty and anarchy. Liberty is freedom from some constraints; anarchy is the absence of all. Nonconfigurationality, defined as the confluence of radical pro-drop, freedom of word order and noncontiguity of (sub)constituents, seems to represent the anarchic end of the linguistic spectrum. What is missing from current studies is the search for order beyond these three simple criteria. In this book, we tackle this issue through the detailed study of one particular nonconfigurational language, showing that robust configurational effects, familiar from other languages, lie beyond the scope of the three definitional criteria. This holds important implications for linguistic theory as it entails that the deep phrasal architecture of nonconfigurational languages does not differ radically from that of more commonly studied ones.

We will show that Kiowa, our language of study, has radical pro-drop, extremely free argument order, and free splitting of constituents. These are the hallmarks of nonconfigurationality. However, Kiowa exhibits three major configurational restrictions and the interplay between these and Kiowa's nonconfigurational properties is important for how we understand crosslinguistic variation, syntactic structure and the nature of the syntactic interfaces. The generalizations all involve mirroring of hierarchies around the axis of the verb. In one case, preverbal particles and postverbal suffixes have inverse orders; in another case, postverbal constituents are rigidly bound in the reverse of their default (hierarchically induced) order; and in the last case, one and the same set of focus-marked and quantificational elements is banned from the pre- and postverbal extremities.

In deriving these generalizations, we develop a theory of clause structure with several important ramifications. These relate to the nature of crosslinguistic parametrization (in particular, the notion of macro- versus microparameters), to the syntax–semantics interface (the interpretation of different varieties

of argument chains), and to the morphology–syntax interface and the theory of phrase structure (specifically, the explanatory utility of Mirror Theory, Brody 2000a).

We begin, in chapter 2, with one of the most influential approaches to nonconfigurationality, the Pronominal Argument Hypothesis developed by Jelinek (1984) and implemented in greatest detail, by Baker (1996), as a macroparameter (that is, as an abstract specification of deep organizing principles of the language). We show that Kiowa bears all of the hallmarks of nonconfigurationality and yet that a pronominal argument analysis fails for this language in a way that suggests a microparametric approach, best stated in terms of properties of functional heads in Kiowa clauses (cf. Legate 2001).

In chapter 3, therefore, we focus on the salient characteristics of the Kiowa clause. We establish two of the generalizations mentioned in the opening paragraph and tie these to crosslinguistic work on the hierarchy of functional projections. These generalizations form the basis of chapter 4, where we compare three accounts of phrase structure and show that Mirror Theory provides the best account of both generalizations: the configurationality of the clausal spine, and the configurationality this induces after the verb.

With this in hand, we turn, in chapter 5, to freedom of argument order before the verb, arguing that much of it is due to movement operations arising from information- and discourse-structural considerations. Against the background of this freedom of argument placement, we elaborate a third generalization: that certain classes of expressions, including focal-marked and quantificational items, are forbidden from certain syntactically distinct positions.

In chapter 6, we explain this generalization by first showing that the Mirror-Theoretic analysis we develop in chapter 4 gives us a range of possible chain types. A maximally simple approach to the syntax–semantics interface gives us an explanation for the restrictions in terms of positions that can only be occupied in virtue of base generation (External Merge).

Overall, we argue that Kiowa nonconfigurationality is best thought of as arising from a conspiracy of microparameters interacting with universal principles of clause structure, chain formation and the syntax–semantics interface. Moreover, we demonstrate the inadequacy of movement-based theories of apparent rightward specifiers, even when implemented in terms of roll-up remnant derivations, and show that the possibility of apparent rightward specifiers is intimately tied to the morphology–syntax interface (1a–c). This amounts to the claim that one of the major trends of recent syntactic research is incorrect.

For explicitness, we state here the parameters, and parameter settings, argued for in the subsequent chapters:

(1) **Parameter settings in Kiowa**
- a. absence, for some heads, of any morphological realization
- b. low spell out of the verb and its affixes
- c. absence of Case- and EPP-related movement
- d. the possibility of scrambling and, relatedly, obligatory surface scope of quantifiers
- e. the transparency of DPs to extraction of a left specifier, that is, inactivity of the Left Branch Condition
- f. the availability of Romance-like Clitic Left Dislocation structures

1.2 The Kiowa language

In the remainder of this chapter, we present a brief summary of the core properties of Kiowa grammar. This introduces both the main phenomena to be analysed in subsequent chapters and provides general background necessary to understanding the glossing system used throughout this book. More detail on most of the topics summarized below can be found in Watkins 1984. We begin with some brief notes about the people whose language this is.

1.2.1 Historical sketch

When they first entered written historical records, the Kiowa were resident in the Black Hills of Montana. According to tribal memory, the original tribe had split and migrated in different directions owing to a dispute between two chiefs over the sharing of udders (Harrington 1928 records the account in Kiowa). The Kiowas constitute the southern half of the split. The other half is supposed to have travelled to the north. Mooney (1979[1898]: 154) writes that:

> Several stories are current in the tribe in support of this belief. One woman, now [in 1898] about 80 years of age, when a child was taken by her father with others on a visit to their old friends, the Crows, and says that while there they met a white trader from the north, who addressed them in the Kiowa tongue, which he said he learned from a tribe living farther north, which spoke the Kiowa language.

(We may add that similar stories continue to arise: when discussing the story of the udders with a Kiowa singer in his mid-thirties, Harbour was informed that, at a northern powwow, a member of another tribe claimed to have understood the words of a prayer or song that a Kiowa elder had recited.) Mooney tentatively concludes that such stories "at least offer a suggestion concerning

the direction in which the linguistic affinity of the Kiowa is to be sought" Mooney 1979[1898]: 154).

However, already by 1910, the attention of linguists was focused on the Southwest rather than on the North, and specifically on the similarities between Kiowa and the Tanoan languages (Harrington 1910). This relationship continued to be investigated (e.g., Harrington 1928, Trager 1951) until Hale (1962, 1967) definitively demonstrated that Kiowa and the Tanoan languages are indeed related.

By the time of Mooney's and Harrington's investigations, the Kiowas had become a Plains tribe, resident primarily in Oklahoma. The current Kiowa Tribal Complex is located in Carnegie, Oklahoma, and members of the tribe live mostly in Caddo, Kiowa and Comanche counties. The community's distribution over three counties is the result of deliberate US Government policy. By 1876, white exploitation of resources, as well as deliberately excessive hunting, had precipitated the collapse of the buffalo population, on which the Kiowas depended for many necessities: food to last through the winter, clothing, implements, and shelter (in the shape of hides for teepees). With the continuation of their traditional lifestyle thus rendered impossible, they at last agreed to settle on a joint Kiowa–Comanche–Apache reservation and to receive government rations.

The US government soon found it convenient to break its side of the agreement with these tribes: the reservation provided the tribes with sufficient coherence for the maintenance of autonomous identities, cultures and languages. Moreover, it placed out of reach of white settlers the valuable grasslands that comprised the reservation. So, Congress passed two acts (the General Allotment Act of 1887 and, more controversially, the Jerome Act of 1901), which, by 1907, had had the effect of transferring 80% of the reservation into white hands. Furthermore, ownership of the remaining 20% was so distributed that different tribes were substantially dispersed, not only amongst members of other tribes, but also amongst the non-native population.

The Kiowa language is spoken fluently now only by a few dozen elders; however even that number risks being an overestimation. Members of the next generation often have good comprehension of the language, but they rarely have so intimate a grasp of grammar, lexicon and stylistics. Amongst the younger generations, knowledge of the language rarely consists of more than some songs and individual words (though it should be noted than some younger singers do have extensive knowledge of song lyrics). The prognosis for the language is therefore not good. However, there are now recordings,

transcriptions and translations (many of which were inputs to this project; see especially chapter 5) which mean that future generations of Kiowas are likely to inherit a substantial record of their language in its cultural context, even if direct inheritance of the language becomes impossible.

1.2.2 Grammatical sketch

Basic word order

Kiowa is a rich agreement language with relatively free word order. A basic (informationally unmarked) order is nonetheless discernible:

(2) Particles ≫ Agent ≫ Indirect Object ≫ Direct Object ≫ Verb

(3) Hɔ́n Paithalíí P!ɔ́ɔ́thɔ́pdek!ii áádɔ ɔ́– thêm- ɋɋmɔɔ
NEG Vincent Daniel stick.I 3s:3s:3I–break-make.NEG
'Vincent didn't make Daniel break the stick' (Harbour 2007: 14)

(4) Hét [nɔ́ɔ́ gɔ ám] xégun thǫ́ǫ́se bédêi– ɋɋ
HORT 1 CONJ 2 dog bones 1IN.D:3s:3D–give.IMP
'Let's you and I give two bones to the dog'

Sentences like (3)–(4) are rare for two reasons. First, Kiowa permits pro-drop of any argument DP, as in (5)–(6) (Watkins 1990), making sentences with three overt arguments rare (two examples in our narrative corpus).

(5) Hɔ́n ɔ́– thêm- ɋɋmɔɔ
NEG 3s:3s:3I–break-make.NEG
'He didn't make him break it'

(6) Hét bédêi– ɋɋ
HORT 1IN.D:3s:3D–give.IMP
'Let's give them to it'

Second, DPs, as well as other constituents, are frequently dislocated to the left or right edge of the sentence.

(7) Hɔ́n máthɔn Ø– xą́ą́nɔ̂ɔ
NEG girl 3S–arrive.NEG
'The girl didn't arrive'

(8) Máthɔn hɔ́n Ø– xą́ą́nɔ̂ɔ
girl NEG 3S–arrive.NEG
'The girl didn't arrive'

(9) Hɔ́n Ø– xą́ą́nɔ̂ɔ máthɔn
NEG 3S–arrive.NEG girl
'The girl didn't arrive'

These dislocations correlate with information structure and discourse structure, leftward dislocation for topic and focus, rightward for certain kinds of old information. These are discussed at length in chapters 4–6 (and in Harbour, Watkins and Adger 2008).

Semantically, the particles in (2) express a variety of aspectual, modal and evidential meanings, as well as negation. Many obligatorily cooccur with inflection suffixes on the verb. These are discussed at length in chapters 3–4.

(10) **Béthɔɔ** ***hɔ́n*** ám em–dǫ́ǫ́-***mɔ̂ɔ***-**hel**
MIR NEG 2 2S– be- NEG- EVID
'I didn't realize it wasn't you' (Adger and Harbour 2007: 17)

(11) **Háyáttó** ***hɔ́n*** Ø– dę̨ị- hę́ị́-***mɔ̂ɔ***-**t!ɔɔ**
maybe NEG 3S–sleep-die-NEG- MOD
'Maybe he won't fall asleep' (Adger and Harbour 2007: 17)

(12) **Béthɔɔ** ***an*** ɔ́– bôu- honx!ou- ***yii***- t!ɔɔ- **dei**
MIR HAB :3S:3I–always-come late-IMPF-MOD-EVID
'I didn't realize he was going to keep on coming late'
(Adger and Harbour 2007: 17)

Nouns and agreement

Nominal morphology is sparse in Kiowa. There is no case marking either for DPs or pronouns, and the only marking for number is inverse marking (a property wholly unrelated to the nomenclaturally identical Algonquian phenomenon). For the purposes of the investigation below, and despite its fascinating behaviour, this marking is irrelevant. However, it must be briefly discussed as a preliminary to other aspects of the grammar detailed below.

In their simplest form, nouns are limited in the number of tokens they can refer to. For instance, **tógúl** means 'one or two young men', **áá** means 'two or more trees' and **k!ɔ̂n** means 'two tomatoes'. Naturally, however, speakers may at times need to refer to pluralities of young men, singularities of trees, or unpaired tomatoes. In such circumstances, where the inherent number of the noun and the number of tokens talked of mismatch, the noun is inverse marked. Curiously, one and the same suffix attaches to the nouns just given for the plural, the singular and the non-dual: **tógúúdɔ́** 'young men', **áádɔ** 'a tree' and **k!ɔ̂ǫ̨dɔ** 'a tomato' or 'more than two tomatoes'. (However, the form of inverse marking is subject to phonological variation; Watkins 1984, Harbour 2007.)

The inverse is integral to agreement in Kiowa. For non-inverse-marked nouns, agreement straightforwardly reflects number (and person). For instance,

in the following sentences, it is only by attending to the agreement that one can know the number of stones referred to:

(13) X!óú Ø– dɔ́ɔ́
stone 3S–be
'It's a stone'

(14) X!óú ç– dɔ́ɔ́
stone 3D–be
'They're [two] stones'

(15) X!óú gya–dɔ́ɔ́
stone 3P– be
'They're stones'

Inverse-marked nouns, by contrast, trigger a separate agreement type (glossed as I, mnemonic for 'inverse'), irrespective of whether they refer to singularities, dualities or pluralities:

(16) Áádɔ e– dɔ́ɔ́
stick.I 3I–be
'It's a stick'

(17) Nɔ́ɔ́ e– dɔ́ɔ́
1 1I–be
'It's us (him/her and me)'

(18) Tógúúdɔ́ e– dɔ́ɔ́
young man.I 3I–be
'They're young men'

It should be noted that there are other ways in which the correlation between number and agreement can be obscured. The first is that there is a fifth agreement type, A (animate), restricted to pluralities of higher animates, such as Kiowas, men, women, horses:

(19) Kɔ́ígú á– dɔ́ɔ́
Kiowa.I 3A–be
'They're Kiowas'

The second is that some nouns, especially those that form homogeneous (collective) plurals, use 'singular' agreement in the plural:

(20) Áá Ø– dɔ́ɔ́
trees 3S–be
'They're trees'

And the third is that other nouns, especially those that are collections of heterogeneous parts, use 'plural' agreement in the singular and dual:

(21) Khɔ́ɔ́dé gya–dɔ́ɔ́
trousers 3P– be
'It's one/two/several pairs of trousers'

The semantics, syntax and morphology of this system are analysed at length in Harbour (2007). For present purposes, the best we can do is to warn the reader that apparent mismatch between prefix glosses and translations are the systematic results of the system just outlined.

Nominal syntax

As 'stick', 'dog' and 'bone' in (3)–(4) make apparent, nouns in Kiowa may appear bare. In fact, there are no definite or indefinite articles. However, the language possesses other determiners (**téí** 'all', **té-** 'every, each', **étté** 'many, much', **háote** 'several, a few', **páá** 'some/one', **kɔ̂l** 'some'), demonstratives (**ɋ́ɋ́de/gɔ**, **ɋ́ɋ́hɔde/gɔ** 'this, these', **óíde/gɔ**, **ɔ́íhɔde/gɔ** 'that, those'), and numerals (**páágɔ** 'one', **yíí** 'two', . . . , **kɔ́ɔ́dokhɧ́ mɔ́sɔ́ɔ́khɧ́ ɔ́nt!ɔthą́ą** 'one hundred and sixty-five', . . .). Except for **té-** 'each, every', which forms a compound with its noun, all these may occur pre- or postnominally, or bare:

(22) a. **étté tóú** ∼ **tóú étté** 'many houses'
b. **étté** 'many [houses]'

(23) a. **ɋ́ɋ́de áá** ∼ **áá ɋ́ɋ́de** 'these trees'
b. **ɋ́ɋ́de** 'these [trees]'

(24) a. **yíí álɔɔ** ∼ **álɔɔ yíí** 'two apples'
b. **yíí** 'two [apples]'

Of these, only the demonstratives bear inverse marking. They do so if, and only if, their corresponding noun does (or, would, in the case of bare demonstratives):

(25) a. ɋ́ɋ́gɔ (áádɔ)
this/these.I trees.I
'this (tree)'

b. ɋ́ɋ́de (áá)
this/these trees
'these (trees)'

c. *ɛ́ɻ́gɔ áá
this/these.I trees
'these trees, this tree'

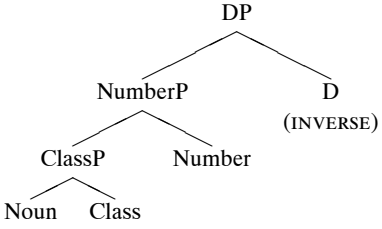
d. *ɛ́ɻ́de áádɔ
this/these trees.I
'these trees, this tree'

e. *ɛ́ɻ́gɔ
this/these.I
'this [referring to a tree]'

f. *ɛ́ɻ́de
this/these
'these [referring to some trees]'

Harbour (2007) argues that noun phrases in Kiowa have the structure in (26), where D is the locus of inverse marking:

(26)



We return to the structural position of quantifiers, demonstratives and numerals in chapter 6.

In most cases, D is only overt when inverse marked. However, for some nouns (including indefinite quantifiers), and for relative clauses, D is overt in all cases. (The example below is constructed so that inverse marking on the noun and relative clause match phonologically; this is not generally the case.)

(27) hɔ́n- **dé** gya–mɔkɸ́ɻ́me-**de**
something-D 3P– useful- D
'something that is useful [e.g., an action]'

(28) hɔ́n- **gɔ́** e– mɔkɸ́ɻ́me-**gɔ**
something-D.I 3I–useful- D.I
'something that is useful [e.g., an implement]'

In addition to the postnominal relative clauses above, Kiowa possesses relative clauses without an overt head.

(29) Hegɔ́ ɔ́íhɔɔ [ɔ́gɔ gya–khoháí-dɔɔ]-de bat– thɔ́ɔ́tɔ́ɔ́
then there REL 3P– exactly-be- D 2S:3P–find.MOD
'Then that way you will find their exact character' (Watkins 1984: 232)

The left boundary of the relative clauses can be identified, as in (29), by the (optional) presence of the subordinating particle **ɔ́(ɔ́)gɔ** (possibly related to the deictic **ɔ́ɔ́kɔ** 'there') and, as in (30), the anaphoric particle **ám**. This **ɔ́(ɔ́)gɔ** may also occur in postnominal relative clauses:

(30) Thalíí [ɔ́gɔ ám xégun á– p!ɔ̂i] -de ɛ́– tǫ̨ǫ̨tɔɔ
boy REL ANAPH dog :3S:3S–lose.PF-D 3D:3S–talk to.AUX
'They are talking to the boy who lost his dog' (Watkins 1984: 233)

The right edge in both (29) and (30) can be identified by the near-obligatory **-de**/**-gɔ** suffixes.

These elements permit one to recognize that Kiowa also has internally headed relative clauses. The head in such cases may be pre- or postverbal, though the former is more common:

(31) Maayį́ bé– k!ííyá-dɔɔ [ɔ́gɔ ɔ́lkhɔ́í-t!ɔ́khɔ̂i e– dɔ́ɔ́]-gɔ
woman :3I:3S–with- be REL crazy- whiteman.I 3I–be- D.I
'A woman was with the crazy whitemen (that there were)'

(32) Ø– Tǫ́ǫ́nêi, [Ø– khɔ̂ǫ́mei k!yą́ą́hį̨́į̨]-de Ø– hį̨́įhel
3S–say.IMPF 3S:3S–name.IMPF.EVID man -D 3S–die.EVID
'He said, naming the man, that he had died'
(Watkins 1984: 247, revised translation)

In sum, relative clauses are constructed by merging D to a clause, where the head of the relative clause may be internal or external. D and the head agree for whether they are inverse marked. We assume that the internally headed relative clause contains a trace (though this is not crucial to anything below).

(33)