1 Introduction

1.1 Preliminaries

The term VOICE can refer to several different things in the study of human language. In literary-linguistic studies, it is used to describe an author's style – the formal qualities that make his/her writing unique. In phonetics, the term refers to the articulatory process in which the vocal cords vibrate. In morphosyntax, where it is sometimes specified as GRAMMATICAL VOICE, it denotes a particular relationship between the meaning and the form of clauses.

For instance, the following English sentences are usually thought of as conveying propositions with the same truth values, but they are used in different conditions or contexts of use on the one hand and have a different formal make-up on the other:

(1) English (Germanic, world language)[1]
   a. *The paparazzi saw Zelda at the party.*
   b. *Zelda was seen by the paparazzi at the party.*

The first sentence – an example of the active voice – is more naturally used when talking about paparazzi and what they did, whereas the second, passive-voice, sentence appears to be more commonly used when talking or writing about Zelda (especially in formal registers of the language). Several formal features distinguish both sentences, namely constituent order, verb morphology, and the syntactic status of the main participants (*the paparazzi* and *Zelda*), in addition to intonational patterns. The study of grammatical voice deals precisely with such conditions or contexts of use and with such formal differences, not only in English active–passive pairs but also in similar or related oppositions found in virtually every natural language.

Grammatical voice is one of the oldest topics in descriptive linguistics. In his *Aṣṭādhyāyī* 'Eight Chapters', Pāṇini (c. sixth–fourth century BCE) describes the inflectional paradigms of Sanskrit verbs, which show what we nowadays call a voice opposition between *parasmaipada* 'word for another' and *ātmanepada* 'word for oneself' (e.g., *bharati* 's/he bears' vs. *bharate* 's/he is borne').

[1] Most examples in this study come from published sources, which are acknowledged in the text or the indented examples. Where no source is given, the examples are based on the authors' personal knowledge.

The treatise on Greek grammar called *Téchnē Grammatikḗ* 'Art of Grammar' – customarily attributed to Dionysius Thrax (170–90 BCE) – uses the term *diáthesis* 'state, condition, disposition' to describe the three-way opposition found with Greek verbs between *enérgeia* 'activity, vigor', *páthos* 'suffering', and *mesótēs* 'intermediate, middle' (e.g., *etúptēsa* 'I struck' vs. *etúphthēn* 'I was struck' vs. *etuptēsámēn* 'I struck for myself').[2] Later grammarians use the Latin terms *verborum genus* / *genus verbi* 'genus/gender of verb(s)' and *vox* 'voice' for the analogous grammatical category of Latin. The latter language has a two-way opposition between *vox activa* 'active voice' and *vox passiva* 'passive voice' (e.g., *ferō* 'I bear' vs. *feror* 'I am borne'), which are the origins of the present-day English terms used to refer to the verb forms in (1) above, as well as of similar terms used in other European languages.

The present study of grammatical voice, written in the functional-typological tradition, has two objectives. First, it is intended to provide an overview of the manifestations of the category grammatical voice in the grammars of the world's languages. Second, it seeks to lend clarity to the current understanding of the category by proposing a model of voice that is not only broad enough to cover numerous grammatical facts but also strict enough to draw meaningful lines between voice phenomena, voice-like phenomena, and categories that are related to voice but best seen as different from it. In particular, we include in our treatment selected phenomena that some earlier approaches choose to exclude from their voice models (e.g., applicatives), and we exclude some phenomena that at least one recent approach subsumes under the term voice (e.g., formally unmarked diathetical alternations). Another hallmark of the present study is that we present voice phenomena according to semantic criteria first – alteration vs. maintenance of semantic argument structure and increase vs. decrease of number of arguments – followed by a presentation of morphological and syntactic features of the constructions under scrutiny.

We hope that these choices contribute to balancing the literature on grammatical voice, which for many years tended to focus on interesting syntactic aspects of passive(-like) constructions but comparatively neglected other aspects of many different constructions in the world's languages that were equally important. After three decades of descriptive work of unprecedented depth, detail, and breadth in Western linguistics, as well as four decades of stimulating theoretical and typological studies addressing issues related to voice, we have found a daunting but exhilarating amount of material at our disposal. We have tried to present the readers of this book with a study intended

[2] The earliest use of the term *diáthesis* to mean 'grammatical voice' seems to be found in Aristotle's *Categories*, which predates the *Art of Grammar* by approximately two centuries. Apollonius Dyscolus (second century CE) employs the term more broadly in *Perì Syntáxeōs* 'On Syntax': he distinguishes between three kinds of diatheses, namely *sōmatikḗ* 'relative to the body' (i.e., voice), *psychikḗ* 'relative to the soul' (i.e., mood), and *chronikḗ* 'relative to time' (i.e., tense and aspect).

to deepen their understanding and broaden their horizons, rather than merely classify grammatical facts.

1.2 Terminological and Analytical Prerequisites

Several related concepts are important for the study of grammatical voice, namely valency, transitivity, and diathesis. VALENCY is the number of arguments a predicate takes: semantically, syntactically, or morphologically. The first refers to the number of arguments in semantic structure; predicates can be semantically avalent (e.g., English *rain*), monovalent (e.g., *weep*), bivalent (e.g., *kill*), or trivalent (e.g., *give*) (Tesnière 1959). The other two kinds of valency refer to the number of arguments instantiated in the syntactic structure of the clause and the morphological structure of a predicate, respectively. For instance, in English *she gives the beggar her coat*, the semantically trivalent verb *give* appears in a clause with three arguments, and the verb marks one argument, its subject.

TRANSITIVITY is a multi-parameter notion that comprises different facets of clauses, including semantic and syntactic valency, but also agentivity, affectedness, and referentiality of different arguments (see, e.g., Hopper & Thompson 1980 and Næss 2007). Clauses can thus occupy an intermediate zone between intransitive and transitive poles. For example, inanimate, indefinite, or nonspecific patients may appear as unmarked objects vis-à-vis more "transitive" constructions with animate and highly individuated patients that are expressed as case- or adposition-marked objects – a well-known and much-studied phenomenon called differential object marking (see the literature from Bossong 1985 to Iemmolo 2011). Similarly, events instigated by non-prototypical agents (which may, e.g., act involuntarily or be inanimate) can be expressed by constructions encoding lower transitivity (Fauconnier 2012). Descriptive studies occasionally deal with some specific phenomena that belong to this intermediate zone using the label "detransitive constructions." These may comprise different instances of voice, but also different instances of differential argument marking.

Many studies do not distinguish between valency and transitivity as strictly. It is common to find the following labels referring to predicate valency values of 0, 1, 2, and 3, respectively: atransitive, intransitive, (mono-)transitive, and ditransitive. In recent years, the term "ambitransitive" has also been used in typological studies to refer to labile predicates like English *eat*, which have a syntactic valency value of 1 (e.g., *he ate too late last night*) or 2 (e.g., *she ate her supper*). In this book, transitivity is understood as in the studies mentioned in the preceding paragraph. Instead of using the potentially ambiguous terms "intransitive verb" and "transitive verb," however, we will specify whether predicates are semantically or syntactically (or morphologically) monovalent or bivalent, and we will characterize clauses that have subjects only as one-argument, those that

have a subject and an object as two-argument, and those with a subject and two objects as three-argument clauses. (The two objects of three-argument clauses are seldom identical: they are usually either direct and indirect or primary and secondary objects. See Dryer 1986.)

DIATHESIS refers to any specific mapping of semantic roles (SRs) onto grammatical roles (GRs). The former include notions like agent, patient, theme, recipient, experiencer, stimulus, source, goal, etc., which are usually conceived of as low-level abstractions over predicate classes (Bickel 2011). We work with the following generalized roles here: A and P for the agent-like and patient-like argument of bivalent predicates, respectively; A, T, and G for the agent-like, the theme-like, and the goal-like argument of trivalent predicates, respectively;[3] and S for the single argument of monovalent predicates.[4] (We specify the S further as S_A and S_P when necessary. The distinctions made in functional studies on the one hand between agentive 'dance' and patientive 'break' predicates and on the other between active 'come' and stative 'be cold' predicates basically corresponds to what the literature in the Chomskyan tradition labels the unergative-unaccusative distinction; see, e.g., Levin & Rappaport Hovav 1994: 59f.) Grammatical roles include notions like subject, object, other complements, and adjunct. At the center of attention in this book are DIATHETICAL OPERATIONS, that is, strategies used by natural languages to alter diathetical structure. The mechanisms employed in such operations relate to semantic argument structure, such as argument INSTALLMENT or REMOVAL; syntactic structure, such as argument PROMOTION or DEMOTION (and the latter's extreme case, viz., SUPPRESSION); or both.

GRAMMATICAL VOICE is defined here as a grammatical category whose values correspond to particular diatheses marked on the form of predicates. Diathesis refers to the number of semantic arguments involved in a state of affairs, to how they are involved in it, and to how they are assigned to GRs of varying salience and flexibility. Voice refers to the way a specific diathesis is formally marked on functional or lexical verbs in the predicate complex. For instance, the English examples in (1) above show a difference in verb morphology: while the active verb appears in a simple, unmarked, form (*saw*), the passive verb form is especially marked as an auxiliary-cum-participle construction (*was seen*). Thus, the English passive diathesis is expressed by a passive voice. By contrast, the examples in (2) from Palu'e show that the only formal difference between the active and passive diatheses may concern

[3] We follow common practice in not distinguishing between the agent-like argument of bivalent predicates and the agent-like argument of trivalent predicates. Unlike split intransitivity, which is hardly a marginal phenomenon, languages that distinguish between agent-like arguments of higher-valency predicates in their grammar appear to be extremely rare (Bickel 2011).

[4] The symbols S, A, P, etc. are widely used in functional-typological studies, but different authors understand them differently (Haspelmath 2011). Unlike Dixon (1994) and Comrie (1981), who employ them as syntactic notions orbiting semantic cores, we use them as generalized semantic roles (like in Bickel 2011).

constituent order. In such a language, the diathetical opposition is not expressed by a voice opposition: there is simply no voice, due to the lack of any kind of (argument-related) verbal morphology.

(2) Palu'e (Austronesian, Indonesia; Donohue 2005: 60)

a.	*Ia*	*cube*	*vavi*	*va'a*.
	3SG	shoot	pig	DEM
	'He shot the pig.' (active diathesis)			
b.	*Vavi*	*va'a*	*ia*	*cube*.
	pig	DEM	3SG	shoot
	'That pig was shot by him.' (passive diathesis)			

Among the several hallmarks of the definition of voice employed in this book, the one regarding morphological marking deserves special attention, for two reasons. First, natural languages frequently have several alternative grammatical structures that can be used to portray the same, or nearly the same, state of affairs. More often than not, however, only some of these structures have an overt marking that identifies them as particular voices. There is usually one construction that is formally unmarked vis-à-vis the others, and linguistic studies have traditionally not only chosen such unmarked structures as the vantage point from which the other structures are characterized, but have also labeled them as voice despite their lack of formal marking, like the English active voice in (1) above. Second, many languages do not have a formally unmarked construction; all related structures are equally marked – although they may differ as to the exact means of marking. Some languages have contrasting sets of argument markers, like active *-mus* vs. mediopassive *-mur* for the 1PL in Latin *monē-mus* 'we admonish' vs. *monē-mur* 'we are admonished'. Others show active and passive morphemes, like *men-* and *di-* in Standard Indonesian:

(3) Standard Indonesian (Austronesian, Indonesia; Sneddon 1996: 247–248)

a.	*Dia*	*men-jemput*	*saya*.	
	3SG	ACT-meet	1SG	
	'He met me.' (active voice)			
b.	*Saya*	*di-jemput*	*oleh*	*dia.*
	1SG	PASS-meet	by	3SG
	'I was met by him.' (passive voice)			

Even though the requirement that only coded diatheses be labeled voices may strike some readers as unnecessarily Eurocentric, such predicate-marking patterns are not only found outside Europe but are also quite widespread, both areally and genealogically. The obvious alternative would consist in calling both coded and uncoded diatheses "voices" (thereby dispensing with the distinction between diathesis and voice), but we have followed current mainstream studies here in taking a conservative tack.

Another hallmark of the present study is that we deliberately keep the modeling of both semantic and syntactic structure rather abstract and vague in order to facilitate its cross-linguistic and (almost) frame-neutral application. On the

semantic side, even though there are a number of proposals as to how to best handle the semantic relations between predicates and their arguments, there is still no universally accepted General Theory of them (Kittilä & Zúñiga 2014). Some authors regard SRs as impressionistic labels and model the causal chain in formal terms resorting to other notions (e.g., Van Valin & LaPolla 1997, Croft 2012). Others regard SRs as definable based on semantic features (e.g., Rozwadowska 1989, Næss 2007). Most authors nowadays simply work with SRs acknowledging the relevance of both causal-chain considerations and specific features, but this has not yet resulted in a principled and comprehensive theory encompassing all that we know about SRs. In the present book, we assume that semantic arguments are identified by the authors of descriptive studies (i) on a language-specific basis and (ii) based on formal (i.e., morphosyntactic, albeit perhaps indirect) diagnostics. The former means, for instance, that rough translational equivalents of English *shout*, *beat*, or *give* in other languages do not necessarily have the same argument structures (Kittilä 2006, 2007). The latter means that a reasonable effort has been undertaken to make claims regarding the semantic characterization of the relevant predicates falsifiable.

On the syntactic side, different theories work with slightly different inventories of GRs, and even theories that have superficially equivalent inventories define the notions differently (e.g., via structural configuration, as primitives of different kinds, or as sets of arguments selected by specific constructions for particular syntactic purposes). In addition, GRs may be seen as universal (i.e., the same for all human languages) or not. We work here with an array of non-primitive and language-specific GRs that makes use of the received terminology (subject, direct and indirect objects, primary and secondary objects, complements, adjuncts). We agree that GRs are best seen as construction-specific but have chosen to assume at least some uniformity or clustering in how the diagnostic properties of GRs pattern language-internally, solely in order to use the received terms in an uncomplicated way. Consequently, even though our approach to syntactic issues is not theory-neutral, it is easily translatable into the approaches employed in formal frameworks. We do not claim here that GRs defined based on clustering of diagnostic morphosyntactic properties are the best or only option, or that the resulting constructs are universal. We merely claim that cross-linguistic comparison of voice phenomena based on such unsophisticated SRs and GRs is still a feasible and a worthwhile endeavor.

It is important to mention that we do not regard voice, or any other structural category of grammar, as the expression of a pre-established category (Haspelmath 2007b). This has three important analytical consequences. First, we arrive at the voice prototypes mentioned above by distilling shared traits from disparate language-specific constructions. These particular constructions may instantiate the prototypes to varying degrees, deviating from them, as they often do, in ways that are complex, subtle, or both. Second, we do not believe that a specific grammatical phenomenon must express *either* voice *or* another grammatical category; a particular pattern or marker might well express *both*

voice *and* another category (e.g., aspect) in any given language. Pure and hybrid voices are interesting phenomena in their own right, but our definition is independent of this dimension. Lastly, voice may develop in a given language from either another, already existing, grammatical category or a lexical element. Nevertheless, we do not regard only some final point in the development path as voice, thereby relegating all previous stages to pre-voice, incomplete voice, or the like. As they grammaticalize further, particular constructions typically become more general and more productive, and we simply see the prototype as involving the highest possible level of applicability to all suitable clauses for the specific value at hand. This means, for instance, that we see both causatives and anticausatives as voices, even though the latter are consistently less widely applicable than the former (which is partly due to how they alter diathetical structure, as we discuss in Chapter 2).

Finally, we use some other expressions in this book that are not exclusively related to the study of voice. *Flagging* is an umbrella term that covers case morphology and adpositional marking, and *indexing* denotes the marking of features related to arguments or adjuncts by means of bound elements. We say that a particular phenomenon is *typical* if it occurs frequently, either language-specifically or cross-linguistically. By contrast, we say that a particular phenomenon is *prototypical* if it conforms to a prototype, which we have defined striking a balance between capturing cross-linguistic regularities and departing from mainstream terminology as little as possible – at least in the many cases where there is reasonable consensus on how the term in question is used. We have chosen not to employ the word *canonical* here, in order to avoid confusion with the term as employed either in general, to refer to (orthodox) rules, or in particular, in the Canonical Typology literature (e.g., in Brown et al. 2013). Lastly, we follow a practice that gained a foothold in functional-typological studies written in English in the late twentieth century in using grammatical labels with an initial capital to refer to language-particular descriptive categories (e.g., "the Tagalog Patient Voice") and ordinary lower-case spelling to refer to comparative concepts (e.g., "the patient voice"), especially when the relation between the two categories is at the center of attention.

1.3 The Study of Grammatical Voice

1.3.1 Previous Studies

Studies of grammatical voice can be classified into two groups according to whether the notion of voice is defined structurally or functionally. Both the functional-typological mainstream and the generative literature belong to the former group. Neither the terminology nor the theoretical apparatus of studies belonging to the latter group have been widely adopted – with one notable exception we mention below.

Structural studies define voices based on the assignment of SRs to GRs. The original conceptualization of the category as applied in antiquity to the descriptions of Classical Sanskrit, Classical Greek, and Classical Latin focuses on the subject. Recent studies also cover some kinds of objects, albeit seldom in a comprehensive and systematic fashion. This corresponds to the view many functional-typologically minded scholars work with nowadays (e.g., Haspelmath & Müller-Bardey 2004, Mel'čuk 2006, Dryer 2007, Kulikov 2011a, and Siewierska 2013), which is the view we espouse in the present book.

Functional studies concentrate on the fact that specific predicate forms and the clauses they head denote particular meanings and are used in particular ways in discourse. The most prominent example of this tradition is a series of studies published in the 1980s and 1990s by Ann Cooreman, Talmy Givón, and several other scholars; we outline the essential features presented in Givón's (2001) synthesis here. This author works with what he calls functional deviations from the "prototype transitive event," distinguishing between primarily semantic detransitive voices on the one hand and primarily pragmatic detransitive voices on the other. The former include reflexives, reciprocals, middles, and adjectival-resultatives. Such operations are said to "tamper with transitivity" in terms of three semantic parameters, namely the decreased agentivity of the agent or subject, the decreased affectedness of the patient or object, and the decreased telicity or perfectivity of the predicate. These operations are defined via coreference conditions (Givón's reflexives and reciprocals) or by a focus on the change undergone by the patient (his middles). Givón's pragmatic voices are the passive, the antipassive, and the inverse; such operations are said to "render the same semantically-transitive event from different pragmatic *perspectives*" (2001: 93, emphasis original). These operations are defined based on relative topicality values of the A and P: the values are said to correlate clearly but variably with specific morphosyntactic structures. In mainstream terminology, these values roughly correspond to strong A-backgrounding and strong P-backgrounding, as well as weak P-backgrounding and weak A-backgrounding, respectively.[5]

Klaiman (1991) stands apart in that she postulates different kinds of voices, not only different values for the same kind of voice. Two of her four voice types are structurally defined: her "basic voice" essentially corresponds to the original notion developed for the classical languages (albeit with some additions and changes in emphasis), and her "derived voice" covers passives and antipassives (and explicitly excludes causatives and applicatives). The other two types, subsumed under the cover term "pragmatic voice," are functionally defined – in fact, they can be seen partly as functional counterparts of her two structural voice types. Her "informational-salience voice" is based on the semantic role of

[5] Givón sees the topic as a pragmatic function related to the cognitive dimension, "having to do with the focus of attention on one or two important events-or-state participants during the processing of multi-participant clauses" (2001: I: 198).

the topic rather than the subject,[6] and her "ontological-salience voice" corresponds to mappings between semantic roles and referents (which are categorized according to person, animacy, and/or topicality or topic-worthiness) rather than grammatical relations.

Klaiman's "pragmatic voice" should not be confused with Givón's "pragmatic de-transitive voices." First, the latter author distinguishes four predetermined values of relative topicality for the arguments of semantically bivalent clauses in general, whereas Klaiman leaves this question open. Second, Klaiman's ontological-salience subtype conflates several dimensions within pragmatics (one related to topicality and the other to the speech act) and semantics (animacy). Most importantly, Klaiman sees her pragmatic voice, which she claims is not syntactically remapping, as structurally opposed to her derived voice, which is remapping by definition. Unlike Givón, for whom inverse and passive are two different values on a scale, Klaiman sees both the inverse in ontological-salience systems and the patient voice in informational-salience systems as structurally active, and therefore as qualitatively, not quantitatively, different from the passive.

Unlike Givón's and Klaiman's voice models, which are not widely employed, Shibatani's (2006) almost exclusively semantic definition of voice has met with some acceptance from several scholars currently working on Austronesian. Since this language family plays an important role in the conceptualization of grammatical voice, it is in order to take a closer look at how it is handled in this part of the linguistic literature. We find the following wording by Arka and Wouk (2014: 314) particularly clear:

> [Voice is] a language-specific system of grammatical opposition pertaining to stages of event realization and the conceptual-pragmatic relevance of the participants of the event (cf. Shibatani 2006). The opposition may be coded by at least one of the following strategies: different verbal marking [. . .], different argument marking [. . .], and different linear order [. . .]. Voice alternation often, but not necessarily always, involves a change of grammatical relations. The active-middle opposition in Sanskrit given below, for example, involves no change in linking of the [agent and patient] arguments.

"Events" are actions, processes, or states, and the "stages of realization" include "linguistically important phases of initiation, development, and extension and/or termination" (Arka & Wouk 2014: 315). The relevant parameters here are – and Arka and Wouk follow Shibatani (2006) rather closely – control, volitionality, and instigation of the agent, affectedness and individuation of the patient, and the existence of an additional affected participant.

According to Shibatani (2006), what defines the different voices is the number and kind of semantic arguments, as well as the kind of states of affairs they are involved in, rather than morphosyntactic features. Although this author labels his

[6] Klaiman defines her topic loosely but explicitly by referring to referential continuity and activation/known status in unfolding discourse (1991: 252).

voices using the traditional terms, namely passive, antipassive, causative, etc., the latter refer to related but crucially different notions when compared to mainstream functional-typological studies. Shibatani says that "voice oppositions are typically based on conceptual – as opposed to pragmatic – meanings, may not alter argument alignment patterns, may not change verbal valency, and may not even trigger verbal marking" (2006: 217). Consequently, for instance, he sees passives as constructions that express "actions that originate with an agent extremely low in discourse relevance, or at least lower relative to the patient" (2006: 248), and as merely orbiting a passive prototype with specific morpho-syntactic features (Shibatani 1985), rather than limited to it.

1.3.2 Voice as Understood and Presented in This Book

Voice as understood in the present study is based on semantics and syntax. It defines diatheses as mappings of the roles of the semantic arguments of predicates onto grammatical relations in clauses, and voices as diatheses formally marked on predicates. This view is similar in spirit to Comrie's (1985) structured survey of relatively few but nonetheless fairly varied valency-changing operations, and it is particularly close to the influential work by Soviet and Russian scholars since Mel'čuk and Xolodovič's (1970) seminal study. The reader is referred to Mel'čuk's (1993, 2006: Ch. 3) argument in favor of his framework and his terminology, and to Kulikov (2011a) for a recent synthesis and application.

The present book consists of this introductory chapter, seven chapters devoted to different manifestations of phenomena related to grammatical voice focusing on main clauses and only occasionally addressing dependent clauses or nominalizations, and a final chapter with concluding summaries and remarks.

Chapter 2 surveys ARGUMENT-STRUCTURE MODIFYING operations that alter the number of semantic arguments by either installing new ones in the clause or removing original ones from it. We cover causatives, applicatives, anticausatives, and antiapplicatives, all of which normally differ syntactically from the base constructions. Many of these voices have been treated as something different from voice by earlier studies – with the notable exception of Croft (1994), which integrates them into a causal-chain analysis in a natural way, and Kulikov (2011a), which labels them "voices *sensu latiore*."

Chapter 3 surveys ARGUMENT-STRUCTURE PRESERVING operations that do not alter the number of semantic arguments but modify the kinds, and potentially the numbers, of their assigned core and/or adjunct arguments. (Subjects and objects are core arguments; other arguments like oblique objects, as well as adjuncts, do not belong to the clause core.) We cover passives, antipassives, and related constructions. Most of these operations have been addressed by earlier studies of voice (Klaiman's 1991 "derived voice," Kroeger's 2005 "meaning-preserving alternations," Haspelmath and Müller-Bardey's 2004 and Mel'čuk's 2006 "voice," and Kulikov's 2011a "voices *sensu stricto*").

Chapter 4 surveys instances of argument-structure preserving and argument-structure modifying operations that have been explored by former studies under labels as diverse as "Philippine-type voices," "symmetrical voice oppositions," and "inverse voice." We follow earlier studies in centering the discussion on the semantic and pragmatic factors that inform voice alternations in languages both from the Austronesian family and from indigenous South and North America. Unlike several previous studies (e.g., Klaiman 1991), however, we do not see either Philippine-type or American-type voices as instantiating fundamentally different kinds of voices. We also emphasize the heterogeneity of such language groups, particularly from the perspective of grammatical voice.

Chapter 5 surveys what we do see, not entirely unlike Klaiman (1991), as a qualitatively different kind of voice: a double, rather than single, assignment of semantic roles to grammatical relations (we label this DUPLEX VOICE), focusing on "affected subjects." We cover reflexives, reciprocals, and middles, which have received a disparate treatment in the previous literature, and hope that our view of these phenomena proves useful.

Chapter 6 surveys what we call VOICE-LIKE PHENOMENA or COVERT DIATHESES. These diathetical operations are not overtly coded on the predicate complex and show both syntactic and functional parallels to their voice counterparts, but they signal quite a different make-up of both the grammar and the lexicon of the languages that make ample use of such uncoded alternations.

Chapter 7 addresses what we call VOICE-RELATED PHENOMENA, which consist in operations that show neither morphological nor syntactic signs of diathetical change but are nonetheless conceptually, and occasionally also morphosyntactically, connected to diathetical operations. We focus on selected constructions that merely denote reduced or increased transitivity when compared to other constructions with which they may alternate.

Chapter 8 addresses the diachrony of voice. We first discuss the sources for different voice categories and then examine voice syncretisms in some detail.