

## The cognitive dimension of clausal organization in Udi

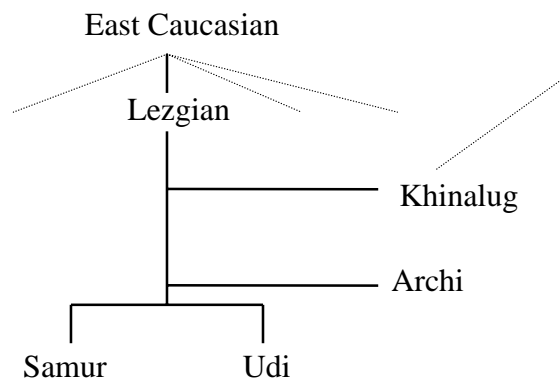
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### 1. Introduction

The data that underly the present talk represent a short extract from a Udi tale that I once recorded in Baku. Udi is generally classified as an East Caucasian language belonging to the Lezgian language group. It does not have immediate relatives but stands in a somewhat distant relationship to the co-called Samur branch of Lezgian, cf. (1):

(1)



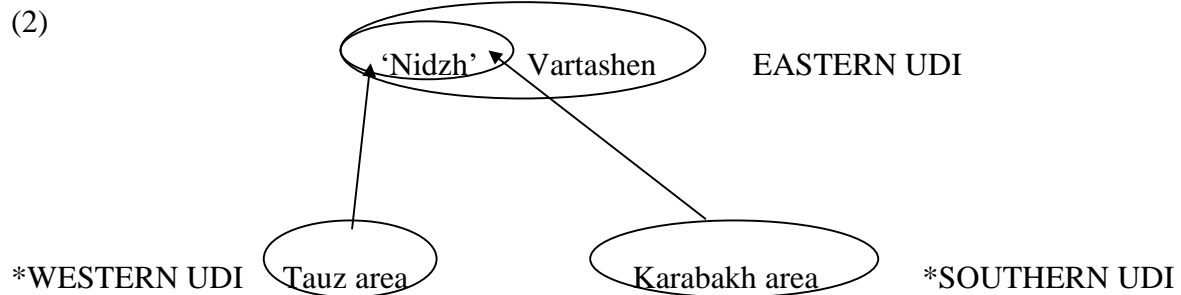
Till 1989, Udi – spoken by about 3.000 people – survived in the two villages of Vartashen and Nidzh, as well as in the Eastern Georgian village of Oktomberi (formally Zinobiani), a dependency founded by Vartashen immigrants in 1922. After the expulsion of Udi people from Vartashen – now *Oguz* – in 1990, Nidzh has become the only village in which a relatively compact Udi speaking community can be found. About 30% of the Vartashen refugees now dwell in Georgia or Armenia, about thousand Udi have fled into the Russian Federation, and a group of 360 Udi speakers have moved to Kazakhstan.<sup>1</sup>

Nidzh and Vartashen represent the two basic dialectal varieties of Udi.<sup>2</sup> In general, Vartashen has retained more archaic features, but it should be noted that the dialectal layers in Nidzh are more complex than those in Vartashen: In Nidzh, we have to deal with three varieties (Lower Nidzh, Middle Nidzh, and Upper Nidzh): Upper Nidzh is closer to Vartashen, whereas the lower varieties probably represent the reflexes of once distinct dialects of Udi spoken by immigrants from Northern Karabakh and the Tauz area. Hence, Nidzh is a

<sup>1</sup> Bežanov 1892 gives a first account of the ethnographics of Vartashen; Meliksetbekov 1942 describes some aspects of the history of the Udi community, also see Volkova 1994 for a brief characterization of the Udi cultural habitus.

<sup>2</sup> The Vartashen dialect together with its variety spoken in Oktomberi normally represent the descriptive standard for the Udi grammar (see Schiefner 1863, Dirr 1904, Bouda 1939, žeiranišvili 1971, Pancviže 1974, Schulze 1982, Schulze(-Fürhoff) 1994, Harris (in preparation b)). These treatments refer to the salient features of the Nidzh dialect to a different degree. Gukasjan 1964 is specifically devoted to the Nidzh dialect (also cf. Gukasjan 1965 for a brief overview).

mixture of Udi *in situ* (Eastern Udi > Upper Nidzh, with closer affinities to Vartashen) and some ‘Southern’ and ‘Western’ Udi, cf. (2):



Compared to other East Caucasian languages, Udi has experienced a relative early documentation. If we accept that at least some of the inscriptions that are normally related to the kingdom of Aghwan are written in some version of Early Udi, then the tradition of Udi started in 400 AD.<sup>3</sup> To these sources we can perhaps now add two palimpsests found by Zaza Aleksidze in the Sinai monastery in 1996 and written in the Aghwan script.<sup>4</sup> The tradition to relate Udi to one of the languages of Aghwan locally survived till the 19<sup>th</sup> century.

It should be noted that Udi represents both a communicative tradition and a linguistic knowledge system that has competed with other local traditions since long. Multilingualism is a standard feature in communication just as in many other East Caucasian speech communities. (3) lists those language systems that can be assumed to have participated in the multilingual communicative ‘cluster’ characteristic for the Udi society since Ancient Times:

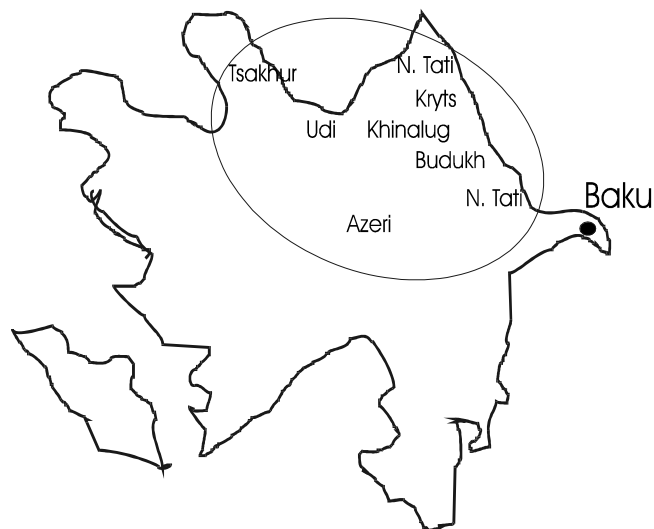
(3)	1000 BC ←	Early Iranian
	500 BC - 300 AD	Median, Iranian languages of <i>Media Atropatene</i> (Azerbaijan)
	300 AD - 900 AD	Old Armenian
	Since 900 AD	Local varieties of Middle/ New Armenian [Arabic] Oghuz Turkic -> Azeri Northwest Iranian varieties Southwest Iranian varieties (Persian, Northern Tati)
	Since 1850	Russian
	Since 1922	Georgian (in Oktomberi)

<sup>3</sup> See Schulze 1982:277-293 on the question whether the Aghwan inscriptions represent some kind of ‘Early Udi’. The matter has not been finally settled yet. We are still in need of a comprehensive report on all proposals concerning the linguistic interpretation of the Aghwan documents (starting with Karamiantz 1886).

<sup>4</sup> Cf. Aleksidzé & Mahé 1997. Both N Sin 13 and N Sin 55 „[représentent] la collection alphabétique des *Apophthegmata Patrum* copiés aux X<sup>e</sup> siècle en pleine page (...). N Sin 55 est beaucoup plus endommagé que N Sin 13, si bien que pour le texte albanien sous-jacent au géorgien, on n’a généralement plus qu’une colonne en N Sin 55, alors qu’on en conserve deux en N Sin 13“ (Aleksidzé&Mahé 1997:520).

The text that underlies the present analysis tells an anecdote widely known in Northern Azerbaijan. The hero is a sparrow which arrives at the profession of a singer through multiple exchange deals. I have recorded versions of this story in Udi, Khinalug, Kryts, Northern Tati, and Azeri. Additionally, informants told me that it is also known in the village of Budukh as well as in some parts of the southern Tsakhur area, cf.

(4)



The speaker's dialect is that of Upper Nidzh which – as had been said – represents a transitory variant. Both morphology and lexicon is not fully stabilized but allows the speaker to switch from more Vartashen-like paradigms to more Nidzh-like ones, cf. 4, which lists some examples from the part of the text in your hand-out (in brackets, I give the forms that would be expected in Lower Nidzh or in Vatrashen):

(5)	Line	Lower Nidzh	Vartashen	Glosse
	1,3,5,7	[-e-]	-ne-	3SG:S=A
	8,9,11,12			
	3	karnan-oy	[karnan-ay]	old=woman-GEN
	4,8,10	-e-	[-ne-]	3SG:S=A
	5	šot'-o	[šot'-u]	DIST-DAT2
	5,7	cac-a	[cac-ax]	thorn-DAT2
	5,7	tur-exun	[tur-exo]	foot-ABL
	8	haq'-i	[aq'-i]	take-AOR
	9	[haq'-a]	aq'-a	take-OPT:2SG
	10	[šum-a]	šum-ax	bread-DAT2
	11	eğel-a	[eğel-ax]	sheep-DAT2
	10,11	e <sup>š</sup> x-t'-i	[...]	seize-LV-AOR

12	-t'un-	[-q'un-]	3PL:S=A
12	[sasn-u]	sasn-ux	lute-DAT2

The broad distribution of the present text makes us suppose that it is marked by a high degree of stereotypical collocations. In order to test this hypothesis I asked my informant to re-tell the story again a week later. The divergences were considerable and made me think that my informant did not tell the story from memory but construed the major portions each time he told it. Those portions that showed up in both situations are either stereotypical collocations such as (6)

(6) *baneke sa cawal* 'Once upon a time there was a sparrow'

refrain-like structure as in (7)

(7) *cacá tadí súmzu haq'í* 'The thorn I gave, a bread I took;  
*súmáx tadí eǵélzu haq'í* the bread I gave, a sheep I took;  
*eǵeláx tadí sázzu haq'í* the sheep I gave, a lute I took.'

or they have to be explained from the interaction of grammar, lexicon, and information processing.

If we turn to the standard typology of Udi grammar, we can describe the following basic features (in the hand-out, each feature is highlighted by bold letters):

1. Case marking: Ergative case marking with O-split that opposes indefinite to definite referents:

(8) *aśuǵ-en saz-n-ux far-e-ne-y*  
 singer-ERG lute-SA-DAT2 play-PERF-3SG:A-PAST  
 'A singer (had) played the lute.'

Case marking is basically accusative with personal pronouns:

(9, a) *zu q'at-zu-bak-i set'abaxt'inté comox oq'a-ne-i* [field note]  
 I:ABS bend-1SG:S-LV:INTRANS-AOR because door:ABS low-3SG:S-PAST  
 'I bent over because the door was low.'

(b) *zu wax bifar-zu exa* [field note]  
 I:ABS you:SG:DAT2 curse-1SG:A LV:TRANS:PRES  
 'I put a curse on you.'

2. Personal agreement based on floating personal clitics [see Harris (forthcoming). *Endoclitics. The Origins of Udi Morphosyntax*. Oxford. OUP for all details. Assumptions on the

distributional patterns of floating clitics are at large based on Harris' analysis]. Personal clitics normally behave according to an accusative pattern:

- (10) *karnu-n-en (...) cac-a tarn-a-ne bos-i*  
 old=WOMAN-SA-ERG (...) thorn-DAT OVEN-DAT-3SG:A THROW-AOR  
 'The old woman threw the thorn into the oven.'

3. Frequent use of light verbs as verbal bases:

- (11) *šo-t'-ay tur-e sa cac t'aq'-ec-e*  
 DIST-SA:OBL-GEN FOOT-DAT one thorn:ABS stick-LV:INTRANS:PAST-PERF  
 'A thorn was stuck in its [lit. 'that one's'] foot.'

4. AttrN-ordering in NP, group inflection, postpositions:

- (12, a) *šo-t'-ay tur-e-xun*  
 DIST-SA:OBL-GEN FOOT-DAT-ABL  
 'from its (lit. 'that one's') foot'

- (b) *ta-ne-c-i sa coban-in t'o'ǵo'ǵ*  
 GO-3SG:A-\$.PAST-AOR one shepherd-GEN PP(AT)  
 'It went to a shepherd.'

## 2. Cognitive typology

Now, if we have a closer look at what motivates the complex structure for instance of Udi morphosyntax, we arrive at a somewhat disparate picture. If we disregard formal approach to language, we have the choice among at least the following explanatory parameters:

- (13) System internal functions  
 System internal diachronic variation in form  
 System internal diachronic variation in function  
 Synchronic language / dialect contact  
 Diachronic language / dialect contact  
 System internal parameters of language acquisition  
 System external parameters  
 - Communication in synchrony  
 - Cognition in synchrony  
 - Linguistic habitus  
 - Diastatic parameters in synchrony

- Communication in diachrony
- Cognition in diachrony
- Linguistic habitus in diachrony
- Diastratic parameters in diachrony

The list in (12) is far from being exhaustive. All explanatory parameters can additionally be accessed from a typological point of view. They are finally related to different types of research domains in which functional linguistics may be anchored, cf. (14) which relates the explanatory parameters mentioned in (13) to the corresponding research domains:

(14)	System internal functions	
	System internal diachronic variation in form	Linguistic Structuralism
	System internal diachronic variation in function	
	Synchronic language / dialect contact	Sociology
	Diachronic language / dialect contact	
	System internal parameters of language acquisition	Developmental Psychology
	System external parameters	
	- Communication in synchrony	Communication research
	- Cognition in synchrony	
	- Linguistic habitus	Cognitive Sciences
	- Diastratic parameters in synchrony	
	- Communication in diachrony	Anthropology
	- Cognition in diachrony	
	- Linguistic habitus in diachrony	Culturology
	- Diastratic parameters in diachrony	
	- Language acquisition	

The interdisciplinary network of research domains that can be accessed from a linguistic point of view is indicated by a broken circle. It maps the multicausal scenario that is typical for the functional paradigm in actual linguistics. Yet, if we start with empirics the question arises which domain should be accessed to explain a specific part of these empirics, cf. the following sentences that had once been uttered by an Udi speaker:

(15) *ägär uś q'ari-ne bak-sa šo-t'-ux k'üre-n xuru-b-es ba-ya-k-sa* [field notes]  
 if fire=wood:ABS dry-3SG:S be-PRES DIST-SA:OBL-DAT2 axe-ERG>INSTR small-LV:TRANS-INF be-  
 1PL:IO-§-PRES

*ägär te-ne šäyn-ne q'ari-bak-ama yaq'-beğ-a-yan*  
 if NEG-3SG:S wet-3SG:S dry-LV:INTANS-CV(till) way-see-OPT-1PL:A>S

'If the fire wood is dry we can chop it with the axe. If it's not, (if) it is wet, we will have to wait (lit. 'see the way') till (it) is dry.'

It seems to be rather a matter of conviction to decide which explanatory domain should serve as the basis to analyse this utterance. Have a look at the final structure *yaq'be<sup>ǰ</sup>ǰayan* ‘we should wait’: The position of the clitic is restricted in such cases as the optative to a place following the optative marker *-a*, cf.

- |      |  |  |
|------|--|--|
| (16) | <i>*yaq'-yan-be<sup>ǰ</sup>ǰ-a</i><br>way-1PL:A>S-see-OPT<br>‘We should wait.’   | <i>yaq'-yan-be<sup>ǰ</sup>ǰ-sa</i><br>way-1PL:A>S-see-PRES<br>‘We are waiting.’                      |
|      | <i>*gölö-yan yaq'-be<sup>ǰ</sup>ǰ-a</i><br>much-1PL:A>S way-see-OPT<br>‘We should wait a long time’<br>( <i>gölö yaq'be<sup>ǰ</sup>ǰayan</i> ) | <i>gölö-yan yaq'-be<sup>ǰ</sup>ǰ-i</i><br>much-1PL:A>S way-see-AOR<br>‘We were waiting a long time.’ |

A system internal explanation of this constraint would perhaps refer to the history of the *a*-optative: There is good evidence that – contrary to other tense/mood markers – this element has been grammaticalized from a former locative or dative case marker that was added to the verbal stem, cf.:

- |      |  |  |
|------|--|--|
| (17) | <i>*yaq'-be<sup>ǰ</sup>ǰ-a-yan</i><br>*wait-see-DAT-1PL:S<br>*‘We were to wait’<br>> ‘We should wait.’ | <i>t'egǰi šähär-a-yan</i><br>today TOWN-DAT-1PL:S<br>‘Today, we will be [lit. are] in town.’ |
|------|--|--|

An argument that is derived from the pragmatics, of communication and information transfer would perhaps start with the observation that the personal clitics in Udi serve as focus markers. The highly marked optative function would then call for the canonical focusing of the verb to which the optative function is associated cf.

- (18) *yaq'-be<sup>ǰ</sup>ǰ-a-yan*  
{wait-see-OPT}<sub>FOC</sub>-1PL:S>A  
‘We SHOULD wait.’

It should be noted that the same kind of constraint applies to one of the Udi future tenses which also has modal properties.

If we look for a cognitive motivation of the optative constraint, a possible explanation could start with the assumption that there is an iconic relation between variation by floating and unmarkedness, cf.

- |      |   |  |
|------|---|--|
| (19) | Unmarked<br><i>floating</i><br><i>clitics</i> | Marked<br><i>fixed</i><br><i>affixes</i> |
|------|---|--|

In this sense, unmarked TAM categories are associated with floating clitics, whereas marked categories such as the optative call for a fixed position of the agreement particle that then plays the role of an affix.

Another explanatory domain is addressed if we turn to language contact. It has been said above that some Northwest Iranian languages of Azerbaijan probably played a major role in earlier phases of multilingualism among Udi speakers. Now, if we have a look at an actual Northwest Iranian language such as Northern Talysh we observe that this language allows floating clitics in certain past tense based paradigms. In modal structures, however, floating is impossible, cf.

(20) Northern Talysh [field notes]

*mə fikr-əm ka palang-i püst-i pe-gat-o-m*

I:OBL think-1SG:A make:PAST:PERF leopard-OBL skin-OBL away-take-OPT-1SG:A

‘I thought to skin the leopard.’

\*[mə] *palang-i püst-əm pe-gat-o*

I:OBL leopard-OBL skin-1SG:A away-take-OPT

Udi:

*fikir-zu-b-i te mošak'-ax c'eq'-a-z*

think-1SG:A-LV:TRANS-AOR CONJ leopard-DAT2 skin-OPT-1SG:A

‘I thought to skin the leopard.’

\**mošak'-ax-zu c'eq'-a*

leopard-DAT2-1SG:A skin-OPT

Naturally, it can be claimed that all these parameters interact to condition the optative constraint in Udi. But then we again arrive at a crucial question: Why and to which extent certain parameters interact while others remain inactive. This question gains even more importance if we argue in terms of language typology: The ambiguity in linguistic explanation is multiplied if the data stem from competing systems.

In fact, the strong inductive orientation in language typology has prevented this discipline to develop a theoretical superstructure that would be able to enable the typologist to systematically incorporate possible explanatory paradigms. The discourse among typologists is marked by a certain reluctance to systematic superstructures that would formulate a deductive theory to approach the empirics of typology. Still, the need of such superstructures – whatever they might be – seems necessary to prevent typology from self-contained or even self-satisfied descriptivism and explanatory haphazardness. The obvious progress that has been made in the functional explanation of linguistic structures calls for the systematization of this experience in terms of a more or less unified account.



We are left with the impression that standard typological work does not really care about the implications that emerge from the choice of a given explanatory domain. Nor does it interpret such a domain in the context of a multicausal scenario as depicted in (14). Yet it should be noted that cornerstones of typological argumentation such as language variation, language change, cross-linguistic ontology of universals, and both synchronic and diachronic probability do not represent fundamental and self-contained principles. On the one hand, they are derived from what once was called the *locus obsevravandi* of typology – on the other hand, they (in this form or another) result from underlying mechanisms of human cognition. We can only evade from this kind of derivational chain if we assume that the ontology of language is characterized by a high degree of cognitive or systemic autonomy. However, ‘autonomy’ as a basic property of language is generally rejected in Functional Linguistics out of good reasons. This does not mean that language should not be associated with features of autonomy. However, autonomy or modularity should only be described as a secondary ‘construction’ (or mental hypothesis) of users about their language. Language typology has to take into account the folk-psychological construction of ‘language’ as a modular reality, because it can heavily influence the ‘gestalt’ of a given linguistic knowledge system, depending on the way it is habitualized. Yet, Functional Linguistics and hence typology has to assume that the structural coupling of adequate network components shapes language as well as those activities that emerge from this coupling.

In this sense, cognitive typology should be more than simply doing typology from a cognitive perspective. Cognitive typology would then be nothing than another look at typology, or – if you want – another look at cognitive linguistics. Though the term has been in cursory use since at least 1995 (cf. 21),

(21) Announcement of the LP 96 conference on Typology, organized by the Department of Linguistics and Finno-Ugric Studies and the Institute of Phonetic Studies of the Charles University Prague (August 20-22, 1996):

„3) What is the foundation of typology as a linguistic discipline? The topic includes (...) **cognitive typology** (configurational vs non-configurational languages, Baker’s incorporation, mirror principles, kinds of raising, etc.)“

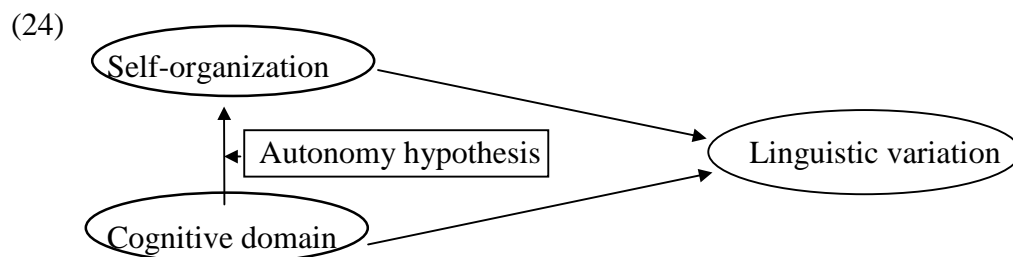
it has never experienced a satisfying definition. Even the announcement of the present conference does not propose such a definition. However, if we take into considerations the claims made so far in this paper, it seems possible to approach the problem of defining cognitive typology more closely.

The problem of defining the scope of Cognitive Typology is directly connected to the question of how to decide to which extent a given linguistic structure is grounded in cognition. Remember that language typology operates through a vast range of explanatory domains, cf. again (13). I think that a major step in typology would be to relate these domains to each other in a way that does not exclude any of them.

In this sense, Cognitive Typology would refer to the claim that the ontology of language has to be seen in cognition. Another consequence would be to suppose that all the other parameters that condition linguistic variation are ultimately formulated by cognition, too. Accordingly, Cognitive Typology should claim that any explanatory parameter or any discipline that is addressed to during the explanatory process has first to be checked for its inherent cognitive implications, cf.

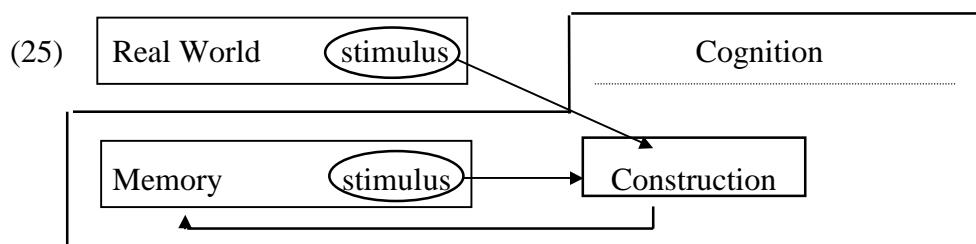
- (22)
- |                        |   |                                  |
|------------------------|---|----------------------------------|
| Communication research | → | Cognitive communication research |
| Sociology              | → | Cognitive sociology              |
| Anthropology           | → | Cognitive anthropology           |
| Interactionism         | → | Cognitive interactionism         |
| System theory          | → | Cognitive system theory          |
| Culturology            | → | Cognitive culturology            |
| etc.                   |   | ...                              |

Naturally, we should not assume that those explanatory parameters that can be deduced from (13) account for linguistic variation in an cognitive perspective only. In many instances, these parameters become active on the basis of an autonomy hypothesis which produces a higher level self-organizing structure, cf.:



For instance, a given communicative habitus may affect the structural dynamics of a language system just as its cognitive conditions. Hence, a radical form of Cognitive Typology does not claim that *all* instances of linguistic variation are immediately and directly grounded in cognition. But it *does* claim that any kind of parameter that causes linguistic variation ultimately emerges from the dynamics of cognition.

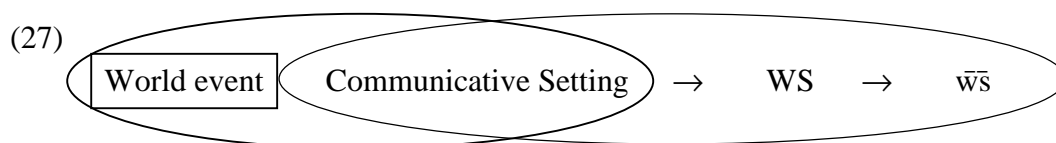
The basic axiomatics of Cognitive Linguistics should – in my eyes – start with the hypothesis that all human behavior is processed in and controlled by cognition which again is partly grounded in the dynamics of the autonomic nervous system. This hypothesis is perhaps best elaborated within the framework of Radical Constructivism. According to this framework, cognitive ‘events’ and networked structures represent schematized reactions to Real World stimuli. The quality of these stimuli is *construed* by cognition as general hypotheses about them. It should be noted that the activation of long and short term memory also implies constructional procedures, cf.



In the following I will use the abbreviation *WS* to denote any kind of ‘world stimulus’ that manipulates the state of a cognitive system. The *construction* of *WS* is symbolized as *ws-bar* ( $\bar{ws}$ ), cf.

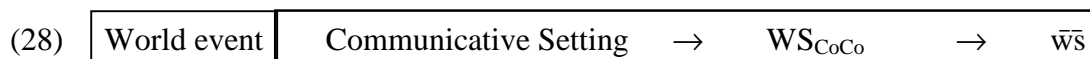
(26)  $WS \rightarrow_{/construed\ as} \bar{ws}$

In order to account for linguistic variation, the mapping structure in (9) needs further elaboration. The mapping of a world stimulus is sensitive to the general setting in which a world event becomes relevant. A world event becomes a world stimulus only, if it attracts communicative attention in a given setting, cf.



The communicative setting already conditions that a given world event is processed in a way that is specific for linguistic communication. Not *all* aspects of this event are processed, and some factors are more salient than others. Naturally, this kind of case-sensitivity is structurally coupled with other sensoric devices such as visual input. The point, however, is that the experience of a world event as a world stimulus that is controlled by communication can be independent from an actual coupling with – for instance – the visual input. We can talk about things we do not see, to put it into trivial words.

The controller that indexes a world event as a communicative world stimulus can be identified as the cognition<>communication interface (CoCo), cf.



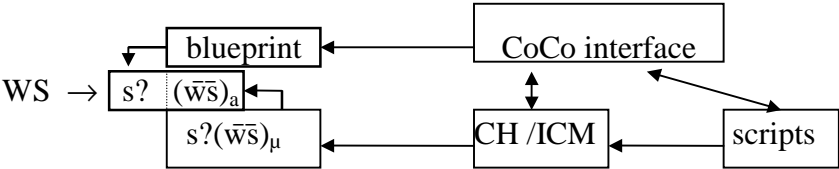
It is important to note that the theory of Cognitive Typology as proposed in this paper supposes that major parts of the architecture of the CoCo interface constitute a universal of human ontology. In accordance with standard assumptions of Cognitive Linguistics we should hypothesize that

(29) „(...) language emerged from brain structures which had been engineered for other functions, by co-opting them from their previous domains.“ (Foley 1997: 77).

The communication domain of cognition represents an emergent structure which is structurally coupled with the evolution of mental storage techniques. These result – among others – from the experience of perpetuated communication – hence we have to deal with a cyclic experience. The complex CoCo network components result in an emergent activity that pronounces itself as ‘language’. Naturally, other mental capacities had to evolve parallelly, namely the techniques of pattern recognition (paradigmatization), conceptualization, and symbolization. All these structurally coupled ‘features’ enabled the human being to experience the oral activities of others as what the human being had learned it is: ‘language’. Consequently, we cannot assume that ‘language’ (or ‘linguistic knowledge’) has a biological ‘substance’ of its own. Rather it is a learned knowledge system that is imposed (by tradition) on its own cognitive conditions, again a cyclic process that is typical for human cognition as a self-organizing system.

The indexing of ‘world events’ as communicative world stimuli that is conditioned by the CoCo interface results in the perhaps most crucial technique of construing an adequate reaction to this stimulus, namely that of ‘scenes’ and ‘scenarios’, cf.

(30)



[s? = ‘scene’, a = instantiated (picturing/re-presentation), μ = memorized, CH = Cognitive Hypothesis, ICM = Idealized Cognitive Model]

‘Scenes’ represent functional templates to linguistically process event images in a communicative setting. The framework that underlies the present analysis, namely the ‘Grammar of Scenes and Scenarios’ assumes that the way of how such event images are processed by cognition is conditioned by the communicative knowledge base: Linguistically processed pattern recognition refers to a specific *grammar* that interpretes and manipulates event images in a communicative perspective.

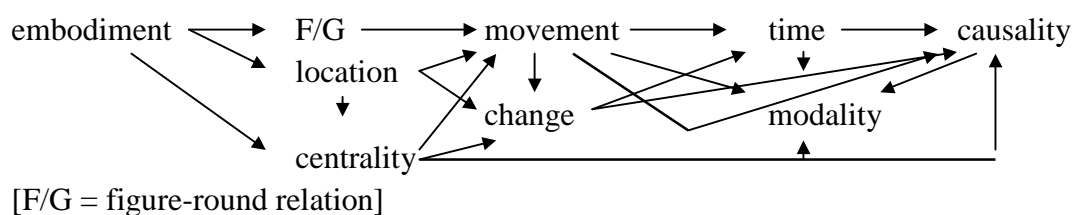
Scenes do not share any real world properties, but reflect the way how real world experience is construed on the basis of strongly idealized cognitive models or cognitive hypotheses. The ‘blueprints’ of scenes are thought to be part of the evolution of cognitive and communicative behavior. Their basic structure is constituted by the architecture of those cognitive domains that have been involved in the emergence of scenic blueprint at all. It is assumed that there is a functional iconicity between the neurophysiological architecture of cognition and the architecture of scenes: Scenes cannot be processed but within the general frame of cognition. Their blueprints represent engrammatic structures that are stored in long term memory. The input of a world stimulus activates procedures of *picturing* or *re-presenting* such engrammatic structures in terms *scripts* (Schank/Abelson).

The CoCo interface establishes certain properties of scenic blueprints that can be tentatively labeled as *scenic universals*. By this is meant that the universal aspects of the

CoCo interface force an universal design of scenes irrespective of the way *how* a given scene is finally communicated. These universals are embedded into the general schemes or cognitive hypotheses of human beings regarding the communicative interpretability of world experience. Among them, we can describe aspects of time stability, object and relational permanence, movement, variation and change, localization, embodiment, and centrality. These universals are additionally characterized by the fact that linguistic scenes are only construed in a communicative context. Hence, we have to assume that basic parameters of intra- or interindividual communication and interaction such as *role swapping* or *role exchange* also belong to the universal design of such scenes.

All these universals constitute the kernel of prototypically organized scenes. Such structures gain complexity because of two factors: First, the universals can experience a different degree of particularization. By this is meant that higher level domains as well as strategies of grammaticalizing a scene establish a peripheric structure within the prototypical organization of the scenic blueprints. Due to these particularized blueprints some universals become more active or functional than others. Second, scenic universals are liable to a high degree of metaphorization. The earlier such a metaphorical process has become routinized and conventionalized, the more a resulting metaphor gains the status of a quasi-universal. (31) lists some of the most typical metaphorical paths:

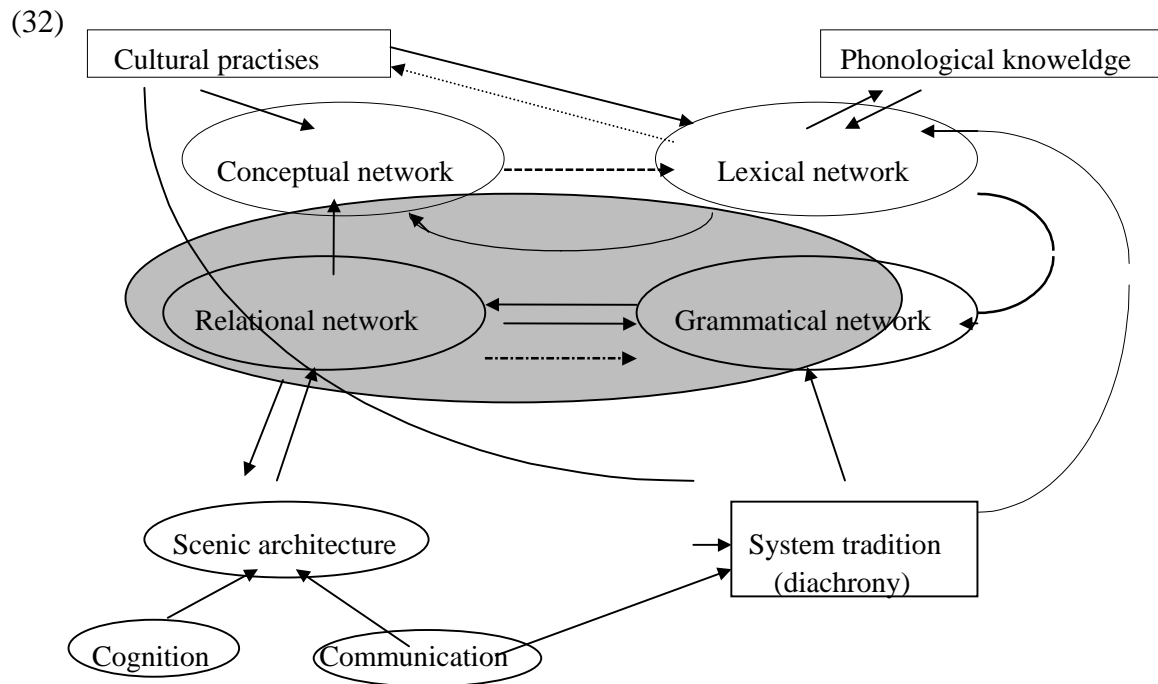
(31) Some metaphorical paths in the radial network of scenic universals:



Perhaps the most prominent one is that of causality that stems from the universals of movement and change. Movement itself seems to result from the embodiment of figure-ground-relations which themselves are part of the overall scheme of *internality* and *externality* characteristic for the process of embodiment. Movement and location are metaphorized as time which can interfere with causality and establishes modality.

Another universal property of the architecture of linguistic scenes is that the original image schema or *gestalt* has to be transferred into a serial sequence of information chunks that corresponds to the linearity of linguistic expressions. In GSS, this type of linearization is called *attention flow*, a term borrowed from the fragment of cognitive grammar as proposed by Scott DeLeancey. However, *attention flow* has a specific semantics in GSS: It refers to the fact that the cognitive constructive reaction on a world stimulus already presupposes the anticipation of the final linguistic output: Accordingly, the stimulus input is scanned with respect to possible segments. This anticipatory behavior is called *attention* in GSS. Though the construction of linearity itself is a universal scenic feature, its instantiation is highly particularized.

Depending on the communicative context, but also on higher level domains such as cultural practices, communicative knowledge and symbolization routines, scenes are grammaticalized to a very different extent. This process is characterized by a complex interaction of different segments of the cognitive network, cf. (27) which tries to outline some of those factors that are involved in the procedure of grammaticalization.



It is important to note that the relationship between the blueprint domain of the scenic architecture and the grammatical network that conditions a major part of the linguistic knowledge system is not regarded as a direct relation. The grammatical network does not simply *translate* the scenic architecture into a linguistic format but activates a complex relational network that plays the role of an interface between the two components. It shapes the paradigmatic structure of the grammatical network especially in a diachronic perspective, and restricts the way how scenic information is processed to the formal capacities of the grammatical network.

The relational network is termed *Operating System* in GSS. It refers to those parts of the grammatical network that constitute the verbalization of scenes in a given speech community. Operating Systems are universal in that they are the requirements for language systems in general. However, GSS does not propose a universal structure for Operating Systems. Rather, they appear as highly particularized instantiations of the universal requirement to process the linguistic coding of event images. Just as the structure of linguistic practice in general should be interpreted as an ‘anachronistic’ knowledge system, processes of particularization are basically diachronic in nature, too: Operating Systems represent structural complexes that are routinized in space and time. The output corresponds to the tacit knowledge of a speaker of his/her language system (‘poietic’ knowledge in terms of GSS).

Only small parts of Operating Systems are liable to synchronically react on the communicative ‘demands’ of a speech community (articulate or ‘pragmatic’ knowledge). It follows that GSS does not propose a direct (or synchronic) relation between linguistic ‘categories’ that are crucial for Operating Systems and cognitive knowledge system, just as GSS denies a Saussurean plurality of synchronic states. Rather, the relationship between these two domains is basically historical: The functional and cognitive motivation of linguistic categories usually emerges in a relatively short period of time, but acquires a long-term stability that is ‘fossilized’ in a cognitive perspective. If we apply this hypothesis to linguistic ‘schemas’ like ‘accusativity’ or ‘ergativity’, it follows that GSS rejects any semantic interpretation of these schemas in terms of actual ‘world views’. However, Operating Systems are not fully non-dynamic systems. They can – in parts – be synchronically adjusted or reorganized according to specific pragmatic conventions. This process is called ‘pragmatic intervention’ in the ‘rammar of Scenes and Scenarios’.

Operating System are conditioned by the synchronic accommodation of diachronically motivated strategies of verbal information processing or ‘verbal behavior’. They are prototypically organized and are derived from univesrals of scenic architecture, cf. (33) which alphabetically lists some of the relevant correlations between the cognition<>communication interface, the scenic architecture, and operating systems:

(33) Some correlations between ‘scenic architecture’ and ‘Operating Systems’ (OS)

<b>CoCo interface</b>	<b>Scenic architecture</b>	<b>Grammaticalization (OS)</b>
Attention flow (Core)	I→F	AEC, word order, topicalization
Categorization (Peri)	Standardization, props, weighting	Classification, referentiality, attribution, AEC
Causality (Core)	C→E	AEC, grading
Centrality (Core)	(n)SAP	AEC, grading, personalization, logophorics, social deixis
Embodiment in scenario (Peri)	Anchor, pivot	AEC, endophorics, exophorics, logophorics, reflexivity, discourse cohesion devices
Figure-Ground (Core)	ISA, F/G, F→G	AEC, grading, localization
Intentionality (Peri)	Spotting	Pragmatic functions, focus
Linearization (Core)	Sequences, clustering, I→F	Word order
Perspectivization (Peri)	Arrangement, disguise	Grounding, diathesis, syntactic functions
System space (Core)	Localization	Deixis, localization, AEC
System time (Core)	Temporalization	temporalization, AEC

[World] (Core)	Knowledge base	Modalization	AEC, Mode, negation, interrogation
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(CoCo = cognition $\leftrightarrow$ communication interface, Core = prototypical core, Peri = periphery, ISA = generic relation, F = Figure, G = Ground, C = Cause, E = Effect, I = initial domain (high attention), F = final domain (high attention) (*attention/information flow*), / = clustering,  $\rightarrow$  = vector.)

The right column lists those grammatical strategies and paradigms that encode the demands of scenic architecture. It comes clear that the core of Operating Systems is dominated by a paradigmatic behavior that is closely associated to the Accusative Ergative Continuum (AEC). In GSS it is claimed that both the accusative and ergative behavior of paradigmatic structures represent some kind of ‘conditioned reflex’ emerging from the prerequisites of how the routinized construction of worlds and world experience is transformed into a linguistic format. The AEC dominates those parts of the scenic architecture that are related to the location of core actors in system space and system time. Such actors represent referential entities around which ‘a world is built’. The relation between an actor and ‘its world’ is basically a figure-ground relation (F $\rightarrow$ G). Depending on conventions regarding the ‘empathic’ access to an actor in question it is either the actor or the world that is interpreted as the ‘figure’ (or ‘trajector’) within the F $\rightarrow$ G relation. Note that ‘world’ refers not only to space but also to time (metaphorized from space) and to the co(n)textual and presuppositional frame into which an actor is embedded.

If another actor is involved in the scene or if the given ‘world’ is interpreted as an actor, the F $\rightarrow$ G-relation is metaphorized to a cause-effect vector (C $\rightarrow$ E). The technique of ‘world incorporation’ is illustrated by the so-called ‘object diathesis’ in German:

(34) German

(a) *Sie steigt-t auf ein-en Baum*

she(F):NOM climb=up:PRES-3SG:S on INDEF-ACC:SG:MASC tree(G):ACC

‘She climbs up a tree.’

(b) *Sie be-steig-t ein-en Baum*

she(C):NOM OD-climb=up:PRES-3SG:A INDEF-ACC:SG:MASC tree(E):ACC

‘She climbs (up) a tree.’

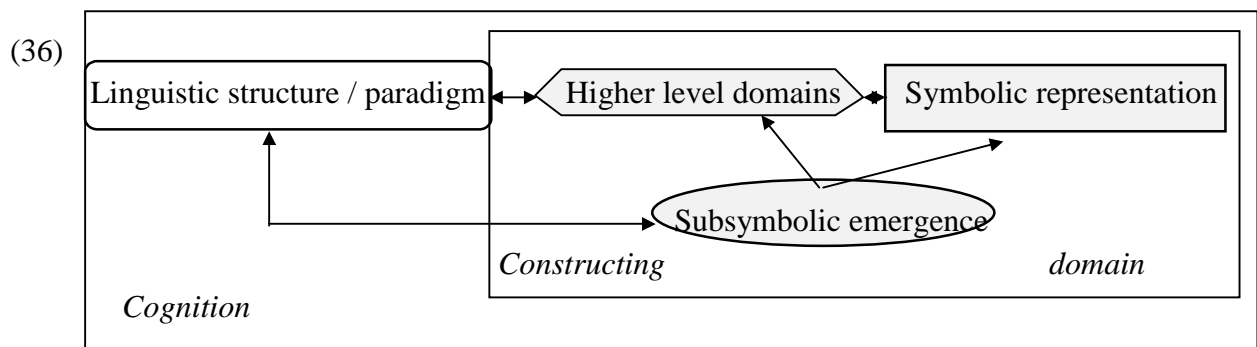
The involvement of another actor in a scene is based on a metaphorization chain that interprets either ‘figure’ or ‘ground’ as the cause domain of the ‘new’ relation, depending on the empathic access to the actors in question. (35) is an abbreviated version of this metaphorization chain:



- (35) Inner > figure [> ground] > earlier > cause .....  
 Outer > ground [> figure] > later > effect .....

The two domains ‘cause’ and ‘effect’ are understood as abstract conceptualization which are subjected to semantic particularization in terms of the well-known semantic roles. It is important to note that unless secondary metaphorization or pragmatic intervention applies ‘cause’ represents the starting point of a vector that is oriented towards ‘effect’. The notational convention ‘C→E’ (cause → effect) that is related to DeLancey’s interpretation of transitivity is intended to cover this dynamic aspect.

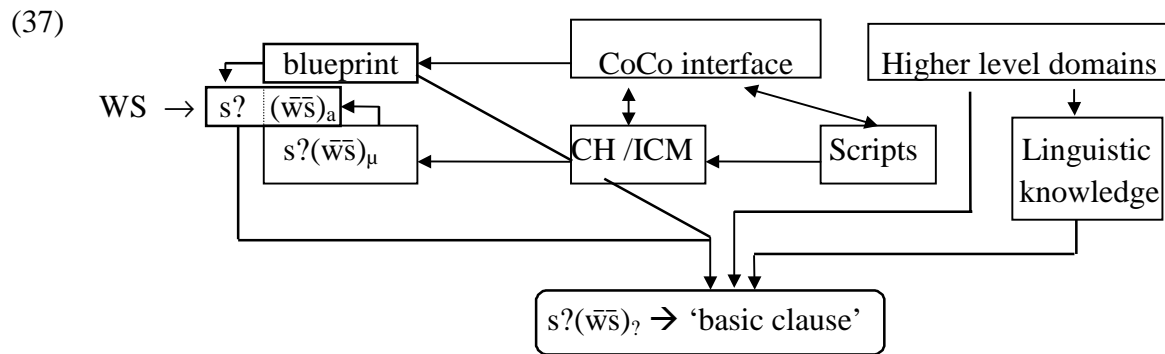
We could go on interpreting the table in (33), however I will stop here for sake of brevity. The lesson we can learn from what has been said so far is that there is – in my opinion – a realistic option to define the enterprise of Cognitive Typology. If Cognitive Typology is thought to be more than a mere heuristic term we should start with the hypothesis that variation in language as well as variation among languages stems from particularization procedures. These procedures emerge from the interaction of the CoCo interface with conventionalized strategies to accommodate a linguistic tradition to a given communicative as well as cultural habitus. It follows that the immediate impact of cognitive features on linguistic structures is shadowed or filtered by a number of higher level domains that are related to linguistic practice in general. In consequence, Cognitive Typology should not rely on the assumption that all linguistic data have an immediate symbolic representation in cognition. Instead, I hypothesize that linguistic structures are motivated by the complex interaction of subsymbolic routines and symbolization procedures, cf.:



Consequently, the explanation of linguistic data in the framework of Cognitive Linguistics as outlined here has to take into account both the mapping of subsymbolic structures and symbolization procedures that may be effected by the above mentioned higher level domains. Additionally, Cognitive Typology has to incorporate theories of how speakers in a speech community handle the experience of systematic linguistic knowledge. Or, in other words: Cognitive Typology has to describe the cognitive conditions of paradigmaticization, their dynamics in terms of system dynamics as well as their structural coupling with constraints on the phonetic/phonological level.

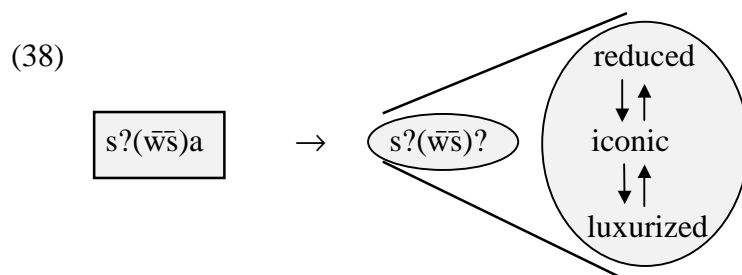
### 3. The Udi data

In order to demonstrate some aspects of Cognitive Typology as designed so far, let us turn again to the Udi data in your handout. A basic claim of the Grammar of Scenes and Scenarios is that the grammaticalization of scenes happens in terms of ‘simple sentences’ or ‘basic clauses’, cf. again (30) and (37):



Contrary to the hypotheses of Radical Construction Grammar as proposed by William Croft and others, GSS does not treat the architecture of phrasal ‘constructions’ as independent grammatical and symbolic units. Rather, the architectural properties of constructions are regarded as routinized procedures to map the scenic architecture. Hence, GSS strongly argues against any reificatory interpretation of grammatical constructions. If it were so, ‘constructions’ would hardly be accessible to the degree of pragmatic intervention or communicative manipulation as can sometimes be observed in single languages.

‘Clauses’ are defined in GSS as those linguistic structures that map a more or less complex scene. Yet, it should be noted that the degree to which a scene is grammaticalized in terms of a ‘clause’ does not necessarily depend on an iconic relation between scenes and clauses. Depending on higher level domains such as communicative habitus clauses can both expand and reduce the architectural information conveyed by a given scene (cf. (38)). This becomes immediately apparent if we look at utterances produced during first language acquisition or at luxurized structures produced in poetic contexts.



If we have a closer look at the scenic arrangement in the Udi passage quoted in your handout, we can start with the following statistics:

(39) Words:	Tokens	79		
	Types:	58	(8x : 1; 3x : 2, 2x :13, 1x : 18)	
Lexemes:	Tokens	58	(N 36, V 19, HV 2, PART 1)	
	Types:	27	(N 13, V 10, VN 2, PART 1)	
Grammatical words:		21	(Deixis 8, indef./num. 8, SAP 2, Postp. 2, Refl 1)	
Lexeme / Gramm. word:		1 / 0.36	(Grammatical word / lexeme: 1 / 1.7)	
Morphemes:	Tokens:	108	(among them: Case 36, TAM 31, AGR 17)	
	Types:	30	(among them: Case 8, TAM 7, AGR 4)	
Ratio morpheme per word:		1.39		
Polysemy:		2 out of 30		
Word order:	A O V	3	O V <sup>-</sup> A	4
	A O V V <sup>-</sup> A	1	S V	2
	A IO V [O]	1	V:A [O]	1
	A>S O V V <sup>-</sup> S	2	V <sup>-</sup> S	1
	IO O V <sup>-</sup> A	3	V S	1

It comes clear that Udi is a strong agglutinating language that occasionally shows morphological polysemy. The ratio of 1.39 morphemes per word is relatively high and suggests that Udi words represent complex functional units. Functional or grammatical words are rather frequent: we can expect one grammatical word in a chain of 4 words (26.58 %). Word order is basically accusative; verbs tend to occupy the final position. The relational primitives subjective, agentive, and objective are normally indicated by dependent marking. S and A are additionally resumed by floating agreement markers that focus the preceding constituent. NP internal ordering is Attribute-Noun.

Obviously, morphology and morphosyntax play a major role in the functional organization of Udi clauses. But which of those domains mentioned in (13) are responsible for the functionality of Udi morphemes and syntax? To access this problem, I first translate the Udi text into a scenic format, cf. (40). Note that the format is rather superficial: it reflects only the most basic architecture of scenes. In the third column, I have mentioned the basic strategies to grammaticalize the given scenes:

(40)			
<b>Udi text (field notes, W. Schulze)</b>	<b>Scenic</b>	<b>format</b>	<b>Grammaticalization</b>
	(rudimentary)		
(1) <i>baneke sa cawal</i>	[G] ← F		V:AGR:S S:ABS
(2) <i>šot'ay ture sa cac ta<sup>q</sup>'ece</i>	G:PROP <sup>-</sup> F←		LOC:POSS S:ABS V[-AGR]
(3) <i>me cawal taneci sa karnanoy t'o<sup>š</sup>g'o<sup>š</sup>l</i>	F → G		PROX S:ABS V:AGR:S LOC
(4) <i>karnanen tarna šume bast'ay</i>	C <sup>-</sup> [LOC <sup>-</sup> E <sub>sp</sub> ] →		A:ERG LOC:DAT O:ABS:AGR:A V
(5) <i>cowalen šot'on eše ay karnu bez turexun me caca šiša</i>	C <sup>-</sup> EX <sub>sp</sub> → [E] [INTRO]		A:ERG IO:DAT:AGR:A V VOC LOC:POSS O:DAT

	LOC:PROP <sup>-</sup> E ← C	V:AGR:A
(6) <i>za sa šum tada</i>	EX <sup>-</sup> E ← C	IO:DAT O:ABS V:AGR:A
(7) <i>karnunen šot'ay turexun caca ciceri tarnane bosi</i>	C <sup>-</sup> [ LOC:PROP <sup>-</sup> E] →	A:ERG LOC:POSS O:DAT
	& [E] <sup>-</sup> LOC <sub>sp</sub> →	V[-AGR] LOC:AGR:A V
(8) <i>cowala sa šume tadi cowalen t'e šuma haq'i taneci sa cobanin t'o<sup>š</sup>ğo<sup>š</sup>l</i>	C <sup>-</sup> [EX <sup>-</sup> E <sub>sp</sub> ] →	IO:DAT O:ABS:AGR:A V
	& C <sup>-</sup> E →	A>S O:DAT V[-AGR]
	& F → G	V:AGR:S LOC
(9) <i>pine me šuma aq'a za sa eğel tada</i>	C → [E]	V:AGR:A O:DAT V:AGR:A
	E ← C	IO:DAT O:ABS V:AGR:A
	& EX <sup>-</sup> E ← C	
(10) <i>cobanen šumax e<sup>š</sup>xt'i ic gala sa eğele tadi</i>	C <sup>-</sup> E →	A:ERG O:DAT V[-AGR]
	& [C] <sup>-</sup> [LOC: PROP <sup>-</sup> E <sub>sp</sub> ] →	[LOC: LOC:POSS O:ABS:AGR:A V
(11) <i>cowalen eğela e<sup>š</sup>xt'i taneci laşq'oye</i>	C <sup>-</sup> E →	A>S:ERG O:DAT
	& F → G	V[-AGR] V:AGR:S LOC
(12) <i>t'iya äcit'uney nağält'un besay aşuğen saznuş fareney</i>	LOC F → [G]	LOC V:AGR:S O:AGR:A V
	& C <sup>-</sup> E <sub>sp</sub> →	A:ERG O:DAT V:AGR:A
	& C <sup>-</sup> E →	

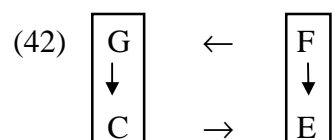
[ ] = inferred; & = chaining ; → / ← = vector ; <sup>-</sup> = amalgamation; C = cause; E = effect;

EX = 'extra' role; F = figure; G = ground; LOC = locatization; PROP = props; sp = spotting.

At a first glance, there seems to exist a relatively strong iconicity between some aspects of the scenic architecture and grammar, cf.:

(41)	F	→	ABS	+AGR	Initial
	G	→	LOC	-AGR	Medial
	C	→	ERG	+AGR	Initial
	E	→	ABS	-AGR	Medial
	→	→	VERB		

As for case marking, we can describe a standard metaphorization of the Figure domain to the Effect domain in trms of ergativity. Cause, on the other hand seems to be derived from the Ground domain, cf.



In fact, the underlying figure-ground relation is particularized by centering in the ground domain: Just as in a number of other East Caucasian languages, the morphosemantics of locative structures clearly shows that they are thought to reflect quasi-referential aspects of space, to which the figure domain is attributed, cf.

(43) *k'ož-in boš*  
 house-GEN PP(in) [G ← F]  
 'In the house...'

*k'ož-in pänžärä*  
 house-GEN window  
 'The window of the house...'

*k'ož-in boš-ne* [G ← F]  
 house-GEN in-3SG:S  
 '(S)he is in the house'

The metaphorization of the ground-centered  $F \rightarrow G$  relation conditions that the Cause domain in transitive structures is centered, too. This metaphorization effect leads to a quasi accusative potential of transitive structures which is defined by the dominance of the Cause domain.

The question now is whether the grammaticalization of the Cause domain still reflects a cognitive dominance of this domain in actual Udi. In other words: Does the Udi ergative morpheme (*-en* etc.) has some kind of conceptual reality that activates expectations about the cause domain? Or, is the ergative morphology nothing but a formal device in actual Udi that is simply learned as many other parts of the grammar? I have tested this question with a number of Udi speakers. I asked them to react on teh follwoing four utterances:

- (44) a) [en] (ergative morpheme)  
 b) [adamarén] (man:ERG)  
 c) [adamarí] (man:GEN)  
 d) [adamar] (man:ABS)

The reactions by the informants were rather homogenous, cf.:

- (45) a) ???  
 b) *e-t'-ux-ne bsa?*  
 what-SA-DAT2-3SG:A make:PRES  
 'What (do you mean) he does?'  
 c) *k'ož / cubux / a<sup>š</sup>elux / ...*  
 house / woman / children ....  
 d) *ma?*  
 'Where?'

It has come clear that the ergative morphology is immediatedly coupled with the construction of transitive scenes. Such scenes are normally construed in a way that have the Cause domain as their staring point. Interestingly enough, the zero-marked absolutive had primarily been

related figure-ground-relations, but not to the effect domain of transitive structures. This picture changed as soon as I used lexemes that typically appear in the effect domain, cf.

- (46) *śum* > *tarn-a-ne* / *nana-n me-t'-ux bad-al-le*  
 bread:ABS OVEN-DAT-3SG:S mother-ERG PROX-SA:OBL-DAT2 bake-FUT-3SG:A  
 'It's in the oven' 'Mother will bake it.'
- k'oǰ* > *bez kala baba-n me-t'-ux ser-ne-b-e*  
 house:ABS I:GEN big father-ERG PROX-SA:OBL-DAT2 build-3SG:A-LV:TRANS-PERF  
 'My grandfather has built [it]'

The productive semantics of the ergative morphology in Udi also explains two important shifts that seem to be on the way especially in the Nidzh dialect. On the one hand, the ergative case tends to be used in marked intransitive structures, cf.

- (47, a) *a<sup>ʕ</sup>el axš:um-ne-xa*  
 child:ABS laugh-3SG:S-LV:PRES  
 'The child laughs.'
- (b) *a<sup>ʕ</sup>el-en gele axš:um-ne-xa*  
 child-ERG much laugh-3SG:S>A-LV:PRES  
 'The child laughs much.' (semelfactive)

On the other hand, the ergative morphology tends to substitute the so-called dative construction with verba sentiendi especially in Lower Nidzh, cf.

- (48, a) *bez wic-e t'e xinär-ax bu-t'u-q'-sa* [Vartashen]  
 I:GEN brother-DAT DIST girl-DAT2 love-3SG:IO-\$-PRES  
 'My brother loves that girl.'
- (b) *bez wic-en t'e xinär-a bu-t'u-q'-sa // bu-ne-q'-sa* [Lower Nidzh]  
 I:GEN brother-ERG DIST girl-DAT love-3SG:IO-\$-pres // love-3SG:A-\$-PRES  
 'My brother loves that girl.'

In both instances, we have to deal with an augmentation of control features that are related to the Cause domain. But whereas (47) establishes a new type of S-split (in fact Fluid-S), (48) reduces the importance of A-splits. In fact, Lower Nidzh shows a clear tendency towards the standardization of transitive structures. It follows that the Udi type of Fluid-S should be explained in terms of pragmatic intervention or scenic variation, whereas the reduction of Split-A features relates to the economy principle of paradigmatic organization in Udi.

We have seen that Udi knows two types objective marking, absolute and dative or dative 2, cf.

(49, a) *karna-n-en tarn-a šum-e bast'a-y*

old=woman-SA-ERG oven-DAT bread:ABS-3SG:A put:PRES-PAST

'The old woman was putting bread into the oven.'

(b) *p-i-ne me šum-a aq'-a za sa eğel tad-a*

say:PAST-AOR-3SG:A PROX bread-DAT TAKE-OPT:2SG I:DAT one sheep give-OPT:2SG

'It said: 'Take this bread [and] give me a sheep!'

This kind of O-Split distinguishes 'given topic' from 'new topic' or indefinite referents from definite ones. It does not effect the basic scenic organization but can clearly be identified as a pragmatic feature that is conditioned by communicative knowledge. In this respect, we can observe an interesting case of co-paradigmatization: Above, I mentioned that Udi personal clitics have focus function. They normally are added to just that constituent in a clause that conveys new information. If the effect domain contains new information, it is generally grammaticalized with the help of this focus structure. Additionally, new information on the scenic population is often introduced by the indefinite marker *sa*, originally a numeral denoting 'one'. Both strategies do not apply if the constituent in the effect domain represents a given topic. Instead, a locative orientation is used, cf.:

(50) C → E<sub>NTop</sub> → A *sa* O:ABS-CLITIC:A V  
 C → E<sub>GTop</sub> → A O-LOC>DAT2 V [clitic elsewhere in the sentence]

The threefold marking of indefinite objectives should be interpreted as a routinized way to express a new topic in transitive structures. If we look at contact languages such as Azeri, Classical Armenian, and Northwest Iranian (cf. again (3)) we can describe rather parallel procedures to construe O-splits. This is especially true for Northwest Iranian as documented for instance by Talysh. From this we should conclude that the O-split strategy in Udi is not based on variations in the scenic architecture, but on the adaptation of communicative routines due to language contact.

Case marking is blended in Udi with agreement techniques and word order. As had been said above, agreement is basically accusative: Floating clitics are triggered by the intransitive subjective and the transitive agentive, cf.

(51) S 

>abs
------

 → +AGR  
 A 

>erg
⋮
>dat

 → +AGR  
 O 

>abs
⋮
>dat(2)

 → -AGR

This agreement pattern which is an innovation in Udi supports the dominance of the Cause domain in the scenic architecture. If we look at intransitive figure-ground relations, however, agreement seems to contradict to the observations made so far: Above I claimed, that figure-ground relations are ground-centered in Udi just as in many other East Caucasian languages. The figure domain has been associated with the referential entity as in structures like

- (52) *me cowl ta-ne-c-i sa karna-n-oy t'o<sup>ŕ</sup>g<sup>ŕ</sup>o<sup>ŕ</sup>l*  
 PROX sparrow:ABS GO-3SG:S- $\$$ :PAST-AOR one old=woman-SA-GEN PP(at)  
 'This sparrow (*figure*) went to an old woman (*ground*).'

How to explain the fact that agreement copies dominance in transitive scenes, but the weak domain in intransitive scenes? Obviously, agreement is not only conditioned by the quality of the scenic domains, but also by other factors. We should bear in mind that agreement in Udi stems from cataphoric strategies of pronominal doubling. The Udi type of pronominal doubling normally from some kind of 'after-thought', cf.

- (53) *zu ar-i-zu*  
 I:ABS come:PAST-AOR-1SG:S  
 'I came' < \*'I came, I' > 'I, I came' ~ 'it was me who came'

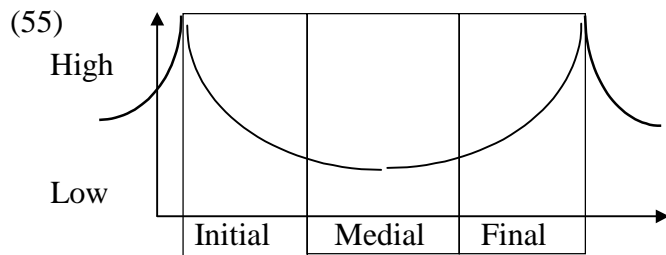
Thus, pronominal doubling once added pragmatic information to the figure domain, just as it added pragmatic information to the cause domain in transitive structures. The original cataphoric function that can be derived from the status of the doubled pronouns as enclitics later was reanalyzed as an anaphoric function – after clitzation had become obligatory. This internal process layed the ground for the actual use of clitics to focus the immediate antecedent, cf.

- (54) *(zu) s<sup>ŕ</sup>inebi<sup>ŕ</sup>g<sup>ŕ</sup>-zu ar-i*  
 (I:ABS) midnight-1SG:S come:PAST-AOR  
 'I came at MIDNIGHT.'

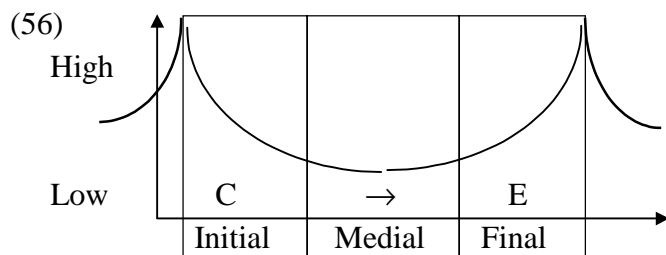
Hence, agreement in Udi is conditioned by a larger set of procedures which are located mainly in higher level domains of cognition.

The final criterion I want to mention is that of word order. If you again look at (39) you immediately realize that Udi prefers verb final structures. It is a standard assumption that information units such as complex verbal structures in head marking languages or clauses in general conform to a typical attention or information flow, cf.

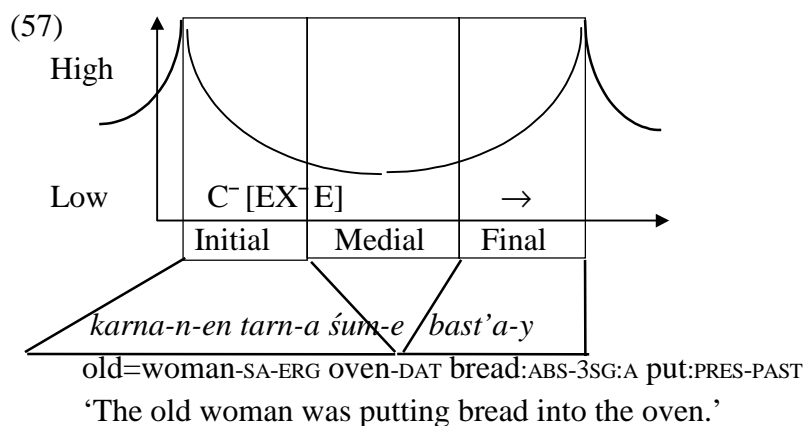




Normally, contextualized information units start with a high value. This value is subsequently lowered because much information has already been given and this cognitive state allows the speaker/hearer to produce a number of inferences about what follows this initial segment. In linguistics, this medial or second position is known as ‘Wackernagel’s Position’. The final segment again gains a higher degree of attention because the speaker/hearer presupposes that it contains the clue for whole information unit. GSS assumes that information or attention flow is structurally coupled with the scenic architecture which – as already has been said – is communicatively motivated *per se*. The tripartite structure of scenes allows to correlate figure-ground relations and cause-effect vectors to this information flow, cf. as an example:



The Udi type of attention/information flow prefers the amalgamation of the two scenic domains whereas the relational structure is placed at the end of the information chain, cf.



Attention/information flow is grounded both in cognition and communication. In consequence, the grammaticalization of this feature in terms of word order has correlations at least in these two basic level domains. The text underlying the present analysis suggests that Udi speakers prefer to start the grammaticalization of a scene with a representative of either the figure or the cause domain. Other domains are allowed initially only if the figure or cause domains are lexically empty, or if pragmatic changes apply:

(58, a) *q'uzi-ne śamp-e*

lamb:ABS-3SG:A slaughter-PERF

‘(S)he has slaughtered a lamb.’

(b) *ćóća k'ul-l-u gölö k'ic'k'e źe-ne*

read earth-SA-DAT much little stone:ABS-3SG:S

‘In the loamy soil<sub>TOP</sub> there are many little stones.’

In pragmatically unmarked structures we arrive at a significant hierarchy, cf.

(59) Preference for initial position:

S < PERIPH < V

A < IO < PERIPH < O[-def] < V

A < IO < O[+def] < PERIPH < V

This hierarchy additionally illustrates that the effect domain is strongly coupled with the relational segment if it conveys new information. If it represents a given topic it more strongly amalgamated to the preceding constituents.

The text in your handout demonstrates that the speaker uses pragmatic variations in the scenic arrangement only sporadically. There are only two exceptions from the basic order that clusters constituents initially and in medial position, followed by the verbal relation. This hints at a rather routinized way of accommodating the scenic arrangement to the attention/information flow. The two exceptions are found in the beginning of the text, cf.

(60, 1) *ba-ne-k-e sa cawal*

be-3SG:S-\$-PERF one sparrow:ABS

‘[There once] was a sparrow.’

(2) *šo-t'-ay tur-e sa cac ta<sup>š</sup>q'-ec-e*

DIST-SA-GEN foot-DAT one thorn:ABS stick-LV:INTRANS:PAST-PERF

‘A thorn was stuck in its [lit. that one’s] foot.’

(60,1) represents a typical intrada to folk tales in Udi. The word order is strongly ritualized and should not be analysed in a cognitive sense (except for the fact that such an ordering usually indicates the commencement of a story). (60,2) is exceptional because it positions the

landmark in front of its trajector. This is a topicalizing strategy that links the given topic component represented by the anaphoric pronoun to the new topic of the preceding phrase.

From this we can conclude that the speaker prefers a rather stereotypical information flow that does not allow significant pragmatic intervention. In consequence, we should assume that idiosyncratic cognitive processes that may manipulate the structure of a known text do not play an important role with respect to this text.

#### **4. Conclusions**

In my paper I could only address a selection of those features that constitute and control the clausal organization of Udi. Yet, I hope it has become clear that clausal organization in Udi is motivated by the heavy interaction of a broad range of primary and secondary cognitive strategies. Only a very small part of clausal grammar can be directly related to cognitive aspects such as conceptualization, semantic hierarchies, iconicity, etc. In most parts, Udi grammar – just as the grammar of every natural languages – has to be described in terms of a multicausal scenario that respects the polycentric architecture of human cognition as well as quasi-autonomous dynamics stemming from routinization and ritualization.

In this sense, the cognitive typology of clausal organization cannot be restricted to classical explanatory paradigms of Cognitive Linguistics. Cognitive Typology is more: If we claim that human language emerges from and is processes by cognition and by nothing but cognition, we need an adequate linguistic theory that tells us how the different domains of the polycentric network of cognition interact and produce linguistic variation in space and time. Methods emerging from such a theory should be eclectic in nature: they should condense all experience made in linguistics since its beginnings to a pluralism in methods that, however, does not contribute to hapazardness in linguistics. Rather, this pluralism should be anchored in a theoretical framework that bundles methodical experience in accordance to the basic claim of Radical Cognitive Linguistics, namely that in principle linguistics cannot be other than cognitive.

The framework of a ‘Grammar of Scenes and Scenarios’ as allusively described in this paper tries to modestly contribute to this aim. GSS claims that language starts with the cognitive construction of reality in terms of communication. The routinization of these constructional procedures accounts for language variation just as the cognition<>communication interface accounts for universal principles of scenic organization and grammaticalization.