

RUNNING HEAD: EYE GUIDANCE IN UIGHUR

Eye Movements Guided by Morphological Structure:

Evidence from the Uighur Language

Ming Yan (1), Wei Zhou (2), Hua Shu (2), Rizwangul Yusupu (2), Dongxia Miao (3),

André Krügel (1), & Reinhold Kliegl (1)

(1) Department of Psychology, University of Potsdam, Germany,

(2) State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal
University, P. R. of China, and

(3) Department of Chinese Minority Language and Literature, Minzu University of
China, P. R. of China

Address for correspondence:

Ming Yan

Department of Psychology, University of Potsdam

Karl-Liebknecht-Str. 24/25, 14476 Potsdam-Golm, Germany

Emails: mingyan@uni-potsdam.de

Abstract

It is generally accepted that low-level features (e.g., inter-word spaces) are responsible for saccade-target selection in eye-movement control during reading. In two experiments using Uighur script known for its rich suffixes, we demonstrate that, in addition to word length and launch site, the number of suffixes influences initial landing positions. We also demonstrate an influence of word frequency. These results are difficult to explain purely by low-level guidance of eye movements and indicate that due to properties specific to Uighur script low-level visual information and high-level information such as morphological structure of parafoveal words jointly influence saccade programming.

During reading, the eyes of a reader are sent to different positions in the text to acquire lexical and semantic information. Research on eye-movement control in reading alphabetic languages has reached the generally accepted conclusion that the center of the word which is to be fixated serves as the intended landing position for the next saccades because word processing is assumed to be optimal at this location (McConkie, Kerr, Reddix, Zola, & Jacobs, 1989; O'Regan & L  vy-Schoen, 1987). Word centers are calculated on the basis of word lengths. Therefore, a major cue to determine where to fixate next is the low spatial-frequency information (i.e., spaces between words) in parafoveal or peripheral vision. One of the topics debated recently is whether or not variables other than low-level visual information can influence where the eyes initially fixate in a word in reading (see Rayner, 2009; for a review). In the present study, we provide clear evidence that saccade-target selection in eye-movement control is also influenced by the morphological structure of words and by word frequency in at least one writing system.

Fixation landing-positions are not always precisely at the intended locations (i.e., word centers). Due to random oculomotor error and the saccadic range effect which was explained as either a systematic range-error (McConkie, Kerr, Reddix, & Zola, 1988) or an error occurring at the perceptual level (Engbert & Kr  gel, 2010), first-fixation landing-positions (FLPs) form a Gaussian distribution peaking slightly to the left of word centers, labeled the preferred viewing location (PVL; Rayner, 1979). Rayner's (1979) observation of a PVL effect has been replicated in a number of studies; they are consistent with the original observation that initial fixations are primarily driven by low-level visual information. FLPs also depend on the launch site of the saccade (i.e., the distance of the last fixation to the beginning of the currently fixated word): The peak of the Gaussian distribution moves towards the beginning of

words as launch sites increase (Engbert & Krügel, 2010; Nuthmann, Engbert, & Kliegl, 2005; McConkie et al., 1988).

Such PVL curves and their underlying mechanism of word-based saccade-target selection in reading require knowledge of the beginning and end of the target word as indicated by spaces between words. For example, if spaces are removed from English texts, the PVL curve no longer follows a Gaussian shape, but decreases sharply and linearly from the beginning to the end of a word (Rayner, Fischer, & Pollatsek, 1998; Rayner & Pollatsek, 1996). Similar PVL curves were also observed during reading Chinese texts (Li, Liu, & Rayner, 2011; Yan, Kliegl, Richter, Nuthmann, & Shu, 2010). Conversely, Nuthmann, Engbert, & Kliegl (2007) reported little difference in PVLs between normal reading and so-called mindless reading of Z-strings with spaces.

In agreement with the view that initial fixations are primarily driven by low-level visual information, Beauvillain (1996) demonstrated that morphological structure in French words (suffixed and prefixed words) had little influence on FLP when word length was matched. Hyönä and Pollatsek (1998) varied the lengths of the component morphemes (i.e., constituent words constructing the compound word) of two-morpheme Finnish words of constant overall word length. They found no effect of morpheme length on FLP. Their result is consistent with a purely visual guidance-mechanism. Similarly, Deutsch and Rayner (1999) compared FLP between single and plural Hebrew words of the same lengths (varying from 5 to 8 letters), and no effect of morphological structure was observed. Finally, Inhoff, Briehl, and Schwartz (1996) found no difference in FLP between bimorphemic suffixed (e.g., *ceaseless*) and monomorphemic words (e.g., *arthritis*), but fixations were slightly closer to the center when bimorphemic compound-words were fixated (e.g.,

blueberry).

Underwood, Clews, and Everatt (1990) hypothesized that eye-movement guidance can also be based on high-level semantic parafoveal information processing. They observed that readers' saccades took their eyes further into the word if decisive information was located in the second half (i.e., *superstore*), as opposed to those words with decisive information located in the first half of the word (i.e., *engagement*), underscoring the view that the eye guidance system has knowledge of the information density of the word to be fixated before its fixation actually takes place (see also Hyönä Niemi, & Underwood, 1989). However, Underwood et al.'s (1990) critical finding was not replicated in later studies (e.g., Rayner & Morris, 1992; Hyönä 1995).

Lavigne, Vitu and d'Ydewalle (2000) reported a shift of the initial fixation-location towards the end of words for highly frequent and predictable target words when prior fixations were located close to the beginning of the target word. These results suggest that the decision where to send the eyes next in reading might be affected by ongoing linguistic processes. Rayner, Binder, Ashby and Pollatsek (2001) found that, compared to unpredictable words, readers skipped predictable words more often and spent less time processing them when they did fixate them; however, there was only a very small influence of predictability on FLP and this result could be explained as being due to skipping-related mislocated fixations (see also Vainio, Hyönä & Pajunen, 2009 and Rayner, Reichle, Stroud, Williams, & Pollatsek, 2006, who found no influence of lexical predictability on FLP at all).

Finally, Hyönä (1995) reported that irregular letter combinations at word beginnings attracted a fixation closer to the word beginning, indicating that word length is not the only type of information that will influence the decision where to

fixate next. Similarly, White and Liversedge (2004) also found that initial fixation positions shifted towards word beginnings when the first letters of target words were misspelled. These results are in agreement with the view that abstract letter-codes for the first few letters are activated parafoveally (Rayner, McConkie, & Zola, 1980). It is perhaps worth noting that the FLP modulation, observed in both studies, was mainly due to low-level visual/orthographic information. This modulation effect only took place when the irregular/misspelled letters were close to the fovea.

Summing up, the studies reviewed above indicate clearly that low-level features are primarily responsible for FLP, whereas there is a lack of strong evidence supporting the hypothesis that saccade-target selection (as indexed by FLP) is also influenced by high-level information such as the morphological structure of parafoveal words. One possible reason for the absence of positive evidence is that affixes are generally much shorter than root morphemes in Indo-European languages. This may reduce the relevance of affixes in saccade-target selection. Alternatively, researchers may choose orthogonal designs using target words with short root-morphemes as experimental materials, so that the lengths of root morphemes and affixes are roughly the same. However, this in turn limits both the amount of available material and the number of observations.

The Uighur language is well suited to demonstrate an effect of affixes (in fact, suffixes). Uighur, formerly known as Eastern Turki, became a written language in the fifth century. Today, an Arabic-derived alphabet is the official graphemic system used for Uighur in the Xinjiang Uighur Autonomous Region, under the administration of the People's Republic of China. Uighur is an agglutinative alphabetic language. This means that many suffixes serving different functions can be attached to the end of a word; they denote, among others, person, number, direction, tense, case, and voice.

For example, the word بولمايدىغانلىقىنى (impossibility) is composed of one root بول (meaning *able*) and 5 suffixes: ما , يدىغان , لىق , ى and نى , which indicate negation, tense, part of speech, person and ablative, respectively. Some of the letters look different in the whole word than in isolated forms or suffixes, because they are written in successive strokes (so-called closing letters) in the whole word; each letter has up to four different forms (Engesath, Yakup, & Dwyer, 2009; Hahn, 1991). Figure 7 contains a few example sentences.

Another important feature of Uighur script is its right-to-left reading direction. It has been demonstrated that the perceptual span in reading (i.e., the area of text from which visual information is extracted during fixation) is asymmetric to the right of fixation in left-to-right scripts such as English, because readers spread attention in the direction of reading to acquire incoming information (McConkie & Rayner, 1975). Conversely, Pollatsek, Bolozky, Well, and Rayner (1981) found a rightward asymmetry when the Israeli readers read in English; the leftward asymmetry only emerged when the readers were reading Hebrew because of its right-to-left reading direction. Deutsch and Rayner (1999) found that the PVL curve for readers of Hebrew texts was similar to that of readers of English: PVL curves in both scripts peaked close to the word center with shifts towards the word beginning. Pollatsek et al. and Deutsch and Rayner further claimed that their result was evidence against the lateral-dominance hypothesis, which suggests that the PVL effect has more letters projected into the left hemisphere of the brain for better linguistic processing.

As noted above, due to the right-to-left reading direction of the Uighur language, the present study offered itself as a further test of these PVL effects. More importantly, we tested the effect of morphological structure (i.e., the number of suffixes) on FLP during the reading of Uighur.

Previous research is not clear with respect to frequency effects on FLPs: Rayner, Sereno, and Raney (1996) and White and Liversedge (2004) found no evidence of frequency effects, but other studies reported that readers' eyes landed further into high- than low-frequency words (Rayner et al., 2006) or when initial morphemes of compounds were of high rather than of low frequency, with no difference in frequency of the compound (Hyönä & Pollatsek, 1998). Therefore, we also tested the effect of word frequency on FLPs in the present experiment. Last, but not least, morphological-complexity and frequency effects need to be established beyond the already known effects of word length and launch site.

In summary, we examined the effects of the following four variables: word length, launch site, morphological complexity, and word frequency on FLPs during right-to-left reading of Uighur sentences. Moreover, we report additional analyses of how all these variables impact on subsequent fixation durations and refixation rates.

Experiment 1

Method

Subjects

Forty-eight undergraduate students from Beijing Normal University with normal or corrected-to-normal vision, who were native speakers of Uighur, participated in Experiment 1. The sessions lasted for about 30 minutes. Each student received 20 CNY for participation.

Material

A total of 120 Uighur sentences were constructed. They were 7 to 12 words in length ($M=9.2$, $SD=1.2$) and comprised 1106 tokens of 846 words (types). Word length varied from 2 to 21 letters ($M=7.5$, $SD=3.0$). The percentages of word length in the range of less than 5, 5 to 10, above 10 letters were 11%, 73%, and 16%,

respectively. Word frequencies (i.e., frequencies of complete word forms) were taken from the official survey of website terms for modern Uighur based on four million words (Yusup, Zhao, Pan, & Abdurahim, 2010). The percentages of words with occurrences in the range of less than 100, 100 to 1000, 1001 to 10,000 and above 10,000 per four million words were 13%, 48%, 34%, and 5%, respectively. The percentages of words with 0, 1, 2, above 2 suffix(es) were 34%, 38%, 19%, and 9%. The lengths of root morphemes varied from 1 to 11 letters ($M=4.7$, $SD=1.7$) and the total numbers of letters of suffix(es) in suffixed words varied from 1 to 15 ($M=3.9$, $SD=2.3$).

Apparatus

Eye movements of the subjects were recorded binocularly with an EyeLink II system (500 Hz). Sentences occupied only one line on the screen and were presented one at a time at the 1/3 vertical position from the top of the screen of a 19-inch ViewSonic G90f CRT Monitor (1024×768 resolution; frame rate 100 Hz) controlled by a P4 computer running at 2.8 GHz under a Windows XP environment. Subjects were seated 50 cm in front of the monitor with the head positioned on a chin rest. Texts were displayed using 20 pt bold fonts, with each letter subtending 0.46 degrees of visual angle.

Procedure

Each subject read half of the total number of sentences (i.e., 60); they read the other half of the sentences in a Chinese translation and the sentences were counterbalanced across subjects. The current report is based only on eye movements from Uighur reading. Subjects were calibrated with a standard nine-point grid. After validation of calibration accuracy, a fixation point appeared on the right side of the monitor. If the eye tracker identified a fixation on the fixation spot, the fixation point

disappeared and a sentence was presented such that the center of the first letter in the sentence appeared at the fixation-point position.

Subjects were instructed to read the sentences for comprehension and to signal the completion of a trial by fixating a dot in the lower left corner and pressing a button on a joystick. Then the sentence was replaced by a yes-or-no question pertaining to the current sentence on 14 trials (23%), which the subjects answered by pressing one of two different joystick buttons. These questions served primarily to ensure reading for comprehension. Subjects correctly answered 88% ($SD=8\%$) of the questions. Following a response, fixation on a fixation point initiated the presentation of the next sentence or a drift correction. The experimenter carried out an extra calibration if the tracker did not detect both eyes within a pre-defined window of 1.5° by 1.5° around at the initial fixation point.

Data Analysis

Fixations were determined with an algorithm for binocular saccade detection (Engbert & Kliegl, 2003). After deleting sentences containing a blink or loss of data (5%), there were 22684 fixated words (34661 fixations). Words were excluded from the analysis when they met the following two sets of criteria. The first set comprises the usual exclusion criteria (i.e., first and last words and first and last fixated words of a sentence and hyphenated words: 25%; words on which first-fixation durations [FFDs] shorter than 60 ms or longer than 600 ms or gaze durations [GDs] longer than 800 ms: 6%). FFD is the first fixation duration on a word, irrespective of the number of fixations; GD is the sum of fixation duration during the first pass reading of the word. After this filtering there were 16330 fixated words (72%) left.

The second set of exclusion criteria is specific to the analysis reported here. We excluded words with first fixations on the space before them ($n=1785$) and words with

launch sites from the last letter of the last word (n=304) or from more than ten letters before the current word (n=1105). This left a total of 13523 fixations. We carefully checked the impact of these criteria on our results and maintain that our conclusions do not depend on them; their inclusion, however, requires much more complex models than the one we report here. For example, the inclusion of fixations with launch sites larger than ten letters requires a polynomial parameterization of the launch site effect (i.e., a quadratic term and its interactions with the other covariates) in what arguably qualifies already as a very complex statistical model.¹

In line with previous research, we used a log10 transformation for word frequencies and log2 transformation for word length. These transformations reduce the skew in the distribution of these variables and guard against spurious effects (Kliegl, Nuthmann, & Engbert, 2006).² All four covariates were centered on the sample means. Also as in much prior research, analyses of residuals strongly suggested that log transformation was required for FFDs and GDs.

Statistical inferences about effects of word length, launch site, morphological complexity, and word frequency on FLP, FFD, and GD are based on linear mixed models (LMM); effects on refixation probabilities (RFPs) and skipping probabilities (SKPs) were analyzed with generalized linear mixed models (GLMMs). Effects larger than twice their standard errors are interpreted as significant (i.e., given the number of subjects and observations for each subject, the *t*-statistic [M/SE] effectively corresponds to the *z*-statistic). We also tested the significance of critical fixed effects and interactions with log likelihood ratio test (LRT) as described below.

In addition to the four main effects (i.e., linear trends) and the interactions between them, we estimated model parameters of variance components for subjects, sentences and word tokens (i.e., varying intercepts) as well as variance components

and correlation parameters for subject-related experimental main effects. In other words, we started with a “full model” (e.g., Zuur, Ieno, Walker, Saveliev, & Smith, 2009; Barr, Levy, Scheepers, & Tily, 2013). Such a model is likely to be overparameterized and mask significant effects in a model with fewer parameters. Therefore, we reduced the model by systematically removing non-significant terms.

“Model pruning” occurred in three steps. In each step we tested whether removal of terms significantly decreased the goodness of fit of the model as reflected in a LRT. In the first step, we eliminated non-significant correlation parameters. In the second step, we tested the significance of each variance component. In the third step, we tested the significance of higher-order interactions in the fixed-effects part of the model. We used restricted maximum likelihood (REML) estimates for model comparisons involving correlation parameters or variance components (steps 1 and 2) and maximum likelihood (ML) estimates for comparisons involving models with different fixed effects (step 3), following the recommendation of Pinheiro and Bates, (2000). Analyses were carried out with the *lmer* program of the *lme4* package (Bates, 2010; Bates, Maechler, & Bolker, 2011) in the R environment for statistical computing and graphics (R Development Core Team, 2012). For graphics we used Wickham’s (2009) *ggplot2* package.

Results

Comparison with Previous Research

Does Uighur reading replicate benchmark results from other alphabetic languages? As shown in a comparison in Table 1, our FLP results of Uighur reading were in good agreement with previous results of Hebrew (Deutsch & Rayner, 1999), English (e.g., Rayner, 1979; McConkie et al., 1988) and German reading (Nuthmann & Kliegl, 2009).³ This also holds for PVL curves (Figure 1).

Table 1

Mean FLPs by word length in the present and previous studies.

	Word length						
	3	4	5	6	7	8	9
RL Present study	2.0	2.4	2.7	3.2	3.3	3.8	4.1
RL Deutsch & Rayner (1999)	2.3	2.7	2.8	3.2	3.5	3.8	-
LR Rayner (1979)	2.1	2.4	2.8	3.2	3.5	3.8	-
LR Rayner et al. (1996)	-	-	2.8	3.1	3.6	4.1	-
LR Nuthmann & Kliegl (2009)	1.7	2.1	2.5	2.9	3.0	3.2	3.6

Note. Values represent mean number of letters from the beginning of a word. RL: right-to-left reading; LR: left-to-right reading.

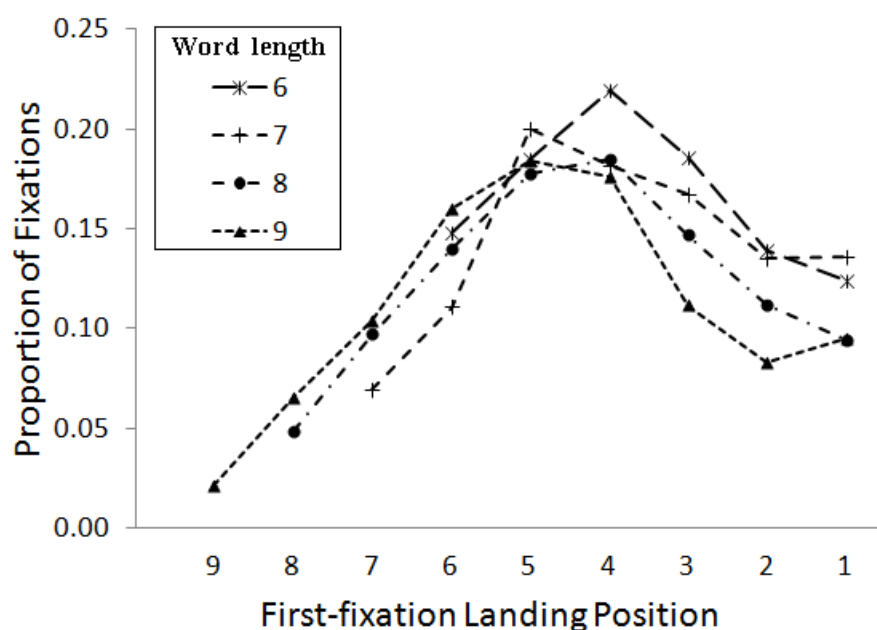


Figure 1. PVL curves for 6- to 9-letter words.

Effects of Morphological Structure on First-Fixation Landing-Positions

Table 2 displays the 13,523 first-fixations on words we observed in the space spanned by the number of letters and number of suffixes of words, revealing the inherent dependency between these two word variables. As it turned out, the LMM

estimates of significant effects on FLPs did not change across model pruning. Therefore, we report results with reference to the full model, summarized in Table 3.

Table 2

Number of fixations broken down by word length and morphological structure.

Word length	Number of suffixes					
	0	1	2	3	4	5
2	37	0	0	0	0	0
3	385	2	0	0	0	0
4	237	61	0	0	0	0
5	1176	697	0	0	0	0
6	1002	924	129	0	0	0
7	413	950	211	15	0	0
8	537	978	481	0	0	0
9	139	586	702	115	0	0
10	87	339	499	220	0	0
11	75	294	630	133	16	0
12	0	136	316	190	0	0
13	0	0	215	117	49	0
14	0	20	18	95	0	0
15	0	0	0	166	17	0
16	0	0	0	17	50	0
17	0	0	0	17	15	15

Note. Rectangle demarcates cells included in Gaussian fit analyses.

The largest effects were due to word length ($b=1.58$, $SE=.10$, $t=15.32$) and launch site ($b=-.43$, $SE=.02$, $t=-24.31$). As shown in Figure 2, which displays the highly significant interaction between these two variables ($b=-.18$, $SE=.02$, $t=-9.18$), FLP decreased with launch site and increased with word length, but the word-length effect started to disappear for very large launch sites. Indeed, there is some discrepancy between model estimates and observed means for large launch sites. Apparently, evidence for saccade-targeting effects requires the eyes to be within

around ten letters from the beginning of the word. We should not be too impressed by the regularity of these results, because in part they reflect the structural constraint of word length on the maximum FLP. Nevertheless, these effects represent benchmark results in agreement with previous research on other alphabetic languages.

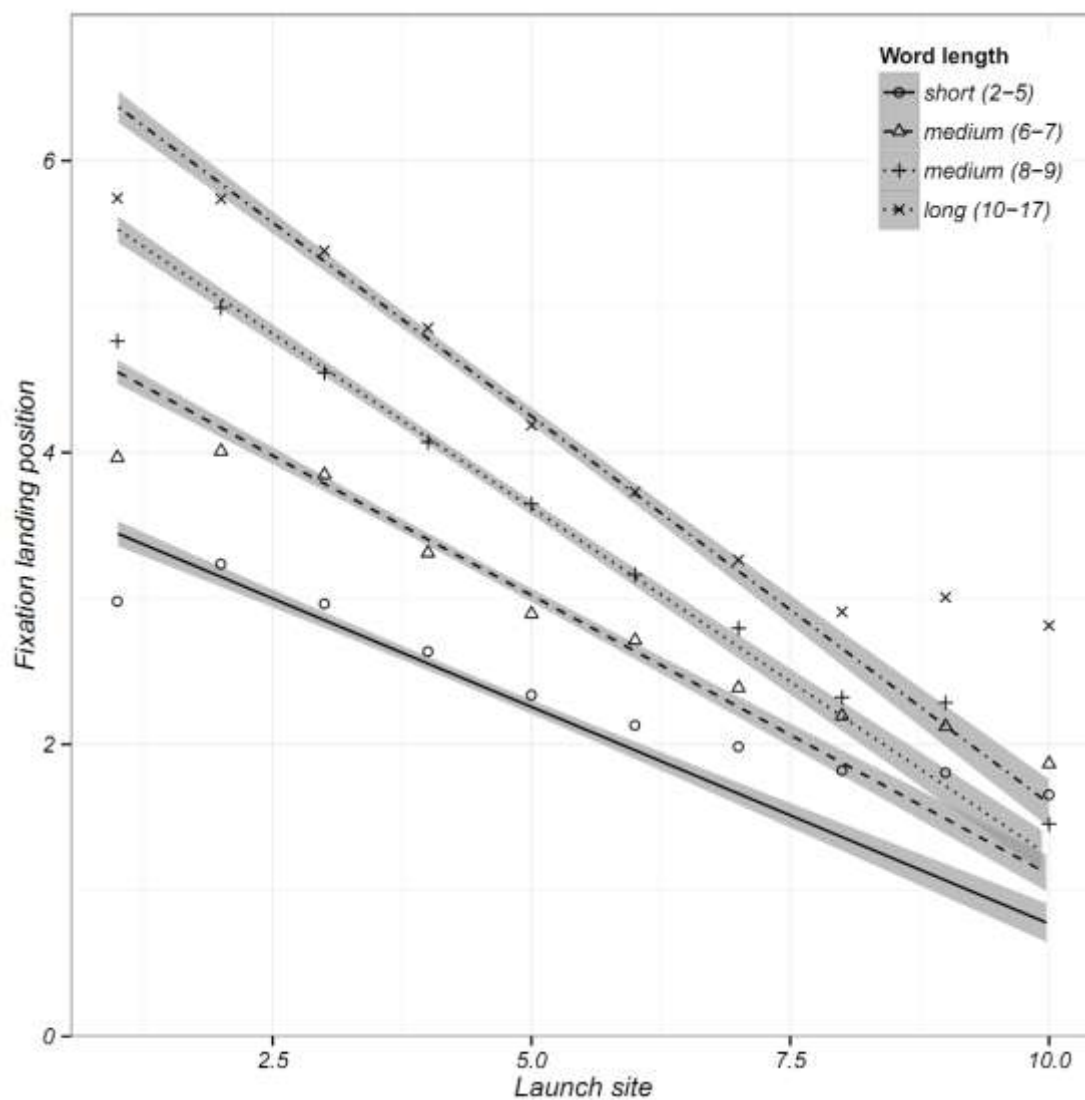


Figure 2. Illustration of FLP effects due to word length and launch site. Word lengths were grouped into four categories (2-5 letters; 6-7 letters; 8-9 letters; 10-17 letters) for this graph; LMM estimates were based on specifying all variables as continuous variables. Lines and 95%-confidence bands are based on these estimates; points are observed means.

Table 3. LMM estimates of FLP (Experiment 1)

Fixed-effects parameters						
	Estimate	SE	t-value			
Grand mean (GM)	3.666	0.106	34.56			
Word length (WL)	1.583	0.103	15.32			
Launch site (LS)	-0.432	0.018	-24.31			
Suffix number (SN)	-0.101	0.042	-2.44			
Word frequency (WF)	0.063	0.046	1.37			
WL x LS	-0.184	0.020	-9.18			
WL x SN	0.093	0.055	1.68			
LS x SN	0.004	0.010	0.38			
WL x WF	0.006	0.093	0.06			
LS x WF	-0.007	0.012	-0.56			
SN x WF	0.014	0.057	0.25			
WL x LS x SN	0.023	0.015	1.58			
WL x LS x WF	-0.006	0.025	-0.24			
WL x SN x WF	-0.059	0.070	-0.84			
LS x SN x WF	0.017	0.015	1.13			
WL x LS x SN x WF	0.005	0.019	0.26			
Variance components	SD	Correlation parameters				
Word - GM	0.66					
Sentences - GM	0.17					
Subjects - GM	0.69	GM				
Subjects - WL	0.47	0.97	WL			
Subjects - LS	0.11	-0.28	-0.39	LS		
Subjects - SN	0.08	-0.68	-0.53	0.27	SN	
Subjects - WF	0.03	-0.19	-0.10	0.60	0.76	WF
WL x SN	0.16	-0.06	-0.01	0.39	0.46	0.66
Residual	1.47					

Note: WL: log2 word length; LS: launch site; SN: morphological structure; WF: log10 word frequency. Log Likelihood: -25122; REML Deviance: 50243; N of observations: 13523; N of sentences: 120; N of subjects: 48.

The new and theoretically important effect uncovered with this study is a significant effect of morphological complexity ($b=-.10$, $SE=.04$, $t=-2.44$; Figure 3): FLP was estimated closer towards the beginning of the word as the number of suffixes increased. Importantly, as also shown in the panels of Figure 3, this effect was opposite to the observed means, which was strongly dominated by correlated effect of word length.

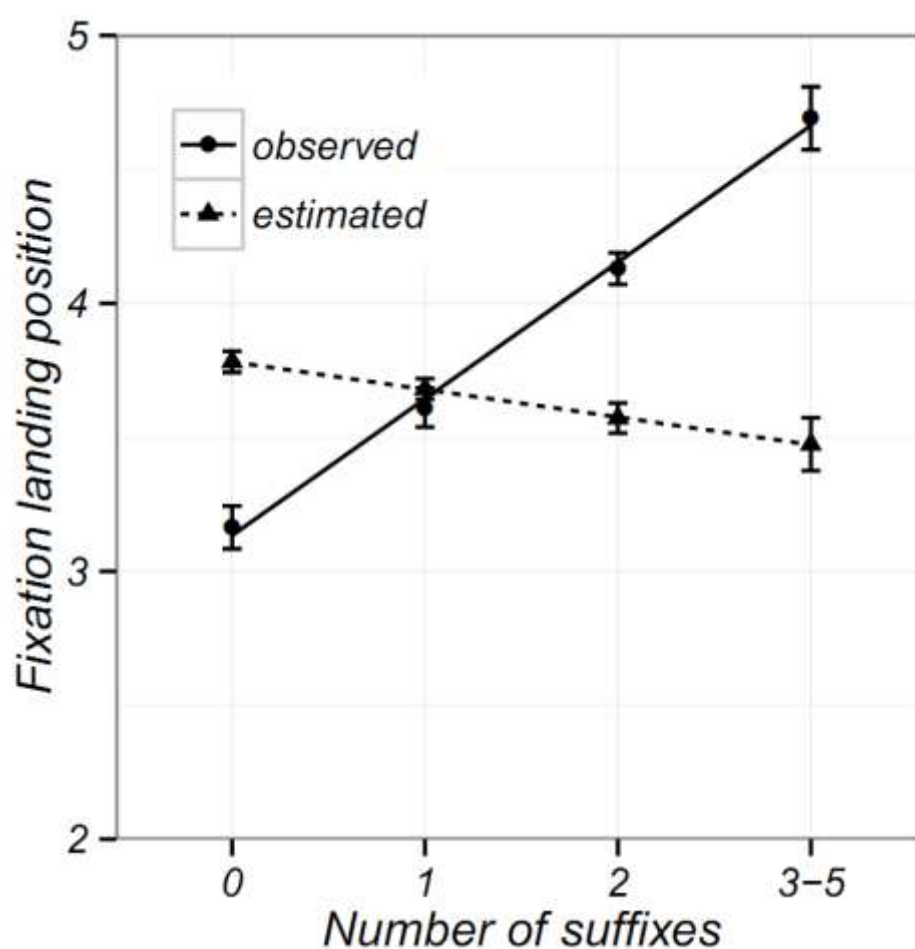


Figure 3. FLP main effect of morphological complexity (i.e., number of suffixes). Observed means are plotted in dots; partial effects based on LMM estimates are in

rectangles. Error bars are 2 SEs based on within-subject cell means for observations or LMM-residual for model estimates.

LMM estimates of variance components (bottom part of Table 3) revealed reliable individual differences for mean FLP and the four effects associated with word length, launch site, number of suffixes and word frequency. There were also significant correlation parameters; five of them with magnitudes larger than .50. Mean FLP correlated positively with the word-length effect (.97) and negatively with the effect of morphological complexity (-.68), that is subjects who jumped further into words overall exhibited a larger word-length effect and a smaller suffix effect. In addition, subjects who showed a positive morphological complexity effect also had a positive word frequency effect (.76) but a negative word length effect (-0.53). Finally, subjects who were sensitive to word frequency were also sensitive to an interaction between word length and morphological complexity (.66). Possibly, these individual differences map onto differences in reading strategy or reading skill.

Two additional analyses were conducted. First, in order to address questions about low-level confounds (e.g., Hyönä 1995), we report results from an alternative LMM in Appendix 3, including initial bigram frequency (weighted by lexical frequency) which was calculated from the same dictionary (i.e., Yusup et al., 2010): the addition of this covariate did not increase the goodness of fit in likelihood ratio test [$\chi^2(16) = 17.012, p = .385$], nor change the significance of number of suffixes on FLP. Second, in Appendix 4 we report influence of two types of suffixes, derivational suffix and inflectional suffix, on saccade-target selection: results strongly suggest that these two types of suffixes are very similar with respect to their influences on FLP.

Fitting Distributions of First-Fixation Landing-Positions

To further confirm the influence of number of suffixes on the distribution of

FLPs, we addressed an important drawback of the analyses of within-word landing-position distributions in natural reading tasks. Within-word landing-position distributions in reading approximate broad Gaussian distributions which are typically truncated at word boundaries, suggesting that a substantial proportion of fixations fall to the left or right of the boundaries of the selected target word due to saccadic error (mislocated fixations; McConkie et al., 1988, Engbert & Nuthmann, 2008). Thus, within-word landing positions represent only a certain proportion of an underlying landing-position distribution. As a consequence, the mean value computed from within-word fixation locations can be far from the real mean value of the underlying distribution. It has for example been demonstrated for normal reading that the mean value of the underlying landing-position distribution can occasionally be even outside the word boundaries (Krügel & Engbert, 2010).

Following McConkie et al. (1988), we fitted truncated Gaussian curves on experimentally observed first-fixation landing-positions within the test words to estimate the true mean landing-position. Using a grid-search procedure (mean values and standard deviations were varied with a step size of 0.1 letter units, c.f. Krügel & Engbert, 2010), we fitted truncated Gaussian curves on FLPs for words demarcated with a rectangle in Table 1 (i.e., word lengths 6 to 9 with 0 to 2 suffixes). Note that there were at least 100 fixations in each cell of this partition.

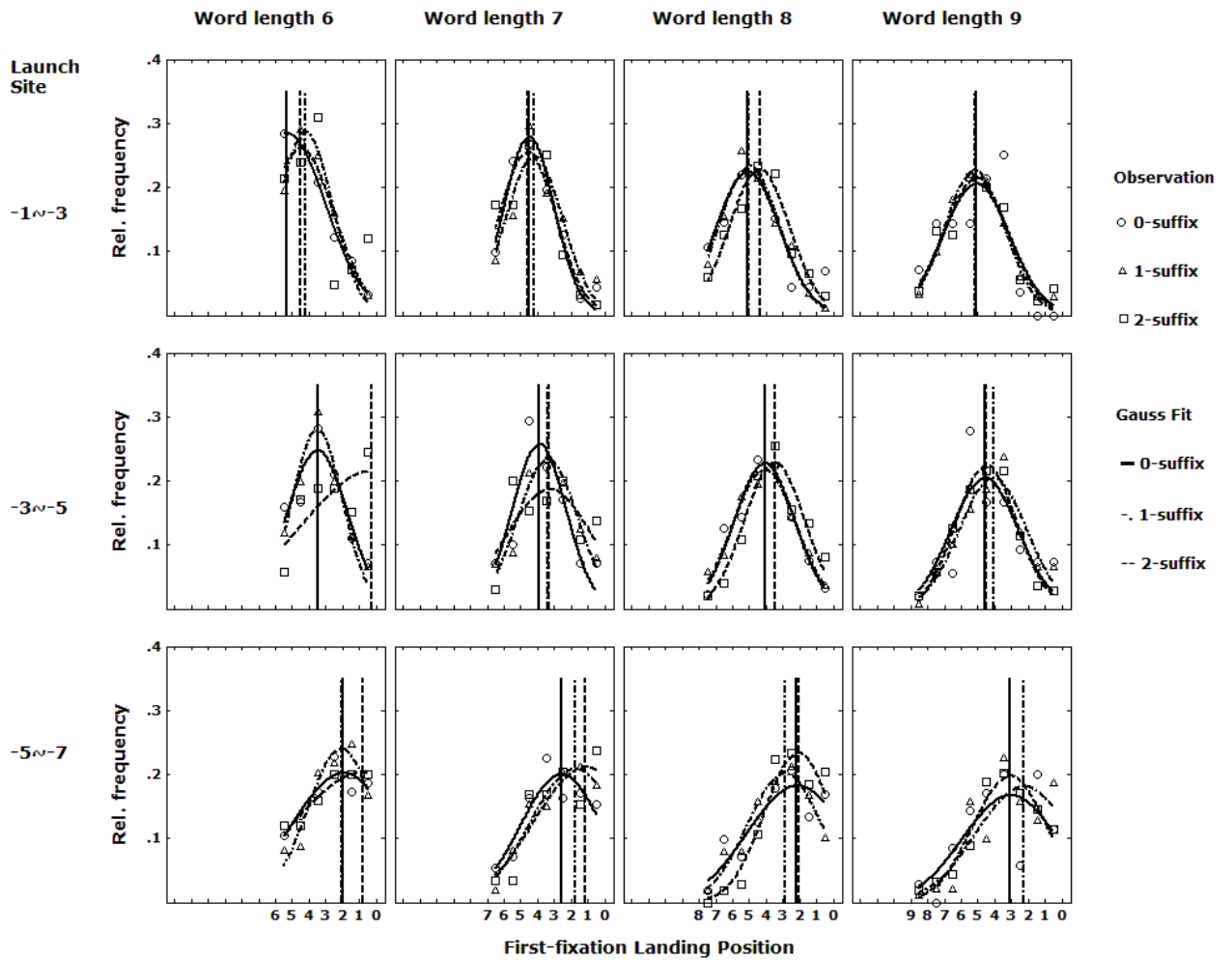


Figure 4. FLPs and their Gaussian-fit distribution curves for words with different numbers of suffixes, broken down for different launch sites (-1 to -3, -3 to -5 and -5 to -7) and word lengths (6-9). The vertical lines indicate means in Gaussian-fit curves. A launch site of -1 means that the saccade originated at the last letter of the previous word.

Figure 4 presents the fitted curves for the distribution of FLP on 6- to 9-letter words with different numbers of suffixes and for different launch sites. Based on the parameter estimates of the truncated Gaussian curves, the numerical landing-site difference reported above turned out to be even more pronounced than suggested by arithmetic mean statistics, which demonstrates the reliability of our results. Further details about means (standard deviations) of FLPs are reported in Appendix 1 (upper

part).

Effects of Morphological Structure on FFD, GD, Skipping and Refixation Rates

In this section we document the significant effects of morphological structure (and associated interactions) on other additional eye-movement measures. These analyses were set up as a cumulative sequence, because FLP is followed by FFD. To capture this behavioral sequence, we included polynomial FLP as an additional covariate for FFD, GD and refixation rate analyses.

There were many reliable predictors for fixation durations, for example, first-fixations were longer when they landed close to the word center ($b=5.830$, $SE=.736$, $t=7.92$ and $b=-4.622$, $SE=.466$, $t=-9.91$, for linear and quadratic trends of FLP on FFD), known as an inverted optimal viewing position (IOVP) effect as reported in many alphabetic scripts (e.g., Hyönä & Bertram, 2011; Nuthmann, Engbert, & Kliegl, 2005; Vitu, McConkie, Kerr, & O'Regan, 2001). FFDs and GDs were longer on less frequent words ($b=-.017$, $SE=.007$, $t=-2.57$ and $b=-.049$, $SE=.009$, $t=-5.45$; for FFD and GD analyses, respectively). FFD increased with increasing launch site ($b=.010$, $SE=.003$, $t=3.36$) and GD increased with increasing word length ($b=.238$, $SE=.018$, $t=13.12$). These effects have been well-documented in the literature and are not directly related to the central topic of the present study. Therefore, LMMs estimates for FFD and GD are only reported in Appendix 2. Below we focus on morphological structure influences.

There were two significant interactions with morphological complexity in FFD and two in GD. As shown in Figure 5a (first row, middle panel), the IOVP effect was strong only for words shorter than 10 letters and with one or two suffixes; $b=2.442$, $SE=.734$, $t=3.33$, for the interaction between word length and FLP. Figure 5b (second row, left panel) demonstrates an interaction between morphological complexity and

word length in FFD ($b=-.040$, $SE=.008$, $t=-5.20$): FFDs increased with increasing morphological complexity for short words, but decreased for long words. Possibly, readers processed the whole word when it was short, but they processed only the root morpheme as a first step when it was long. In agreement with the above assumption, there was a general increase in duration with morphological complexity as shown in Figure 5c (second row, right panel), but the effect was most pronounced for highly frequent long words ($b=.033$, $SE=.015$, $t=2.25$). Finally, there was also a significant three-way interaction between word length, number of suffixes and FLP on GD ($b=-2.516$, $SE=1.059$, $t=-2.38$): GDs on medium and long words were longer when FLPs were closer to word beginning, whereas the opposite pattern was observed for short monomorphemic words and there was little influence of FLP on GD for short words with 1-2 suffixes.

As far as refixation probability is concerned, the only significant effect of morphological complexity was an interaction between launch site and number of suffixes ($b=.053$, $SE=.026$, $z=2.04$, $p=.041$), which indicates that suffixed words are more likely to be refixated with increasing launch site, but there is little influence of launch site on refixation rate for monomorphemic words. No effects or interactions associated with morphological complexity were significant for the analogous analysis of skipping probability.

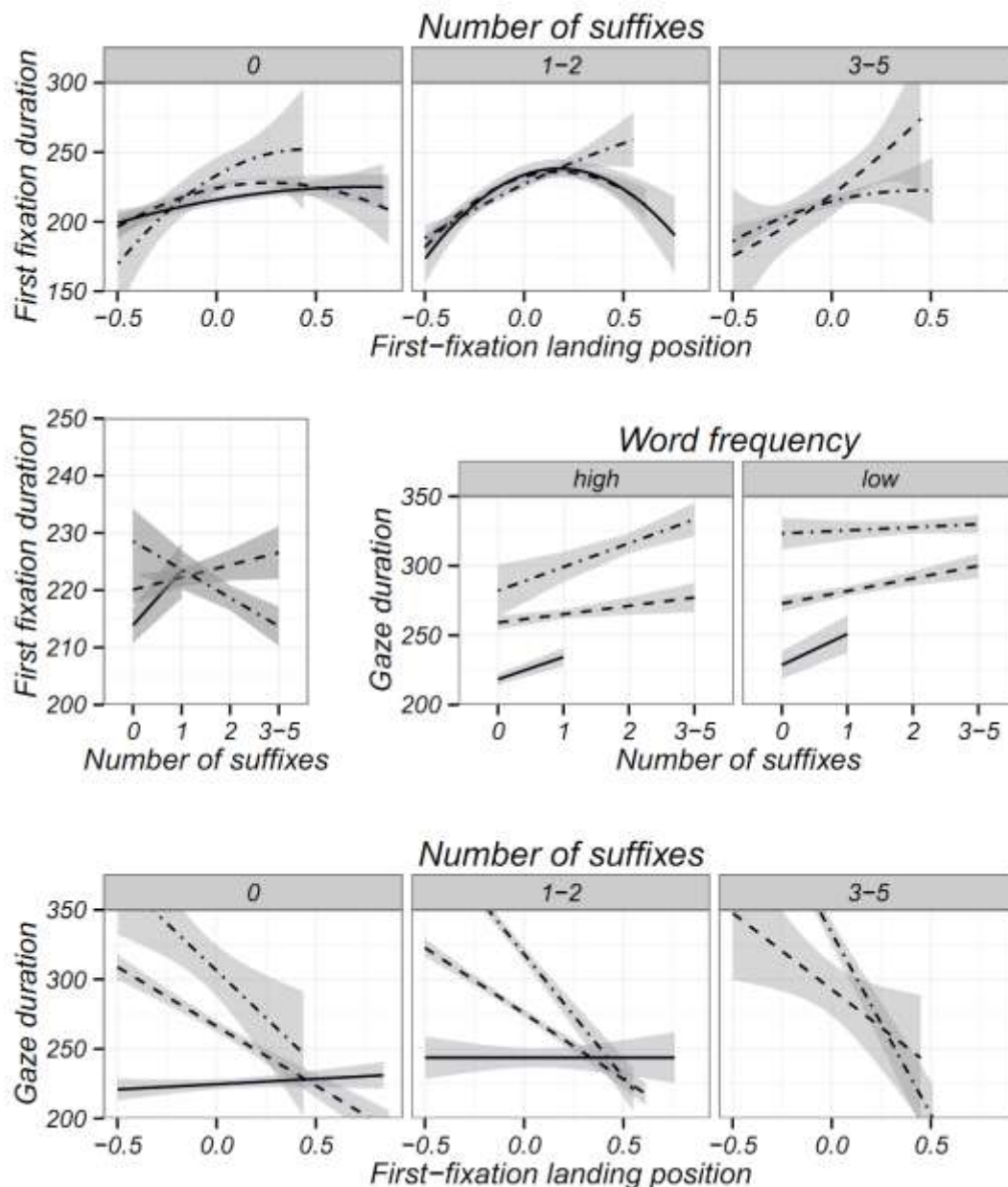


Figure 5. Reliable influences of morphological complexity on FFD (a; top panel and b; middle-left panel) and on GD (c; middle-right panel; d: bottom panel). Words were grouped into three length categories (short words: 2 to 5 letters, solid lines; medium words: 6 to 9 letters, dashed lines and long words: 10 to 17 letters, dot-dash lines) and at low- and high-frequency groups based on the log10 frequency. Cells with fewer than 200 observations were collapsed with their neighbor cells. LMM estimates were based on specifying all variables as continuous variables; lines and 95%-confidence bands are partial effects based on LMM estimates.

Discussion

Results from Experiment 1 confirmed previous findings that the PVL is located between word beginning and word center; with increasing word length, the mean FLP systematically shifted further away from the word beginning, suggesting the primary role of word length in saccade-target selection (Rayner, 1979; Rayner et al., 1996; Rayner et al., 2001). Also, the longer the launch site the closer the fixations landed towards the beginning of words. Furthermore, given the right-to-left reading direction of Uighur scripts, the rightwards-deviated PVL (from the word center) indicates that most visual information is in the readers' left visual field and thus projected into the right hemisphere. Thus, accepting the rationale of Deutsch and Rayner (1999), the PVL phenomenon cannot be explained by the left-hemisphere dominance of linguistic processing. The influence of reading direction on PVL is in agreement with the view that readers need to allocate more of their attention to unidentified strings of letters to acquire incoming information (McConkie & Rayner, 1975).

The most striking finding in Experiment 1 was the effect of morphological structure on FLPs. Initial fixations were directed further towards beginnings of suffixed words than expected on the basis of word length and launch site, which cannot be explained purely by low-level guidance of eye movements. There were also effects of morphological complexity on gaze durations, especially for highly frequent long words. These effects provide independent evidence for a greater processing difficulty associated with an increasing number of suffixes.

Where do Uighur readers send their eyes initially? Results from the present study suggest one possibility: after determining word boundary information on the basis of low spatial frequency, Uighur readers must have segmented a word further into several possible morphological units (i.e., root morpheme and suffix) and selected a

position optimal for the recognition of the root morpheme. In other words, the root morpheme receives higher weight than suffixes in inter-word saccade-target selection. In addition, we had expected that eyes land further into high-frequency than low-frequency words, once we statistically control for word length. Indeed, there was a positive numerical linear effect of word frequency on fixation landing position. This effect was not significant in the full LMM reported. Word frequency, however, was significant in a model without a random factor for words. We reported statistic for the full model, but note that word frequency is known to exhibit nonlinear relations with eye-movement measures (e.g., Kliegl et al., 2006). For example, in the present data, modeling the effect of frequency with a linear and a quadratic trend yielded significant interactions of the quadratic word-frequency component with word length and launch site. Such higher-order interactions are difficult to explain and we did not expect them. Therefore, we stay with the conservative inference that there is no significant evidence for word frequency so far, but this absence of evidence should not be interpreted as evidence for absence of this effect. We will return to the word-frequency effect again in Experiment 2.

In Experiment 1, we analyzed FLPs from all words of the sentences. This analysis faced a high correlation of word length and morphological structure ($r = .72$), because an increase in number of suffixes is usually tied to an increase in number of letters. Therefore, in Experiment 2 we followed up our results with an orthogonal manipulation of a select set of word lengths (6 to 9 letters) and morphological structure (i.e., 0 or 2 suffixes) for target words of sentences, in order to gain experimental control of one confounding factor.

Experiment 2

Current research about eye-movement control during reading comprises (a) a

statistical-control approach, using multivariate statistics such as LMMs, which simultaneously test the effects of a large number of (quasi-) experimental variables in large data sets with many subjects, many sentences, and consequently many observations per subject, and (b) an experimental-control approach based on experimental designs with orthogonal manipulation of a limited number of variables, affording (quasi-)experimental control of confounding variables. Experiment 1 employed the statistical-control approach. Given that morphological structure was not manipulated in Experiment 1, a number of possible confounding factors such as the degree to which current words can be predicted from prior contexts might have potentially influenced the results. Therefore, it is important to corroborate results of Experiment 1 in the context of an experimental design built around target words.

In Experiment 2 we orthogonally manipulated morphological structure (i.e., number of suffixes) and word length (i.e., 6 to 9 letters) of target words and controlled a number of several other word properties. There was one target word per sentence. This way, we aimed at producing further evidence in support of the hypothesis that morphological structure influences saccade-target selection during the reading of Uighur sentences.

Method

Subjects

An independent group of thirty undergraduate students from Beijing Normal University and Minzu University of China with normal or corrected-to-normal vision, who were native speakers of Uighur, participated in Experiment 2. The eye-tracking experiment lasted for about 30 minutes, after which they filled out a brief and adapted version of the language-history questionnaire created by Li, Sepanski, and Zhao (2006). The subjects had an average speaking experience of 21 years ($SD=2$) and

reading experience of 16 years ($SD=2$). The proportions of daily exposure to Uighur print and other scripts (mainly simplified Chinese and English) were 76% ($SD=16\%$) and 24% ($SD=17\%$) respectively. Each student received 20 CNY for their participation.

Another independent group of 17 native Uighur students from the Beijing Normal University participated in a norming study to determine the predictability of the target words. Each student received 10 CNY for their participation.

Material

Eighty-six⁴ pairs of target words (84 nouns and 2 verbs) with different morphological structure (monomorphemic words or words with two suffixes) were selected. These target words ranged from 6 to 9 letters in length, with 31, 30, 11 and 14 word pairs for these word lengths, respectively. Number of letters and parts of speech were identical within each pair. There were also no differences with respect to word frequency (for monomorphemic words: $M=1.592$, $SD=0.656$, and for double-suffixed words: $M=1.569$, $SD=0.544$, log-transformed occurrences per million words): $F(1,171)=0.063$, $p=.803$. In addition, because Hyönä (1995) showed that irregular letter combinations at the beginning of a word are a low-level visual feature that can affect FLP, initial letter bigram frequency was also controlled in Experiment 2 (for monomorphemic words: $M=3.469$, $SD=0.503$, and for double-suffixed words: $M=3.376$, $SD=0.421$, log-transformed occurrences per million bigrams): $F(1,171)=1.706$, $p=.193$. The total number of letters of the suffixes in the suffixed target-words varied from 3 to 6 ($M=3.8$, $SD=1.0$).

In order to minimize the influence of context, within each pair of target words, an identical sentence frame prior to the target words was constructed. Sentence frames after the target words could be different. Sentences were 5 to 13 words in length

($M=7.3$, $SD=1.6$), corresponding to 26 to 85 letters ($M=48.1$, $SD=11.7$). Target words were never among the first two or the last two words. Each sentence was only presented once to a subject with the two conditions counterbalanced over subjects. Each subject read 86 sentences and answered 30 comprehension questions. An example of a sentence pair is shown in Figure 6.

(a) مەن بۇ يەردە پائالىيەت ۋە تەجرىبە لەرگە قاتناشتىم.

(b) مەن بۇ يەردە بالىلىرىم بىلەن ئاشۇ قىيىن كۈنلەرنى تەستە ئۆتكۈزدۈم.

Figure 6. A pair of sentences used in Experiment 2. The target word in sentence (a) is a monomorphemic word, the one in sentence (b) is a suffixed word. The root morphemes are marked by the thin-solid underlining and the suffixes are marked by thick-solid and dotted underlining. Sentence (a) translates as: *I participated in the event and the experiment*; sentence (b) translates as: *I spent the difficult days with my children*.

The sentence contexts were written to be neutral for the two types of target words. In the norming study, we presented all words prior to the target word and asked subjects to predict the next word of the sentence. From 1462 predictions (17 subjects x 86 words), the monomorphemic target words were predicted 5 times (0.3%), and the suffixed words 16 times (1.1%). Thus, as intended, the target words could not be predicted from the prior sentence context—if anything, the morphologically complex suffixed words scored numerically higher on this dimension than monomorphemes: $F(1,85)=2.15$, $p=.146$.

Apparatus, Procedure, and Initial Data Analysis

Apparatus and procedure were largely identical to those in Experiment 1, except that texts were displayed in normal as compared to bold fonts, with each letter

subtending 0.42 degrees of visual angle. Subjects correctly answered 91% ($SD=4.3\%$) of all questions. Sentences containing a blink or loss of data were deleted (i.e., 1% of all trials). After initial screening there were 2332 validly fixated target words. From this set, using the same criteria as in Experiment 1, we excluded (a) 93 words with first durations shorter than 60 ms or longer than 600 ms or with gaze durations longer than 800 ms, (b) 201 words with fixations on the space before the word, and (c) words with last-saccade launch sites smaller than one (77) or larger than ten letters (48). The final data set contained 1953 fixations.

Results

First-Fixation Landing-Positions

Given the much smaller number of fixations in Experiment 2 compared to Experiment 1 and also presumably due to the restricted range for word length and morphological complexity, the LMM analogous to the one reported for Experiment 1 was likely to be overparameterized (although the program did converge to a solution). Interactions of morphological complexity with other variables in analysis of FLP were not significant when appropriate random slopes are included (all t -values < 1.4) and removing these interaction terms did not cause a significant decrement of goodness of fit; likelihood ratio test: $\chi^2(7) = 6.6$, $p = .467$. Therefore, the final model contained four fixed effects as well as subject-related variance components for intercept ($SD=0.51$), word length (0.11), launch site (0.10), and word frequency (0.22) as well as the sentence-related variance component for intercept (0.58); given the theoretical interests on morphological complexity, we also included by-subject (0.00) and by-item random slopes (0.13) for this factor. The residual SD was 1.22. Inspection of residual plots did not indicate any problems with model fit.

The four significant fixed effects are shown in Figure 7. FLPs increased with

word length ($b=0.190$, $SE=.068$, $t=2.79$) and decreased with launch site ($b=-.404$, $SE=.027$, $t=-14.95$). There is evidence for misfit for very short and especially for very long launch sites. Apparently, when the last fixation was 9 or more letters before the current word launch site no longer affects FLP.

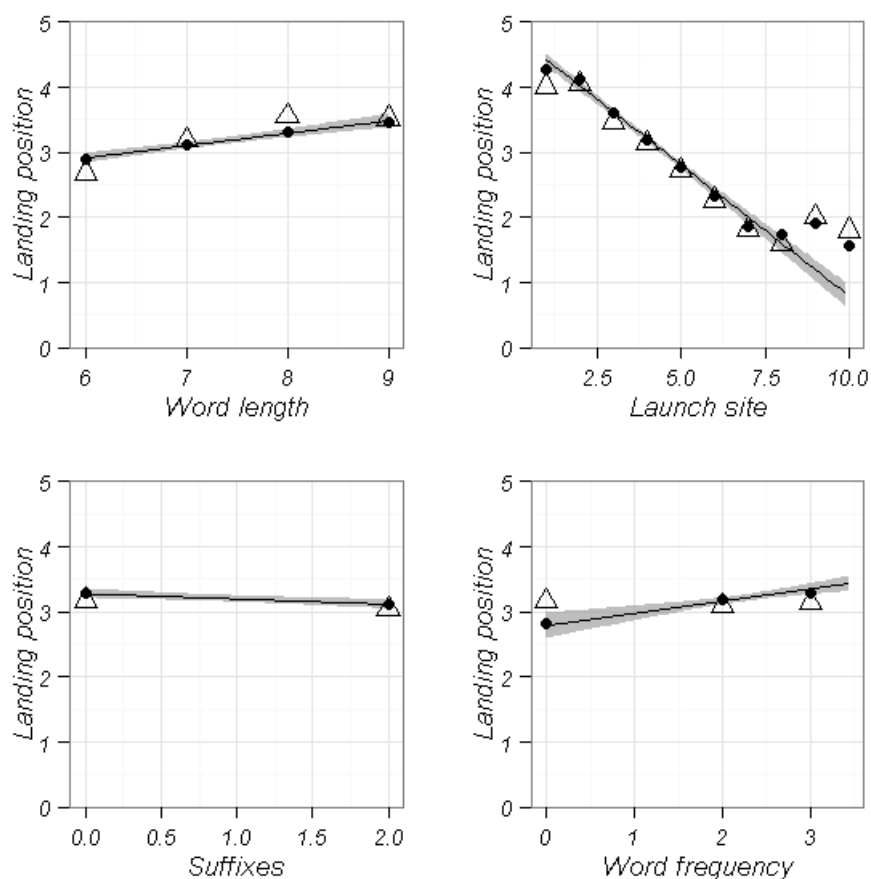


Figure 7. Four significant effects on FLP. Top row: classic effects of word length and launch site. Bottom row: effects of morphological complexity (suffixes) and word frequency. Lines, points, and grey 95% confidence intervals are partial effects (i.e., based on LMM estimates after statistical control of other variables in the model and removal of between-subject and between-sentence random effects); rectangles are observed means (rounded to the next integer on x-axis).

Of theoretical relevance for the present context is that FLP decreased with morphological complexity (bottom left; $b=-.081$, $SE=.032$, $t=-2.54$) and increased

with word frequency (bottom right; $b=.187$, $SE=.082$, $t=2.28$). Thus, we were able to establish the influence of effects, traditionally linked to higher cognitive processes, on saccade-target selection during the reading of Uighur sentences. Further details about means (standard deviations) of FLPs are reported in Appendix 1 (bottom part).

Gaussian Fits of First-Fixation Landing-Positions

As a further demonstration of the reliability of our results, we fitted truncated Gaussian curves to FLPs of target words (Figure 8). The difference in landing-position reflected in the Gaussian curves replicated the one observed in the simple arithmetic mean statistics (for monomorphemic words: $\mu = 3.3$ letters and $\sigma = 1.8$ letters; for suffixed words: $\mu = 3.1$ letters and $\sigma = 1.8$ letters; see also Appendix 1, bottom part).

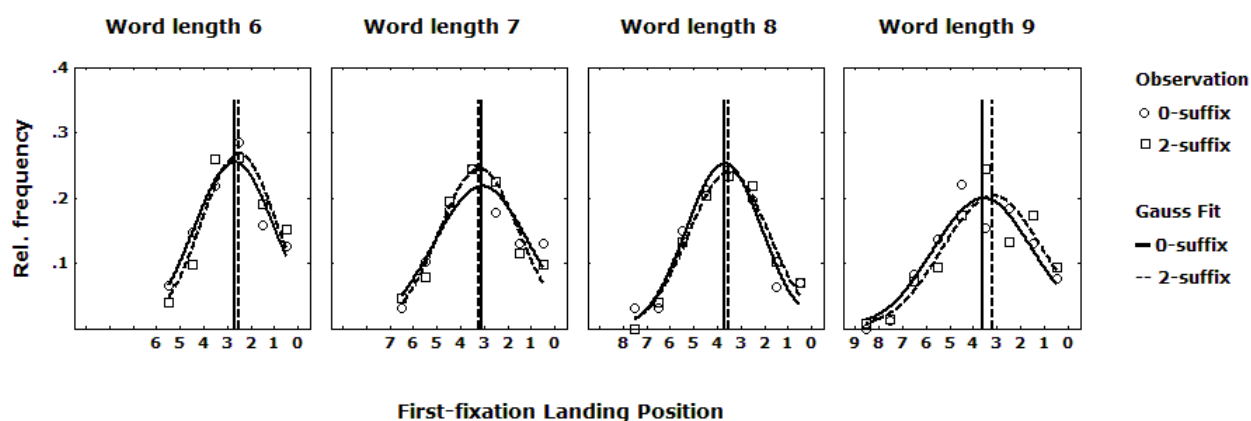


Figure 8. FLPs and their Gaussian-fit distribution curves for words with different number of suffixes, broken down for different word lengths (6-9). The vertical lines indicate means in Gaussian-fit curves.

Other Eye-Movement Measures

For the analyses of FFDs, GDs as well as refixation and skipping probabilities we followed the model building strategy described for FLPs. In general, these measures supported only simpler LMMs with fewer variance components. Also, with

the exception of refixation probability, likelihood ratio tests of the significance of interactions were not significant, even though there were occasional t -values with magnitudes larger than two. We report results based on LMMs including variance components for subject-related and sentence-related means (i.e., varying intercepts) and the four fixed effects of word length, launch site, morphological complexity, and word frequency.

First-fixation duration. First-fixations were longer on short words ($b=-.023$, $SE=.008$, $t=-2.74$) and after short launch sites ($b=-.012$, $SE=.004$, $t=-2.87$). These results may appear counter to expectation, but they simply reflect the fact of higher refixation rates on long words (i.e., up to 80%; see below) and reduced refixation rates for close launch sites, as the first of two fixations is usually shorter than single fixations (e.g., Kliegl, Olson, & Davidson, 1983). Consequently, when refixation rate is included as a covariate in the LMM, this variable is highly significant ($b=-.189$, $SE=.015$, $t=-12.23$) and t -values of word length and launch site drop to non-significant t -values of -0.14 and -0.93 , respectively. As far as the other two variables are concerned, neither the effect of morphological complexity ($b=.008$, $SE=.007$, $t=1.20$), nor the effect of word frequency ($b=-.023$, $SE=.013$, $t=-1.84$) were significant. Interestingly, with refixation rate in the model we obtained the usual effect of word frequency of shorter fixations for high-frequency words ($b=-.030$, $SE=.012$, $t=-2.44$).

Gaze duration. Gaze duration exhibited the expected profile with significant positive effects of word length ($b=.071$, $SE=.012$, $t=5.89$), launch site ($b=.025$, $SE=.005$, $t=4.95$), and morphological complexity ($b=.018$, $SE=.008$, $t=2.17$) as well as the expected negative effect of word frequency ($b=-.060$, $SE=.016$, $t=-3.66$). These results validate the interpretation that suffixes increase morphological complexity and processing difficulty.

Refixation probability. For refixation rate the interaction term for the four-factor interaction was significant, both in terms of t-value ($b=-.149$, $SE=.056$, $t=-2.64$) and in a likelihood ratio test; $\chi^2(11) = 30.6$, $p=.001$. Obviously, this result was unexpected. Figure 9 is one rendition of this interaction in terms of observed means reduced to a word length (3) x launch site (2) x suffixes (2) x word frequency (2) format. For word length, we collapsed fixation for 8- and 9-letter words to obtain a roughly balanced number of fixations for all cells; Launch site was dichotomized into close (1-4 letters) and far; Word frequency was dichotomized at the mean of \log_{10} -frequency.

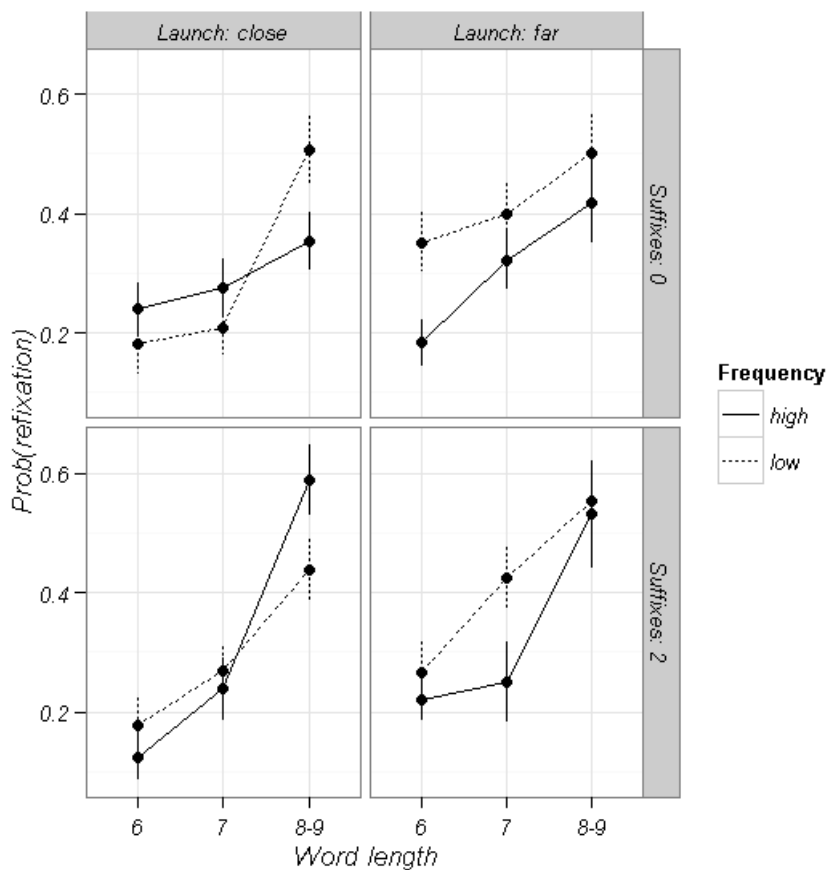


Figure 9. Refixation probabilities broken down by word length, launch site, morphological complexity (number of suffixes), and word frequency. Error bars are ± 1 standard error of the cell means.

As expected, refixation rate increased with word length and overall refixation probability was higher for far (.35) than close (.30) launch sites, because far launch sites lead to fixations towards the word beginning. In addition, there are two unexpected, but theoretically interesting results. First, for far launch sites low-frequency words are refixated more often than high-frequency words (.41 vs. .28), but this was not the case for close launch sites (.31 vs. .30); this interaction term was also significant in the GLMM ($b=-.219$, $SE=.067$, $t=-3.28$). Second, for close launch sites and long words morphological complexity reverses the canonical frequency effect on refixation probability: Long high-frequency words with two suffixes are refixated more often than their low-frequency counterparts.

Skipping probability. With target words varying in length between six and 9 letters overall skipping probability was only .076. As expected, skipping probability decreased with word length ($b=-.292$, $SE=.094$, $t=-3.10$) and (marginally) increased with word frequency ($b=.337$, $SE=.171$, $t=1.97$).

Discussion

Results from Experiment 2 confirmed the critical results from Experiment 1 that the FLP shifted towards the word beginning with more complex morphological structure, in addition, results also demonstrated that fixations were programmed further into the word given high word frequency (such an influence of word frequency appeared only in a numerical trend in Experiment 1). In Experiment 1, these results were obtained only after statistically controlling for word length and launch site; in Experiment 2, they were obtained with an orthogonal manipulation of morphological structure and control of several possibly confounding factors. Therefore, the difference in FLP due to morphological structure should not be explained as a consequence of uncontrolled confounding factors such as properties of the preceding

context, part of speech of the target word, or initial bigram frequency. Thus, the hypothesis about parafoveal morphological decomposition during the reading of Uighur sentences is supported for fixations on a select set of target words. Thus, previous failures to observe a possibly high-level influence on saccade-target selection may need to be re-visited with multivariate LMM statistics. Of course, frequency effects could still be the consequence of correlations with other low-level visual features of words.

The analyses of other eye-movement measures confirmed that suffixes increase processing difficulty: gaze durations were longer and refixation probabilities increased (especially for long words), but there was also an unexpected result: Long, morphologically complex, high-frequency words were refixated more often than low-frequency words of the same length and suffix structure. Although we do offer a conclusive interpretation of this effect, such a crossover interaction between morphological complexity and word frequency, moderated by launch site, deserves to be followed up in future research.

General Discussion

One generally accepted assumption for a saccade-target selection mechanism is that FLPs are primarily determined on the basis of word length (see Rayner, 2009; for a review). There is also evidence indicating that this decision *where* to fixate can also be influenced by other low-level visual factors. For example, irregular (Hyönä 1995) or misspelled (White & Liversedge, 2004) initial letters of a word can attract a fixation closer to the word beginning. However, there is no consistent evidence that high-level information such as morphological structure influences FLPs.

In the present study, two experiments were carried out implementing a

corpus-analytic and an experimental control approach, respectively, to test the effect of morphological structure on saccade-target selection during the reading of Uighur scripts. We expected that the complex morphology of this script would increase the chances to detect such an effect (compared to other alphabetic scripts). Indeed, our results clearly demonstrate that initial fixations were directed further towards the word beginnings for morphologically more complex words. These results are not in accordance with an assumption of purely low-level guidance of eye movements and indicate that Uighur readers must decompose the word about to be fixated into morphological units and accord greater weight to the root morphemes, than to suffixes in saccade-target selection. As a consequence, a position optimal for the recognition of the root morpheme is chosen.

We suspect that this step of decomposing a word and its consequence of clear morphological boundaries are of great importance to Uighur readers. Because Uighur words often have long suffixes, targeting towards the physical center of a word will leave the root morpheme (which often provides crucial information for comprehension) in an eccentric and non-optimal viewing position, leading to a slower overall processing rate. In agreement with our hypothesis, Farid and Grainger (1996) varied fixation-positions of Arabic words (reading from right to left) in an isolated word-recognition task. Their results demonstrated that for the Arabic script, the optimal viewing position in which readers had a minimal error rate shifted rightward (i.e., towards the word beginning) for a suffixed word.

Obviously, such an argument for morphological decomposition clearly rests on the reader's ability to discriminate the locations of morpheme boundaries from the parafovea even without being able to reliably identify the morphemes. A question remains unsolved about which cues would allow the Uighur readers to identify the

morpheme boundaries. We cannot answer this question on the basis of our results, but identification of morpheme boundaries in Uighur may rely on simple statistic information such as letter-transition frequency. The identification of morpheme boundaries in Uighur is more or less similar to word boundary segmentation during the reading of Chinese scripts: Although Chinese is written without any explicit word-boundaries, evidence from recent studies demonstrates that readers of this language are still able to target the word center during saccade generation (Li et al. 2011; Shu, Zhou, Yan, & Kliegl, 2011; Yan et al., 2010). These results suggest that Chinese readers need to segment characters into words parafoveally (Yan et al., 2010; Yang, Wang, Xu, & Rayner, 2009). Experimental evidence and computational simulation further suggest that word-boundary information in Chinese can be generated online on the basis of statistical information such as word frequency and character co-occurrence frequency (Richter, Yan, Engbert, & Kliegl, 2010; Yen, Radach, Tzeng, & Tsai, 2011). Importantly, word boundaries are calculated in very simple algorithms so that in most cases the segmentation can be achieved during fixations on the words prior to the ones about to be fixated. If we adopt the word-segmentation process in Chinese and apply it to Uighur, it is reasonable to hypothesize that the morphological boundary in Uighur can be obtained in similar ways from simple statistical information such as letter-transition frequency.

Alternatively, readers may use other cues to detect morphological boundaries. Due to “vowel harmony” rule in Finnish (i.e., front vowels never appear together with the back vowels in the same word), two adjacent letters of different vowel quality would efficiently indicate a constituent boundary. Bertram, Pollatsek and Hyönä (2004) demonstrated compounds with different vowel quality constituents were processed faster than those with same vowel quality constituents. Although the bigram

frequency around the constituent boundary should be naturally low for compounds in which the vowels in the first and second constituents were of different qualities, post-hoc analyses indicated that this vowel quality effect did not crucially depend on the bigram frequency of the constituent boundary letters.

The parafoveal morphological decomposition is in principle in agreement with recent positive evidence for parafoveal semantic information extraction during natural reading which also suggests that high-level information can be obtained from the parafovea under some circumstances, although this effect has been traditionally elusive or denied (Rayner, Balota, & Pollatsek, 1986; but see Hohenstein, Laubrock, & Kliegl, 2010, for positive evidence in German). Reliable parafoveal semantic processing has been recently consistently reported especially during the reading of Chinese sentences. For example, Yan, Richter, Kliegl, and Shu (2009) used neutral context and simple characters which presumably facilitate parafoveal processing. This parafoveal semantic effect has been extended to traditional Chinese script (Tsai, Kliegl, & Yan, 2012) and to compound Chinese characters (Yan, Zhou, Shu, & Kliegl, 2012). Yang, Wang, Tong, and Rayner (2012) reported that semantic preview benefit in SFDs was apparent only when preview words were plausible from prior sentence context. In addition, there is also evidence for parafoveal extraction of morpho-semantic information in traditional Chinese (Yen, Tsai, Tzeng, & Hung, 2008) and syntactic information in Korean (Kim, Radach, & Vorstius, 2012).

A few previous studies suggested that refixations can be programmed on the basis of different types of high-level information. For example, although Hyönä and Pollatsek (1998) failed to find an influence of constituent morpheme lengths on FLP, they found that the location of the second fixation and refixation probability of fixations landing around the word center (i.e., which were less likely to be mislocated

ones) were influenced by morphology. In addition, Pynte (1996) reported that when the initial fixation location was controlled, refixations were directed towards informative letters, which distinguish a word from its orthographic neighbors. However, we failed to find the effect of morphological structure on refixation probability in the present study. The increased refixation duration as a function of morphological structure is basically in agreement with a view proposed by Drieghe, Pollatsek, Juhasz, and Rayner (2010). Drieghe et al. suggested that there is an initial processing stage in which readers' minds determine the morphological structure. If a word has two constituents, the cognitive system focuses on the first constituent. As a result, initially the second constituent does not receive as much processing resources as the corresponding letters of the monomorphemic words. Combining the difference in FLP and refixation duration as a function of morphological structure, results may jointly suggest that the suffixes are treated as separate units from root morphemes.

We close with a couple of methodological comments. First, we restricted our analyses to fixations following launch sites from 1 to 10 letters. For this range the linear relation to FLP was very strong. Including longer launch sites would have forced inclusion of a quadratic trend representing a plateau of FLPs. Indeed, this pattern is visible in the observed values plotted in Figure 2. Obviously, including quadratic trends in the LMMs greatly increased their complexity, but did not change any of the substantive conclusions presented.

Second, Experiments 1 and 2 together provide a convincing demonstration that statistical and experimental control approaches are not in disagreement with respect to high-level cognitive influences on saccade target selection. Indeed, we consider it quite remarkable that effects of morphological complexity and word frequency exhibited the expected *direction* of their effects only after statistical control of the

dominant influences of word length and launch site. Changes in the sign of regression coefficients relative to their zero-order relation with FLP are examples of suppressor constellations which are not known for their high reliability. Therefore, replicating the direction of two postulated small effects for target words with a zero-correlation between word length and morphological complexity provides not only an important validation of high-level parafoveal effects on saccade target selection, but offers also the constructive perspective that statistical and experimental control techniques can lead to the same conclusions (Kliegl, 2007; Kliegl, Enbger, & Nuthmann, 2006; Rayner, Pollatsek, Slattery, Drieghe, & Reichle, 2007).

Conclusion. Results from the two experiments in the present study clearly suggest that morphological decomposition is a basic stage during saccade-target selection and that fixations are programmed not only on the basis of low-level word length information, but also high-level morphological structure whilst reading Uighur script. It is likely that Uighur readers parafoveally compute the center of morphological gravity of the word about to be fixated and that saccades are a compromise between visual and morphemic guidance. Whether these results reflect only specific characteristics of the reading Uighur script or generalize to other languages deserves further investigation.

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Footnote

1. Program scripts and results for an alternative analysis with a maximum launch site of 15 letters are available at the repository.
2. Alternative transformations for word length are its reciprocal or square-root value. For log2 and square-root transformation skew was minimal. The log2-transformation has the communicative advantage of mapping word lengths 2, 4, 8, 16 on the values of 1 to 4. Our theoretical inferences did not depend on the choice of transformation. One big advantage of the transformation over the original metric was that a significant four-factor interaction, presumably spurious due to the sparseness of long word lengths.
3. Nuthmann & Kliegl (2009) reported median landing positions of single fixations.
4. Originally a total of 88 pairs of target words (86 nouns and 2 verbs) were constructed but two (i.e., numbers 37 and 84 in Appendix 5) were excluded from the analyses. This is because the suffixed words in the removed pairs have only one suffix instead of two.

Appendix 1. Means (standard deviations) for eye-movement measures by word length and morphological structure (Experiments 1 and 2)

Letters	Suffixes	N words	Gauss FLP	FLP	FFD	GD	SFD	RP	SP
<i>Experiment 1</i>									
6	0	72	3.7 (2.7)	3.4 (0.8)	222 (37)	251 (48)	168 (43)	16 (15)	17(14)
	1	75	3.3 (2.1)	3.1 (0.6)	222 (29)	256 (43)	189 (73)	16 (13)	19(13)
	2	7	2.7 (3.8)	3.0 (1.1)	231 (52)	266 (70)	187 (47)	16 (25)	18(34)
7	0	28	3.6 (2.3)	3.5 (0.8)	226 (41)	271 (57)	179 (55)	23 (21)	12(13)
	1	79	3.2 (2.3)	3.2 (0.6)	230 (36)	280 (51)	179 (41)	24 (18)	12(9)
	2	16	3.2 (2.9)	3.4 (1.0)	239 (50)	301 (60)	202 (67)	26 (21)	13(14)
8	0	38	4.1 (2.4)	3.9 (0.9)	233 (45)	293 (58)	182 (51)	31 (20)	10(11)
	1	82	3.9 (2.3)	3.9 (0.8)	232 (38)	299 (53)	201 (45)	30 (18)	10(10)
	2	33	3.2 (2.2)	3.4 (0.7)	232 (42)	296 (60)	182 (42)	30 (20)	11(11)
9	0	13	3.9 (2.5)	4.1 (1.7)	222 (45)	287 (86)	206 (75)	30 (37)	11(19)
	1	44	4.2 (2.3)	4.1 (0.9)	228 (39)	309 (69)	195 (56)	37 (24)	6(7)
	2	47	4.2 (2.2)	4.2 (0.9)	229 (33)	297 (56)	201 (57)	31 (21)	9(10)
10	1	23	5.0 (2.1)	4.8 (1.0)	234 (49)	334 (94)	198 (50)	43 (29)	5 (7)
	2	32	4.5 (2.1)	4.4 (1.0)	238 (43)	336 (72)	192 (56)	44 (24)	5 (6)
	3	14	4.1 (2.6)	4.3 (1.1)	233 (52)	339 (91)	203 (64)	47 (31)	6 (11)
11	1	16	4.2 (2.6)	4.3 (1.3)	222 (46)	350 (78)	210 (55)	55 (27)	4 (7)
	2	41	4.1 (2.8)	4.4 (1.0)	221 (40)	350 (73)	199 (41)	54 (25)	4 (6)
	3	7	4.9 (2.4)	4.9 (1.7)	210 (51)	312 (87)	176 (55)	52 (35)	4 (10)
12	1	13	4.6 (2.4)	4.6 (1.6)	215 (60)	343 (129)	197 (57)	52 (34)	7 (15)
	2	22	4.2 (2.7)	4.4 (1.1)	224 (42)	374 (84)	209 (55)	57 (27)	2 (5)
	3	11	4.3 (2.7)	4.5 (1.3)	213 (47)	347 (95)	197 (55)	59 (32)	4 (10)

Appendix 1 (continued)

<i>Experiment 2</i>									
6	0	31	2.7 (1.7)	2.9 (0.6)	252 (60)	300 (64)	202 (66)	23 (18)	10 (17)
	2	31	2.5 (1.6)	2.6 (0.5)	251 (42)	296 (49)	229 (79)	19 (18)	8 (11)
7	0	30	3.1 (2.0)	3.1 (0.7)	244 (35)	311 (60)	210 (58)	31 (20)	7 (8)
	2	30	3.2 (1.7)	3.3 (0.8)	248 (42)	317 (72)	213 (37)	29 (21)	8 (13)
8	0	11	3.7 (1.6)	3.7 (0.9)	230 (48)	287 (69)	206 (55)	28 (27)	6 (19)
	2	11	3.5 (1.7)	3.4 (1.1)	242 (50)	370 (106)	229 (57)	49 (32)	7 (12)
9	0	14	3.6 (2.1)	3.5 (1.0)	229 (37)	365 (56)	216 (61)	57 (24)	4 (9)
	2	14	3.2 (2.1)	3.4 (1.0)	231 (51)	388 (122)	253 (97)	55 (30)	4 (13)

Note. N word: number of words in material; FLP: first landing position (letters); Gauss FLP: μ (σ) values in Gaussian fitted FLP distribution curves; FFD: first-fixation duration (ms); GD: gaze duration (ms); SFD: second-fixation duration (ms); RP: refixation probability (percentage) and SP: skipping probability (percentage). Values are computed across subjects' means, except Gaussian-fit landing positions, which were estimated from aggregated proportions of first fixations in each letter position for different word lengths.

Appendix 2. LMM estimates for duration analyses (Experiment 1).

	FFD			GD		
Fixed-effects parameters						
	<i>Estimate</i>	<i>SE</i>	<i>t-value</i>	<i>Estimate</i>	<i>SE</i>	<i>t-value</i>
Grand mean (GM)	5.367	0.019	279.86	5.560	0.022	247.29
Word length (WL)	-0.003	0.014	-0.23	0.238	0.018	13.12
Launch site (LS)	0.010	0.003	3.36	0.006	0.003	1.67
Suffix number (SN)	0.009	0.006	1.56	0.004	0.008	0.47
Word frequency (WF)	-0.017	0.007	-2.57	-0.049	0.009	-5.45
Landing position linear (LP1)	5.830	0.736	7.92	-8.136	0.855	-9.51
Landing position quadratic (LP2)	-4.622	0.466	-9.91	0.085	0.584	0.15
WL:LS	-0.004	0.004	-0.90	-0.013	0.006	-2.39
WL:SN	-0.040	0.008	-5.20	0.002	0.011	0.15
LS:SN	0.001	0.002	0.40	0.005	0.003	1.68
WL:WF	0.027	0.013	1.99	0.004	0.019	0.19
LS:WF	-0.003	0.003	-1.36	0.007	0.003	2.15
SN:WF	-0.007	0.008	-0.94	0.002	0.011	0.20
WL:FLP1	1.835	1.088	1.69	-14.280	1.380	-10.35
WL:FLP2	-0.027	0.975	-0.03	0.405	1.231	0.33
LS:FLP1	-1.098	0.225	-4.88	-0.576	0.280	-2.05
LS:FLP2	-0.168	0.209	-0.80	0.070	0.262	0.27
SN:FLP1	-0.013	0.556	-0.02	0.706	0.706	1.00
SN:FLP2	-1.081	0.539	-2.01	-1.024	0.681	-1.50
WF:FLP1	-1.837	0.642	-2.86	1.300	0.811	1.60
WF:FLP2	0.259	0.627	0.41	0.449	0.789	0.57
WL:LS:SN	0.002	0.003	0.55	0.005	0.004	1.25
WL:LS:WF	-0.003	0.005	-0.48	0.000	0.007	0.06
WL:SN:WF	-0.006	0.011	-0.53	0.033	0.015	2.25
LS:SN:WF	0.001	0.003	0.44	0.001	0.004	0.24

WL:LS:FLP1	-0.383	0.500	-0.77	1.780	0.628	2.84
WL:LS:FLP2	-0.151	0.454	-0.33	-0.720	0.570	-1.26
WL:SN:FLP1	-0.797	0.832	-0.96	-2.516	1.059	-2.38
WL:SN:FLP2	2.442	0.734	3.33	-0.325	0.929	-0.35
LS:SN:FLP1	-0.221	0.259	-0.85	-0.648	0.325	-1.99
LS:SN:FLP2	-0.353	0.248	-1.42	0.097	0.311	0.31
WL:WF:FLP1	1.194	1.367	0.87	1.863	1.733	1.07
WL:WF:FLP2	-0.306	1.243	-0.25	2.504	1.570	1.60
LS:WF:FLP1	-0.192	0.295	-0.65	-0.742	0.371	-2.00
LS:WF:FLP2	-0.588	0.287	-2.05	-0.228	0.360	-0.63
SN:WF:FLP1	-0.927	0.800	-1.16	-0.443	1.011	-0.44
SN:WF:FLP2	0.278	0.769	0.36	-0.422	0.970	-0.44
WL:LS:SN:WF	0.007	0.004	1.48	0.002	0.006	0.30
WL:LS:SN:FLP1	0.641	0.395	1.62	0.789	0.498	1.58
WL:LS:SN:FLP2	0.045	0.349	0.13	0.155	0.439	0.35
WL:LS:WF:FLP1	0.466	0.634	0.73	0.795	0.797	1.00
WL:LS:WF:FLP2	0.187	0.592	0.32	-0.093	0.743	-0.13
WL:SN:WF:FLP1	0.997	1.133	0.88	-1.841	1.444	-1.27
WL:SN:WF:FLP2	0.198	0.985	0.20	1.669	1.246	1.34
LS:SN:WF:FLP1	-0.052	0.376	-0.14	-0.016	0.473	-0.03
LS:SN:WF:FLP2	-0.353	0.360	-0.98	0.159	0.452	0.35
WL:LS:SN:WF:FLP1	0.213	0.527	0.40	1.273	0.662	1.92
WL:LS:SN:WF:FLP2	-0.007	0.465	-0.01	-0.648	0.584	-1.11

Note: WL: log2 word length; LS: launch site; SN: morphological structure; WF: log10 word frequency. N of observations: 13523; N of sentences: 120; N of subjects: 48.

Appendix 3. LMM estimates for an alternative model for FLP with initial bigram frequency (Experiment 1).

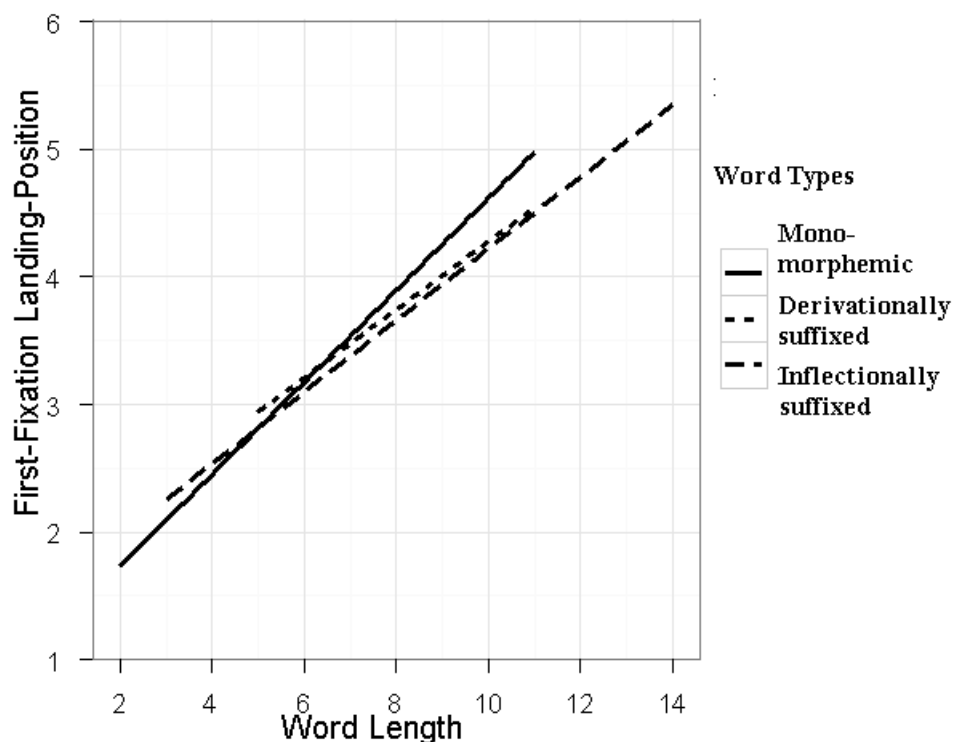
Fixed-effects parameters			
	Estimate	SE	t-value
Grand mean (GM)	3.663	0.105	34.82
Word length (WL)	1.648	0.106	15.61
Launch site (LS)	-0.432	0.018	-24.44
Suffix number (SN)	-0.099	0.043	-2.33
Word frequency (WF)	0.067	0.048	1.41
Initial Bigram freq. (IB)	0.042	0.079	0.53
WL x LS	-0.196	0.021	-9.33
WL x SN	0.118	0.059	2.01
LS x SN	0.010	0.011	0.88
WL x WF	0.014	0.098	0.14
LS x WF	-0.009	0.012	-0.75
SN x WF	0.007	0.059	0.11
WL x IB	-0.136	0.203	-0.67
LS x IB	0.010	0.019	0.53
SN x IB	0.008	0.097	0.08
WF x IB	-0.041	0.092	-0.44
WL x LS x SN	0.028	0.015	1.83
WL x LS x WF	-0.007	0.027	-0.26
WL x SN x WF	-0.018	0.073	-0.25
LS x SN x WF	0.023	0.016	1.47
WL x LS x IB	0.004	0.054	0.07
WL x SN x IB	-0.353	0.146	-2.42
LS x SN x IB	-0.040	0.026	-1.53
WL x WF x IB	-0.183	0.191	-0.96
LS x WF x IB	0.022	0.025	0.86

SN x WF x IB	-0.006	0.100	-0.06			
WL x LS x SN x WF	0.005	0.020	0.23			
WL x LS x SN x IB	0.005	0.040	0.12			
WL x LS x WF x IB	0.084	0.053	1.59			
WL x SN x WF x IB	0.023	0.174	0.13			
LS x SN x WF x IB	-0.039	0.027	-1.44			
WL x LS x SN x WF x IB	-0.053	0.048	-1.11			

Variance components	SD	Correlation parameters				
Word - GM	0.65					
Sentences - GM	0.17					
Subjects - GM	0.68	GM				
Subjects - WL	0.47	0.98	WL			
Subjects - LS	0.11	-0.28	-0.39	LS		
Subjects - SN	0.08	-0.68	-0.54	0.25	SN	
Subjects - WF	0.03	-0.21	-0.14	0.64	0.74	WF
WL x SN	0.15	-0.07	-0.02	0.41	0.46	0.67
Residual	1.46					

Appendix 4: Types of suffixes in Uighur script (Experiment 1).

There are mainly two types of suffixes: derivational suffix and inflectional suffix. In an additional analysis, we tested whether the two types differ from each other with respect to their influences on FLP. We selected monomorphemic words, single-suffixed words and double-suffixed words whose two suffixes are of the same type. As shown in Figure 10, first-fixations significantly landed further into the inflectionally suffixed words as compared to the monomorphemic words ($b=-.185$, $SE=.045$, $t=-4.07$). Although the contrast between derivationally suffixed words and monomorphemic words was not reliable ($b=.096$, $SE=.062$, $t=-1.54$), the numerical trend was very similar to that of the inflectionally suffixed words. We suspect this is due to a lack of statistical power because of the limited number of items and observations for derivationally suffixed words ($N=1459$) as compared to inflectionally suffixed word ($N=6511$). Taken together, results strongly suggest that these two types of suffixes are very similar with respect to their influences on FLP.

**Figure 10.** FLP as a function of suffix type and word length.

Appendix 5: Experimental sentences with morpheme-by-morpheme glosses and translations.

Root morphemes are marked by thin-solid underlining and suffixes are marked by alternating thick-solid and thick-dotted underlining. Derivational suffixes and inflectional suffixes are distinguished by using black and grey colors respectively.

Experiment 1

- 1 ئەينى چاغدىكى خىزمەتداشلىرىم بىلەن ئورناتقان دوستلۇق قىمىزنى دائىم ئەسلەيمەن.
I cherish the memory of cooperating with my colleges.
- 2 يۇيىڭنى سورت مەھسۇلات مىقدارى كۆپ بولۇشتىكە روشەن ئالاھىدىلىككە ئىگە.
The new varieties have a prominent advantage of high production.
- 3 تاشقى سودا گۇرۇھى شىركىتى قىسىمغا يۈرۈشلەشكەن جىنىقش تۈپى سەلبەم بەردى.
The foreign trade corporation prepared multifunctional gymnasium for the troop.
- 4 يۇنەيدىز كىسىلىنى داۋالاندىغان دورىلار ئىچىدە ئۈلۈمى ئەڭ ياخشى بولغان دورا.
It is the most effective medicine for AIDS.
- 5 رەھبەرلەر مەخسۇس كونا ئىنقىلابىي رايۇنغا بېرىپ كەمبەغەل نوقتۇقچىلاردىن ھال سورىدى.
The leaders made a special trip to visit poor teachers in old revolutionary base areas.
- 6 گازارمىدا نارام ئىلىۋاتقانلار بەرنى ئىتتىرىشكە دەپكە ئاۋازدىن جۈجۈپ ئويغىتىپ كەتتى.
People resting in the barracks were woken up by the thundering noise.
- 7 ماشىنا كۆتۈش زالىنىڭ ياخشى مۇھىتى كىشىلەرنىڭ كەيپىياتىنى تەڭشەشكە قۇلاشقا ياردەم بېرىدۇ.
The comfortable environment of the waiting room can help passengers to ease pressure.
- 8 چىڭگىز ئاۋۇستىن ئىنقىلابى شىياڭگاڭ ئىقتىسادىغا ئىجابىي تەسىرلەرنى كۆرسىتىدۇ.
Hong Kong has benefited a lot from decreased tariffs on goods.
- 9 ئىلىم-پەن خادىملىرى چوقمە يۈرۈشنى ئالدىنقى ئەلەم-ئەلەمگە كەينى رەھبەرلەر ۋە ئۇلارنىڭ قىلىشى كېرەك.
All the scientists should explore and inherit the spirit of their predecessors.
- 10 ئويۇنچۇقلارمۇ بالىلارنىڭ كەلگۈسىدىكى پىسخىكا ۋە خاراكتېرىگە تەسىر كۆرسىتىدۇ.
Toys can influence children's moral sentiment and personality development in the future.
- 11 يۇمىرىنى بۇيۇملار يۇقىرى سۈپەتتىكى قول-ھۈنەرۋەنچىلىكنىڭ نىشانى.
The cultural relics indicates the top quality of the craftsmanship.
- 12 بەزىلەر ماقالە ئېلان قىلىپ شەھەرلىك مەسئۇلارنىڭ خىزمەتكە سەل قارمىغانلىقىنى تەنبىھلەيدۇ.
Several persons wrote articles to criticize the authority's neglecting of duty.
- 13 بەزى ماقالىلەر يادىكارلىقلارنى قوغداشنى ھازىرقى تۈزۈملەرنى ئۆزگەرتىشنى تەۋسىيە قىلىمەكتە.
It was appealed in some articles to reform in the current mechanism of cultural relics protection.
- 14 مۇكاپاتقا ئېرىشكەن ئەسەرلەر بىر قانچە خاراكتېردىكى سەنئەت ئوبرازىنى ياراتتى.
The award-winning work created fresh artistic images.
- 15 ئۆسمۈرلەر ياز-جاپارا تۈزۈمىنىڭ كەلگۈچى ئىكەنلىكىنى تونۇپ بەتمەكتە.
The youngsters began to recognize their position as masters of the future.
- 16 يېقىندا ھايۋاناتلار باغچىسى تۇنجى قېتىم تۈزۈمى سۈنۈش ئۈسۈلدا ئەسلىمەنتۈردى.
Recently, the zoo successfully achieved artificial propagation of peacocks for the first time.
- 17 يېقىندا قاتناشقان مۇتەخەسسسلەر تەتقىقات نەتىجىسىنى تولۇق جەزمەنلەشتۈردى.
Experts and scholars participating in the meeting affirmed fully the research conclusion.
- 18 يېقىندىن بۇيان ياش-ئۆسمۈرلەردىكى يىراقنى كۆرۈلمەسلىك كىسىلى يەنىلا كۆپ.
The incidence of myopia in young people remains high these years.
- 19 قۇتقۇزۇش خادىملىرى ۋە بويۇملىرى كەينى-كەينىدىن ئاپەت رايۇنىغا يەتكۈزۈلمەكتە.
Rescue workers and their belongings are being transported to the disaster zone.

- The aid workers keep arriving at the disaster area with relief supplies.
- 20 ھەرقايسى دۆلەتلەر ئۆزلىرىنىڭ ئۆتۈرسال دۆلەت كۈچىنى ئۆستۈرۈشنى مۇھىم ئورۇنغا قويماقتا.
Enhancing comprehensive national power is the primary tasks for each country.
- 21 قانۇندا ساختا يۇل باسقان جىنايەتچىلەرنىڭ قاتتىق جازا ئىندىيغانلىقى بەلگىلەنگەن.
Severe punishments for criminals who counterfeit money are demanded by law.
- 22 بۇ ئوقۇغۇچىلار ئائىلە قىيىنچىلىقى سەۋىيىدىن مەكتەپتىن چىكىنگەن ئەمەس.
Familial financial difficulties are not the causes for these students' dropping out.
- 23 قىزىل كىرست جەمئىيىتى كەلكۈن قورشاۋىدا قالغان شەھەرگە ھاۋادىن بىيەمكەك توشۇماقتا.
League of Red Cross Societies was transporting goods by air for the city surrounded by flood.
- 24 ئايروپىلان ھادىسىسىنىڭ سەۋىيى ئىختىمال ماتوردىن كاشىلا كۆرۈلگەن بولۇشى مۇمكىن.
One of the reasons for the air crash may be a sudden engine failure.
- 25 ئالىي مەكتەپلەر ئىختىساس ئىنگىلىز تەربىيەلىش ئۈچۈن نىقتىساد كەمپىنى كۆپەيتتى.
These universities have established the financial specialty to foster talented people.
- 26 ئامېرىكا ماھىرىنىڭ نەزەر ئىچىدا چاڭغا ئىيىلىش مۇسابىقىسىدە جىمىيون بولۇش ئىختىماللىقى يۇقىرى.
The American athlete may continue to hold the championship in the ski competition.
- 27 مال ساتقۇچىلار بۇنداق بولسا مەھسۇلاتنىڭ سېتىلىش مىقدارىنىڭ كەمىيىپ كېتىشىدىن ئەنسىرەمەكتە.
A lot of salesmen are concerned that the change may lead to a drop in sales.
- 28 بۈگۈنكى كۈندە ئىلىغۇن ئاساسلىق ئالاقىلىشىش قورالى بولماي قاندى.
Telephones are not the main means of communication recently.
- 29 يېقىندىن بۇيان ئامېرىكا كوكۇل ئىچىش مەھسۇلاتلىرى يۇرۇپاننىڭ تەسىرىگە ئۇچرىماقتا.
These years the European entertainment industries have impacted on the USA's.
- 30 مۇتەخەسسسلەر پات يېقىندا يەنە ئۆزى ئىختىماللىقنىڭ يۇقىرى بولمايدىغانلىقىنى كۆرسەتتى.
Experts say the earthquakes are unlikely to occur recently.
- 31 رەھبەرلەر ئىچىدا يېتىلگەن رايوننىڭ تەرەققىيات ئەھۋالى توغرىسىدىكى دوكلاتنى ئاڭلىدى.
Officials listened to the report about the growth of the development zone.
- 32 دۆلىتىمىزنىڭ كۆپ قىسىم جايلىرىدا تېخى يېقىندىكى مەكتەپكە كىرىشنى تەلەپ قىلالمايمىز.
Many regions in our country fail to meet the requirement of children entering schools nearest to their home.
- 33 مەكتەپلەر چوقۇم ئوقۇغۇچى قۇبۇل قىلىش پىلانى بۇيىچە ئوقۇغۇچىلارنى قۇبۇل قىلىشى كىرەك.
Schools need to strictly observe the admission plan when enrolling new students.
- 34 ئۇنچى قىلىشلىق فوتوگراف مۇسابىقىسى كەڭ ئوقۇرمەنلەرنىڭ قىزغىن قوللىشىغا ئورنىتى.
The first photography competition was supported widely by the reading public.
- 35 يېقىن مەزگىلدە ھەممەتلەر رىياسىتى رەشى دۆلەت رەھبەرلىرى بىلەن سۆھبەتتە بولدى.
The board president held a meeting with the country leaders during the conference.
- 36 خەلقئارا بىرلەشمە ئىتتىپاقى بايانات ئىلان قىلىپ ئۇرۇش مەسىلىلىرىنى ھەل قىلىشقا چاقىردى.
League of Nations issued a statement to appeal to solve the problems left over by wars.
- 37 نۇرغۇن دۆلەت ناھالىلىرىنىڭ تۆرمۈش سەۋىيىسى كۆرۈنەرلىك ياخشىلاندى.
The living standard of the residents has been on the rise in a number of countries.

- 38 ئاتلىق ئىنسانلارنىڭ مەۋجۇت بولۇپ تۇرۇشى ۋە تەرەققى قىلىشىنىڭ ماددىي ئاساسى.
Grain is the needful material base for human's living and development.
- 39 ئۇلار ھەر كۈنلىكىمۇ ئۇرغۇنلىغان نەخلىمەت ئۇچۇرلارنى تاپشۇرۇۋېلىشى مۇمكىن.
They may receive numerous junk e-mails every day.
- 40 بۇ يىل چاغغاندا ئۇ دوستلىرى بىلەن شەرقىي شىمالدىكى مۇز ھەيكەللىرىنى تاماشا قىلماقچى.
She will see and enjoy the ice sculpture in Northeast China with friends this spring festival.
- 41 خەلقئارا قىزىل كىرىست جەمئىيىتى ئاپەت رايۇنىغا قەتئىي قۇتقۇزۇش بۇيۇمى ۋە ئىنسانلارنى يەتكۈزدى.
International Red Cross was handing out disaster relief supplies and donation money.
- 42 مۇتەخەسسسلەر كىيىم-كېچە ئالتۇن باھاسىدا ئىلگىر-سېلىنىشى مۇمكىن دەپ قارىماقتا.
Several experts believe that the gold price will fluctuate widely in future.
- 43 ئۇ فرانسىيەدە ئۆتكۈزۈلگەن يۈك ئالتۇنكا مۇسابىقىسىدە ئالتۇن مېدالغا ئىرىشتى.
He won a gold medal in the International Track and Field Competition in France.
- 44 مەسىلىنى ھەل قىلىشنىڭ يولى كەسىپ مائارىپىنى يۈتۈن كۈچ بىلەن تەرەققى قىلدۇرۇش.
The way to solve the problem is to devote major efforts to develop vocational education.
- 45 بەزى بۆلۈملەر تولۇق چۈشەنمىگەن نەھەل ئاستىدا تۈرۈپمۇ ئۆز ئارا مەبلەغ سۆلىشىماقتا.
Some departments were bidding competitively with only a sketchy knowledge of the situation.
- 46 مۇخبىر مەخسۇس بۇ مەھسۇلاتلارنى شىركەتتىكى كىلىپ زىيارەت قىلدى.
The journalist made a special trip to interview the aquiculture company.
- 47 ئۇ قالدۇرۇپ كەتكەن قىممەتلىك ئەدەبىي مىراسلار ئىنسانلارنىڭ مەنىۋى بايلىقى بولۇپ قالدى.
The precious literary heritage left by him has become the spiritual wealth for human beings.
- 48 تاماشىبىنلار ۋەقە جەريانىدا ھازىرقى زاماندىكى ھەقىقىي بىر قەھرىماننىڭ ئوبرازىنى كۆردى.
The audience saw a vivid image of Modern Hero from this event.
- 49 بىيجىڭدا ناھايىتى قىممەتلىك ھەم مۇكەممەل ساقلانغان ئىستانىيە يادىكارلىقلىرى بار.
Beijing has unique and perfectly retained capital historical relics.
- 50 ھازىر ئىنىق ھەم مۇكەممەل بولغان قانۇن-ئىزام يوق بولغىنى دەپ توكىي سۆزىد.
The basic reason is that there is no strict and definite law for this event at present.
- 51 جوڭگۇنىڭ ئۇزۇن تارىخى مەدەنىيىتىنىڭ دۇنياغا بولغان تەسىرى چوڭ.
The ancient Chinese civilization has an important impact on the world.
- 52 ئامېرىكا ھەربىي سانائەت كارخانىلىرى ئازۇك تېخنىكىلىق مەھسۇلاتلارغا زور مەبلەغ سالماقتا.
The American military defense industry invested heavily in developing highly sophisticated products.
- 53 چاغلىق پائالىيەتلەر بايئەخت ناھالىرىنىڭ تۇرمۇشىغا بايراملىق خۇشال كەيپىيات قوشتى.
The activities for the Spring Festival added to the festive atmosphere for citizens in our capital city.
- 54 يۇقرالارنىڭ ساياسىي شۇ ئۆلچىمىنىڭ مەدەنىيەت دەرىجىسىنى كۆرسىتىپ بېرىۋېرىدۇ.
The cultural awareness of citizens reflects the level of civilization for a country.
- 55 ئالاقىدار بۆلۈملەر غوللۇق بولغان دېگەن يۈزىنىڭ سۈرئىتىنى ئاشۇرۇشنى ئوتتۇرىغا قويدى.
Related departments suggested that it is necessary to raise velocity for the main line train.

- 56 ئامېرىكا ئالىملىرى ئومومىيۈزلۈك ئىشلىتىلەيدىغان چوڭ ئىپتىكى كومپيۇتىرنى ياساپ چىقتى.
American scientists created an all purpose electronic computer.
- 57 ئالما كومپيۇتىر شىركىتىنىڭ سىمۋولۇق رەسمى بولسا بۇرچىكى كەم بولغان ئالما.
The symbol for Apple Corporation is an apple taken a bite by someone.
- 58 مۇشۇ خىلدىكى ئەنئەنىۋى ئۇسول رىقابەتچىلىرىنى ئۆزلىكىدىن يىڭىلىق يارىتىشقا مەجبۇر قىلىدۇ.
It was the conservative way of doing things that made the competitors brings forth new ideas constantly.
- 59 ھازىرقى دىرېكتور شىركەتكە باش بولغاندىن بېرى تېخنىكا بىخەتەر ئەھمىيەت بەرمەيۈاتتى.
The incumbent president underestimated the development of new technology after taking over the company.
- 60 كەچتىكى يىغىلىشتا سەنئەت ساھەسىدىكى نۇرغۇنلىغان ئۇستىلار بار ئىدى.
Outstanding persons in each realm of art gathered in the dinner party.
- 61 خەلقنىڭ مەجبۇرى كۈچەت تىكىش ھەرىكىتى شەھەر كۆكرىتىش ئىشلىرىنى ئىلگىرى سۈردى.
The National Tree-Planting activities helped to impel the greening in town and city.
- 62 رەسسام سەنئەت تەربىيىسى ئارقىلىق بالىلارنىڭ گۈزەللىك تۇيغۇسىنى يىتىلدۈردى.
The painter hoped to cultivate children's ability to appreciate the arts through art education.
- 63 جوڭگو مەدەنىيىتىنىڭ يەنە بىر ئارقىلىقى ئەخلاق ۋە ئەزەمەت بىرلىك ئەھمىيەت بەرگەندە.
One excellent tradition of Chinese culture is to pay equal attention to morality and knowledge.
- 64 بۈگۈنكى كۈندىكى ئاپتوماتىلاشقان سىستېمىلارنىڭ يادروسى رەقەملىك كومپيۇتىر تېخنىكىسىدا.
The digital computer technique is the core for the modern automatic system.
- 65 رەھبەرلەر ۋە خىزمەتچىلەر ئاكتىپ ھالدا ئۆزىنى قۇتقۇزۇش نىسبىتى بىلەن شۇغۇللانماقتا.
The enterprise leaders and staff were carrying out the production and self-help plan.
- 66 ھەرقايسى ئورۇنلارنىڭ تەستىقتىن ئۆتەلمىگەن فىلىملىرىنى قۇتقۇزۇش دۆلەت تەرىپىدىن چەكلەندى.
The local was forbidden to sell unauthorized feature film according to the national regulation.
- 67 مەن ئوقۇتقۇچى جەريانىدا ئوقۇغۇچىلاردىنمۇ نۇرغۇن نەرسىلەرنى ئۆگەندۈردىم.
I have learnt a lot from my students during the teaching process.
- 68 ئەدەبىيات-سەنئەت ئىشلىرىنىڭ گۈللىنىشى دۆلەتنىڭ قۇدرەت تاپقانلىقىنىڭ ئىپادىسى.
Progress in literature and art represents a country's prosperity.
- 69 جوڭگو ئىقتىسادى ۋە سانائىتىنىڭ تەرەققىياتى چەتئەللىرىنىڭ ئىلغار تېخنىكىسىغا مۇھتاج.
Advanced foreign technology can help to develop Chinese economy and industry.
- 70 ھازىرقى ئىلغار تېخنىكا مەھسۇلاتلىرى ئۆزلىكىدىن ھالدا كىشىلەرنىڭ تۇرمۇشىغا سىڭىپ كىرىدۇ.
The new generation hi-tech product continued to appear in the lives of mankind.
- 71 دېھقانلار بازار ئىقتىياجىغا ئاساسەن ئۆزلىرىنىڭ تېرىم پىلانىنى بىكىتىدۇ.
The farmers decided the planting plan according to the market.
- 72 ئوقۇغۇچىلار ئۆيىدە ئىكران ئارقىلىق ئوقۇتقۇچى ۋە ساۋاقداشلىرى بىلەن بىكىر ئالماشتۇرالايدۇ.
Students can discuss with their teachers and classmates via the Internet at home.
- 73 ئەينى ۋاقىتتا ئۇلار كەمكىن رىقابەت ئىچىدە نۇرغۇنلىغان قىيىنچىلىقلارغا ئۇچرىغان ئىدى.
They encountered lots of difficulties in the fierce competition.

- 74 مەركەزىدىكى رەھبەرلەر باسقۇچچىلىق ئىشلىرى توغرىسىدا يېڭى تەلەپلەرنى ئوتتۇرىغا قويدى.
The central authority leaders made demands for book and publication industry.
- 75 سۇغۇرتا ئورۇنلىرى جەمئىيەت سوغۇرتا سىستېمىسىدا مۇھىم رول ئوينىدى.
The insurance institution plays an important role in the social security system.
- 76 راكېتا قۇيۇپ بېرىشتىن مەقسەت ئالەم ئايرۇپىلاننى ئۆز ئوربىسىغا يەتكۈزۈپ قويۇش.
The purpose of launching the rockets is to send the space shuttle into the space-flight trajectory.
- 77 بىر يەرگە جەم بولغان دېھقانلار ھىيتنى قانداق ئۆتكۈزۈش توغرىسىدا پىكىرلەشمىكتە.
The industrious farmers got together to talk about Spring Festival.
- 78 ئىقتىسادىي راۋاجلاندىرۇشنىڭ مۇھىم نوقتىسى كارخانىلارنىڭ تېخنىكىسىنى يېڭىلىشىدا.
One of the key aspects of economic development is to reform the technology used in the company nowadays.
- 79 بۇ يىللىق خىزمەتلەرنىڭ مۇھىم نوقتىسى نىزاملارنىڭ تۈزۈلۈشى ۋە مۇكەممەللەشتۈرۈلىشىدە.
The key emphasis in work this year is to establish and improve rules and regulations.
- 80 ئىنگلىيەنىڭ ھەرقايسى جايلىرىدىن كەلگەن جوڭگولۇق ئوقۇغۇچىلار لوندوندا جەم بولدى.
Chinese overseas students from all around the UK gathered in London.
- 81 ئىدىر خادىملار بىلەن كارخانا توغرىسىدا تېخىمۇ ئىچكىرىلىگەن ھالدا تەكشۈرۈشكە بولدى.
The chairman of the board leads workers to carry out an investigation on the company.
- 82 بىر لەشپەن بولك نەسكەرلىرى پۈتۈن كۈچى بىلەن نامىنىڭ ھاياتى مەلۇملىكىنى قۇتقۇزدى.
The Army officers were trying their best to rescue lives and property.
- 83 كىشىلەر بىنەپشە رەڭدەك بىكەينىڭ ئالدىدا ۋەقە سادىر قىلغان شۇپۇرنى بايقىدى.
People found the hit-and-run driver in front of the purple car.
- 84 خەلقئارا لېۋ ھەسكار لېۋ جوڭگونىڭ تەرەققىياتىغا يېڭى كۈچ ئاتا قىلىشى مۇمكىن.
The international corporation will inject new vitality into China' development.
- 85 ئىنگلىيە پارلىمېنتىنى پىلانلىغۇچىنى قولغا ئالدىغانلىقى توغرىسىدا ئىرادىسىنى بىلدۈردى.
The British government firmly indicated that they would seize the criminals plotting for the explosion.
- 86 يەرلىك سايشۇچىلار ئۇلارنىڭ ۋەدىسىگە يەنىلا گۇمانىي نەزەر بىلەن قاراۋاتىدۇ.
The local voters doubted their firm guarantee.
- 87 ئىنستىتۇتنىڭ تەجرىبە ساۋاقلرى تەتقىقات ئورنىدىكىلەر ئېنىق نىقەت ئىتبارىنى قوزغىدى.
The experiences of the academy drew much attention from experts.
- 88 ئالدىنقى يىلى ۋەزىيەت سىياسى مۇقىملىق ۋە ئىقتىسادىي تەرەققىياتقا كاپالەتلىك قىلىش.
The most important tasks at present are to guarantee political stability and to develop economy.
- 89 بۇ يىللىق خىزمەتنىڭ مۇھىم نوقتىسى بۇل ياخشىلىشىدىن كەلتۈرگەن مەسىلىلەرنى ھەل قىلىش.
One of our most urgent problems this year is to solve the problem of inflation.
- 90 ئۇلار نامىرىكا يادرو تەكشۈرگۈچىلىرىگە يادرو قوراللىرى مەخپىيەتلىكىنى ئاشكارىلىدى.
They revealed the secret of developing nuclear weapons to the American verification team.
- 91 ئىككى تەرەپ ئىمزا ئالغان ھۆججەت بۇندىن كىيىنكى ھەسكار لېۋ ئۈچۈن ئاساس سالىدۇ.
The document signed and agreed on by both sides will be the foundation of their further

corporation.

92 ھەل قىلغۇچ مۇسابىقىگە قاتناشقانلارنىڭ ھەممىسى بۆلۈرقى مۇسابىقىدىكى ئۇستازلار.

Participants in the finals are the outstanding contestants in last year's ski championships.

93 نامىرىكا تاشقى ئىشلار مىنىستىرلىكىنىڭ باياناتچىسى پار تىلىتىش ۋەقىمىنى قاتتىق ئەيىبلەيدى.

The American Foreign Ministry spokesman vehemently condemned the explosion incident.

94 بۇلار شىركەتنىڭ تەرەققىياتى ئۈچۈن ئەۋزەل بازار شارائىتى ھازىرلاپ بەردى.

It helped to create good market environment for the rapid development of the company.

95 جىنايى ئىشلار زارۋىچىلىقى ۋە ئوڭرال ۋە يويۇنلارنىڭ قانۇنسىز قىلمىشلىرىغا زەربە بەرمەكتە.

The criminal investigation department fights against illegal activities at the stations and on the trains.

96 جامائەت خەۋپسىزلىكى ئورنى ئۈنۈملۈك تەدبىرلەرنى ئىشلىتىپ زەربە بەردىش كۈچىنى ئاشۇردى.

The public security bureau took measures to fight criminals more efficiently.

97 بىر قىسىم كارخانىچىلارنىڭ جەمئىيەتكە نىسبەتەن مەسئۇلىيەتچانلىقى كۈچلۈك.

Some entrepreneurs have intense sense of social responsibility.

98 ئىككى تەرەپ بىردەك ھالدا ھەمكارلىقنىڭ ئاساسى باراۋەرلىك ۋە ھۆرمەتلىشىش دەپ قارىدى.

The two parties identify with the spirit of equality and mutual respect.

99 بۇ دۆلەتمىز مۇھىت ئاسراش خىزمىتىنىڭ تەرەققىيات باسقۇچىغا كىرگەنلىكىدىن دېرەك بەردى.

This means that the environment protection in our country has stepped into a new development stage.

100 شىئىرلار توپلىمى شائىرنىڭ يېقىنقى بىر نەچچە يىلدىن بۇيانقى ئەمەللىرىدىن تەركىب تاپقان.

The new poetry anthology has included a majority of his works these years.

101 جوڭگو جەنۇبىي ئافرىقىنىڭ بىرىنچى چوڭ سودا شىركى ۋە ئىككىنچى ئىستاتىستىكا ئايلاندى.

China has become South African's preferred trade cooperative partner and destination countries for exports.

102 جايلار دېھقانچىلىق ماشىنىلىرىغا تولۇقلىما بەردىش خىزمىتىنى چىڭ تۇتتى.

The grass-roots around the country were pressing on with the state subsidies regulation for agricultural machinery.

103 شىۋىتسىيە يىڭى جوڭگو بىلەن ئەڭ بۇرۇن دىپلوماتىيە ئورناتقان غەرب دۆلەتلىرىنىڭ بىرى.

Switzerland is one of the earliest countries who made established diplomatic relations with China.

104 بۇرۇن كەنتىكىلىرى ساتالىمىغان بەرلىك مەھسۇلاتلار ھازىر شەھەرلىكلىرىنىڭ تۇتىشىغا ئايلاندى.

The local special products which farmers used to find hard to sell have become valuable goods for townsman.

105 ئۆۋەتتە ئۆمۈمىيۈنلۈك يولغا قويۇشتىن بۇرۇن ھەرقايسى تەبىئىي خىزمىتىنى چىڭ تۇتۇش لازىم.

It is necessary to prepare inclusively before taking measures.

106 گەۋدىلىك مەسىلىلەرنى يارلىق كۈچ بىلەن ھەل قىلىپ ياكىلىقتى تەشەببۇس قىلىش لازىم.

We must deal with the typical problems and fight against economic corruption.

107 ئۆزلىمىزنىڭ يەن ئىخنىكىسىنىڭ خەلقئارا رىقابەت كۈچى ئۆستۈرۈلدى.

The position of Chinese technology gradually arises.

- 108 بىلىمىدىكى بىگىلىق يارىتىشنى تەشەببۇس قىلىپ تىخنىكا ئىنقىلابىغا تۈرتكە بولۇش كىرەك.
We should pay attention to knowledge innovation in order to promote the technology reform.
- 109 دۇنيا ئىقتىسادىنىڭ تەڭپۇڭلۇقىنى يۇقۇتۇشقا كۆپ تەرەپلىملىك مۇرەككەپ سەۋەب بار.
The global economic inequality has numerous complicated reasons.
- 110 سوغۇق ھاۋانىڭ بىر قىسىم جايلارنىڭ يېزا ئىگىلىكىگە كۆرسەتكەن تەسىرى تەتقىق قىلىندى.
The related institutions studied the impact of low temperature on local agriculture of some areas.
- 111 قىسىم قۇرغاقچىلىق بولغان جايلارنى ناھەتتىن قۇتقۇزۇشقا پۈتۈن كۈچى بىلەن ياردەملىشىۋاتىدۇ.
The army and policemen were trying their best to offer their assistance for drought area.
- 112 نۆۋەتتە جۇڭگونىڭ خەلقئارا ئورنى ۋە تەسىرى داۋاملىق يۇقىرى كۆتۈرۈلمەكتە.
China's international influence and position are constantly improving.
- 113 جۇڭگو مەسئۇلىيەتچانلىق بىلەن تىنچلىق تەرەققىيات يولىدا ئىز قىماي ماڭدۇ.
As a responsible country, China insists on the principle of harmonious development.
- 114 بىز جۇڭگونىڭ كەلگۈسى تەرەققىياتىغا بولغان ئۈمىدىمىزنى بىئوخىخنىكىغا باغلىدۇق.
We place hopes on biotechnology to promote the development of our country.
- 115 دۇنيا ئىقتىسادىدا يۇپىل بارا-بارا ئىسلىگە كىلىش نەھەلى كۆرۈلدى.
The world economy has revived from deep recession gradually.
- 116 جۇڭگو دۇنيادىكى ئىلغار تىخنىكىلىق كارخانىلار بىلەن ھەمكارلىقنى كۈچەيتىشنى خالايدۇ.
Our country is willing to strengthen cooperation with hi-tech companies.
- 117 يارنىڭ گازى قويۇپ بېرىش مەسىلىسى تەرەققىي تاپقان دۆلەتلەرنىڭ سانائەتلىشىش نەتىجىسى.
The problem of greenhouse gas emission came from industrialization of developed countries.
- 118 بىز مۇھىت نەرسىنى ئىشلىتىشنى چەكلەش ۋە تەرەققىيات جەريانىدا ئېنېرگىيەنى قىلىشقا ئەمەل قىلىدۇ.
We abide by the ideas of energy conservation and reduction in the process of development.
- 119 مەزمۇنى مول بولغان سۇ مەدەنىيىتى ۋاسىلىسى قىلىشقا ۋە چوڭقۇر تەتقىق قىلىشقا ئەرزىيدۇ.
The rich water culture is worth further exploration and passing on to later generations.
- 120 مۇھىت سۈپىتىنى ياخشىلاش ئىلمىي تەرەققىياتقا تۈرتكە بولۇشقا مۇھىم نەھەمىيەتكە ئىگە.
Improving the environment plays an important role in propelling the scientific development.

Experiment 2

- 1 بۇ قىتمىقى بىغىننىڭ روھىنى شۇنچە تىز ئۇنتۇپ قاپسىز.
بۇ قىتمىقى بىغىننىڭ زۇڭتۇڭ مەھكىمىسىدە ئىچىلىشىغا قارشى پىكىر چىقىپتۇ.
You forgot the spirit of this meeting so quickly.
There were objections for the meeting being held in the president palace.
- 2 ئالىمنىڭ دادىسىنىڭ كۈچىنى سەل چاغلىمايلى.
ئالىمنىڭ دادىسىنىڭ كۈزۈك سىلىش پىلانى بىكار بولدى.
We cannot underestimate the ability of Alimu's father.
The project of building a bridge proposed by Alimu's father is cancelled.
- 3 بۇ يەردىكى ئەڭ مۇھىم مەسىلە ئىلىمىز ھۆكۈمىتىنىڭ قوللىشىنى قولغا كەلتۈرۈش.
بۇ يەردىكى ئەڭ مۇھىم مەسىلە قانداق دېگەن سۆزنىڭ نۇقۇم دائىرىسى.
The most critical issue is to get the support of the government of the country.
The most critical issue is to understand the concept of the word "meet".
- 4 مەن ئادىلنىڭ بۇلىنى ۋاقتىدا قايتۇرۇپ بېرىلمىدىم.
مەن ئادىلنىڭ پىرىمانىنى بىرىشىگە موھتاج ئەمەس.
I do not pay back the money to Adil in time.
I do not need the command from Adil.
- 5 گۈلزار ئۆزىنىڭ ئۆيىگە كەتمەيدىغانلىقىنى دېدى.
گۈلزار ئۆزىنىڭ ئۆستۈر بولغانلىقىنى ھەمىشە كۆز كۆز قىلىدۇ.
Gulizhaer said that he would not go home.
Gulizhaer often shows off his job as a teacher.
- 6 ئالىمنىڭ دادىسى كۈنىگە ئاران تۆت سائەت ئىشلەيدۇ.
ئالىمنىڭ دادىسى يۈزىگە ھەقىقەتتە بىر مۇنچە تەلىم بەردى.
Alimu's father works for only four hours a day.
Alimu's father shared some knowledge about music.
- 7 سىز ئىنئەنەتتىكى تۈرلەردە بىخەلق باراڭسىڭىز بولاتتى.
سىز ئىنئەنەتتىكى ناخىيارەت ساھەسىدە بۇنداق ئىشلارنى ئاشكارە قىلالمايتىڭىز.
You'd better make innovation in the traditional classes.
You cannot use traditional media to announce such a thing.
- 8 مەن سىنىڭ سانئىيىڭنى كۆپىيىپ كېتىشىڭنى ئالدىنى ئالالمايتىمەن.
مەن سىنىڭ بىر تەكچى ئوقۇتقۇچىغا موھتاج ئەمەسلىكىڭنى بىلىمەن.
I doubt your ability to control the number of them.
I know that you need a tutor.
- 9 مەندە دادامنىڭ سۆزىنى ئاڭلىمىغۇدەك جۈرئەت يوق.
مەندە دادامنىڭ سۆزىنى ئاڭلىمىغۇدەك جۈرئەت يوق.
I don't dare to ignore my father's words.
I do not want my father to work in cement factory.
- 10 بۈگۈنكى يىغىندا ئالىمنىڭ تۈرىگە مەبلەغ سىلىش ماقۇللاندى.
بۈگۈنكى يىغىندا ئالىمنىڭ تاماكا چەككىتىگە جەرمائەت قويۇلدىغانلىقى ئۇقتۇرۇلدى.
Alimu's project on investment was accepted in today's meeting.
The punishment for Adil's smoking cigarettes was announced in today's meeting.
- 11 ئالىمنىڭ بۇ روھىغا ئاپىرىن ئىنتىماي تۇرالمىمىز.
ئالىمنىڭ بۇ ئىشلىرى پۈتكۈزۈلۈش ئۈچۈن قاتتىق ئەجىر سىڭدۈرگەنلىكىنى پەقەت بىز بىلىمىز.

- We cannot help but admiring the spirit of Alimu.
Only we know how much effort Alimu paid on the load maintenance station.
- 12 مەركەز چىگرا رايونلاردىكى خەلقنىڭ كىرىمىنى ئاشۇرۇش ئۈچۈن بىر قانچە قارار ماقۇللىدى.
مەركەز چىگرا رايونلاردىكى خەلقنىڭ سېلىنىما مەبلەغىنى ئاشۇردىغانلىقىنى ئىلان قىلدى.
The government discussed several drafts to improve people's income of border areas.
The government announced to increase the investment in the people of border areas.
- 13 باشلىق دېگەن كۈچىنىڭ بارىچە خەلققە خىزمەت قىلىشقا تىرىشىشى كىرەك.
باشلىق دېگەن پىرىنسىپ بويىچە ئىش قىلىشى كىرەك.
Leaders should dedicate their efforts to serve the people.
Leaders should act according to principles.
- 14 ھەركىم ئۆز كەسپىدە ياخشى نەتىجە پارتالايدۇ.
ھەركىم ئۆز شىكايەت سۆزلىرىگە قانۇنىي ئاساس تېپىشى كىرەك.
Everyone will success in their career fields.
Each person must find the legal basis for their prosecution.
- 15 مەخمۇتنىڭ دادىسى ئۆزىنىڭ يۇلتىدىن قىرىنداشلىرىنى قىزغىندىكەن.
مەخمۇتنىڭ دادىسى ئۆزىنىڭ باپلىق تۇرمۇشىدىن رازى ئەمەس.
Mahemuti's father is always watching out for his brothers just because of a little money.
Mahemuti's father is not satisfied with a life of wealth.
- 16 سىز ئىخچە ئۇنىڭ سۆزىنىڭ مەنىسىنى بىلمەيسىز.
سىز ئىخچە ئۇنىڭ قوشۇلما قىممەت توغرىسىدا ماقالە يازغانلىقىنى بىلمەيدىكەنسىز.
You do not know the meaning of his words.
You do not know that he wrote an article about the value increment.
- 17 مەن بالامنىڭ يۇلتىغا قاراپ قالمىدىم.
مەن بالامنىڭ يۇلتىغا قارشى.
I can only expect my children's money.
I am opposed to my child playing football.
- 18 بۇ يەرنىڭ مۇرىككەپ تىلىنى ئۈگەنمەك ئۈچۈنلا ئاسان ئەمەسكەن.
بۇ يەرنىڭ مۇرىككەپ تۈپراق تەركىبىنى تەكشۈرمەك ئۇنداق ئوڭاي ئەمەس.
It is not easy to learn such a complex language.
It is not easy to examine such complex soil composition.
- 19 سەن داداڭنىڭ يېنىغا پەقەت پۇل ئۈچۈنلا بىرىپسەن.
سەن داداڭنىڭ ئەشپۇت كۈچىنى يىتىشتۈرۈشىگە ياردەم قىلغىن.
You only go to my father's side for the money.
You should go to help father cultivating pear seedlings.
- 20 ئايگۈلنىڭ ئۇ قىزغىن ئادەمنىڭ قىزى ئەمەسلىكىنى بىلمەيدىكەنسىز.
I do not have the courage to look at Ayiguli's eyes.
I do not know Ayiguli is the daughter of the Kirgiz person.
- 21 مەن ئۇنىڭ مەندىن يۇلتىنىڭ يېرىمىنى تېخى ئالمىغانلىقىنى ئاڭلىمايتىمەن.
مەن ئۇنىڭ مەندىن ئەندىشە قىلىدىغانلىقىنى بىلمەيدىكەنمەن.
I do not know that he has asked me for half the money.
I do not know that he has taken concerns about me.
- 22 سىلەر ئاۋۋال ئالىمنى ھالىدىن كەتكۈچە تۇرۇڭلار.
سىلەر ئاۋۋال ئالىمنى يېنىڭغا تېپىۋېلىشقا ئۈندىڭلار.

- "You beat Alimu until he is out of energy at once.
You ask Alimu to put on the coat at once.
23 رەيھان بۇ گۈلنىڭ بىر دەستە سېتىۋالدى.
رەيھان بۇ قونۇرماق ۋە قاتناش نىشلىرىدا كۆپ ئاۋازچىلىققا ئۇچىردى.
Reyihan bought a bunch of these flowers.
Reyihan met a lot of trouble in the accommodation and transportation.
24 ئادىل بالىلىرىنىڭ قولىدىن خاتىرە دەپتەرنى ئالدى.
ئادىل بالىلىرىنىڭ پىدائىي بولۇپ كىتىشىگە چىدىمىدى.
Adil took the notebook from the hands of children.
Adil did not want his own children to be volunteers.
25 بىز ئايگۈلنىڭ قىشىغا كەلگەنلىكىمىزنى ئۇنتۇپ قاپتۇق.
بىز ئايگۈلنىڭ ھېكايە باز غالىقىنى بىلمەي قاپتۇق.
We do not know that we have gone to the side of the Ayiguli.
We do not know Ayiguli wrote a story.
26 گۈلزار دانىم بۇ يەردىكى يەر قىيىن ئۇنتۇپ قالدۇ.
گۈلزار دانىم بۇ يەردىكى نىسلىپە قۇرۇلۇشنىڭ تەرىقىسى قىلمىغانلىقىدىن قاقشايدۇ.
Gulizhaer often forget the difference between them.
Gulizhaer often complain the undeveloped equipment here.
27 مەن يىراققىدىنلا بۇ ھىندىنى پۇراپ قالدۇم.
مەن يىراققىدىنلا بۇ كۈنچۈت ساتقىنىنى ئادىمنى تونۇۋالدىم.
I smell the fragrance from a distance.
I recognize the person who is selling sesame from a distance.
28 بۇ قىشقىرى يىغىندا سۆزلىگىنىمىز بىزنىڭ مەكتەپنىڭ مۇدىرى.
بۇ قىشقىرى يىغىندا تەقدىرلىشىش پائالىيىتى ئېلىپ بىرىلماقچى.
The speaker at the meeting is our principal.
An award ceremony will be hold at the meeting.
29 تاپقان پۇل ئايگۈلنىڭ يولىدا خەمچىلىك تۇگىدى.
تاپقان پۇل ئايگۈلنىڭ رۇسىيە ساياھىتىگە خەمچىلىك.
The money we earn is used up on account of Ayiguli's waste.
The money we earn is used for Ayiguli's trip to Russian.
30 ئالىمنىڭ ئىشلەپچىقىرىشتىكى بۇ تۈرىنى قولغا كەلتۈرەلەيسىز.
ئالىمنىڭ ئىشلەپچىقىرىشتىكى بۇ توختام ئۈچۈن ماڭغان يولى ئاز ئەمەس.
It is not easy to take over Alimu's production contract.
Alimu dedicates himself to the production contract.
31 ھازىر بۇ پۇلنىڭ بېشىدا ئوت كۆيۈۋاتىدۇ.
ھازىر بۇ پۇلنىڭ بېشىدا بۇلغا چىقىشقا چىلىكى يوق.
The money is needed with urgency.
The money is not enough for petrol now.
32 بۇ يەردىكى ئىشنى بېشىدىن باشلاپ چۈشەندۈرۈڭ.
بۇ يەردىكى ئىشنى بېرىمەن بويىچە ئەينەن دوكلات قىلىشىمىز لازىم.
We will explain the things clearly from the beginning.
We will report on the task according to the distribution ratio.
33 يۇقىرى دەرىجىلىك رەھبەرلەر بېشىدا بۇ تەرەپكە بۇرىدى.
يۇقىرى دەرىجىلىك رەھبەرلەر پارتىيە مەسلىھەتچىسىنىڭ ئەمەلىيلىكىدىن بەكمۇ رازى بولدى.

- The leader turned his head to the other side.
The leader is satisfied with the investment of greenhouse.
34 ئالىمنىڭ بۇ قۇرۇلۇش تۈرىدە بىر يۈسۈش يارىتىشىنى ھەممەيلەن ئۈمىد قىلىدۇ.
ئالىمنىڭ بۇ قۇرۇلۇش پونكىت خىزمىتىدىكى مەسئۇلىيەتسىزلىكى ھەممەيلەننى چۈچۈتتى.
We all hope Alimu' to achieve a breakthrough on this project.
We are surprised by Alimu's mistake at work in the construction institute.
35 مەن ھازىر بۇ كۈنلەرنىڭ قانداق ئوتتۇرا تاللىغىنى بىلمەيلا قىلىۋاتىمەن.
مەن ھازىر بۇ ئىشنىڭ مەسئۇلىيەتسىزلىكى قانداق ھەل قىلىش توغرىسىدا ئويلىشىۋاتىمەن.
I do not know how we spend these days.
I'm thinking about how to solve the problem of energy.
36 ئۇ ئۆزىنىڭ مۈلكىنىڭ ساتىنىشىمۇ ئۇقمايدۇ.
ئۇ ئۆزىنىڭ ئەشەنچىلىك ساھەسىدىكى ئويۇنغا ئىشىنىپ كېتىپتۇ.
He did not know the amount of his assets.
He overestimates his position in the industry of publishing.
37 سەن خەلقنىڭ زېمىنىدا ئىگىلىك تىكلەشنىڭ تەسلىكىنى ئۇنتۇپ قاپسەن.
سەن خەلقنىڭ مەنزىرە گۈللىرىنى ياققۇرمايدىغانلىقى بىلمەيدىكەنسەن.
You forgot how difficult the people of this territory started venture.
You do not know that some people do not like bonsai.
38 سەن ئۇ تۈرىسىمۇ كۆڭۈل بۆلمەيسەن.
سەن ئۇ مەلۇمات ۋە ئۇچۇرلار مانگا بىلدۈرۈلمەپتۇ دەپ ناغىرناما.
You do not care about his presence.
You can not complain that we did not to let you know the charts and information.
39 ھەممە ئادەمنىڭ ئۆزىنىڭ قىلغىنى ئۆزىگە كۆرۈنمەيدۇ.
ھەممە ئادەمنىڭ تىبابەت ئىشلىرىدىن خەۋرى بولۇشى ناتايىن.
Many people cannot see their shortcomings.
Many people want to ask something.
40 مەن بۇ يەردە ياللىرىم بىلەن ئاشۇ قىيىن كۈنلەرنى تەستە ئۆتكۈزدۈم.
مەن بۇ يەردە پائالىيەت ۋە تەجىربىلەرگە قاتناشتىم.
I spend the difficult days with my children here.
I participated in an activity and an experiment.
41 قۇش جىنىدا ئۆزىنىڭ ئۇۋىسىنى قوغداش ئۈچۈن ھەرىكەت قىلىدۇ.
قۇش جىنىدا ئۆزىنىڭ جىسمانىي ئىقتىدارىنى توغرا مۆلچەرلەيدۇ.
The birds take measures to protect their nests.
The birds can accurately estimate their own ability.
42 قوشنا مەھەللىنىڭ ئىتلىرى كىچىچە قۇش چىقى.
قوشنا مەھەللىنىڭ ئىنسان ۋە بەزى بوسۇنلارنى بىزگە ئانچە ئوخشاپ كەتمەيدۇ.
The dogs around the streets barked all night.
The building and custom of the neighboring villages are different from ours.
43 بۇ يەردە ئۆزىنىڭ ئاممىسى بىلمەيدىغان ئادەم يوق ئىكەن.
بۇ يەردە ئۆزىنىڭ ئاشخانىدا ۋە دۇكان ئاچقانلىقىنى ھەممەيلەن بىلىدۇ.
We all know that he has a good reputation here.
We all know that he opened a restaurant and shop here.
44 بۇ مەسىلىدە ھەر كىم ئۆزى ياللىرىنىڭ قىزىقىشىغا ھۆرمەت قىلسا توغرا بولىدۇ.
بۇ مەسىلىدە ھەر كىم ئۆزى مائارىپىنى كۆرۈپ باقسا بولىدۇ.

- Everyone should respect the child's hobbies on this issue.
Everyone should research for the information on this issue.
45 يەكشەنبە كۈنى كويىڭدا تۇرغان ئادەم مېنىڭ دادام بولدى.
يەكشەنبە كۈنى شاكىلات ئېلىپ باراي.
The man in your house on Sunday is my father.
I will bring chocolate on Sunday.
46 سەن دائىم ۋاقتىدا كەلمەسەڭ بولمايدۇ.
سەن دائىم ئىتقاد مەسلىسى ئۈستىدە گەپ قىلىدىكەنەن.
You have to be always on time.
You often say the words about faith.
47 سەزنىڭ بۇ ھەرىكەتتە يۈرتىنى سىغىنغانلارغا ئازراق تەمەللى بولدى.
سەزنىڭ بۇ ھەرىكەتتە خىرىدار چاقىرىش ۋە كىيىنكى مەنپەئەتكە ئەمەس تەمسىر بىرىدۇ.
Your behavior can comfort the one who misses his hometown.
Your behavior is bad for future interests and trade promotion.
48 ئايگۈل دائىم قىزىنى باغچىغا ئاپىرىدىكەن.
ئايگۈل دائىم زىننەت بۇيۇملىرىنى سېتىۋالىدۇ.
I heard that Ayiguli often took her daughter to the park.
I heard that Ayiguli often bought jewelry.
49 مەن گۈلزارنىڭ يېرىدىن ئىككى باش بەسەي يۇلۇۋالدىم.
مەن گۈلزارنىڭ يوشۇرۇن ھەرىكەتلىرىدىن بىر نەرسىنى ھېس قىلغاندەك بولدۇم.
I picked two cabbages from Gulizhaer's fields.
I felt something from Gulizhaer's secret action.
50 ئاتلار دائىم پالسىنىڭ بەختى ئۈچۈن ئۆز راھىتىدىن ۋاز كېچىدىغان پىداكار ھەم مېھرىبان ئىنسانلاردۇر.
ئانىلار دائىم ئىتتىرىت ۋە باشقا مەنپەئەتتىن يىغى مائىرىياللارنى كۆرۈشكە ئەھمىيەت بەرسە بولىدۇ.
Mothers are the kindest people who sacrifice themselves for their children's well-being.
Mothers should pay attention to new information from the Internet and other sources.
51 سەن ئالىمنىڭ سۆزىگە قارشى چىقالمايسەن.
سەن ئالىمنىڭ سۆزىگە قارشى چىقالمايسەن بىزىر بولدىڭ.
You cannot oppose Alimu's words.
You are tired of Alimu only focusing on the speed of doing things.
52 بۇ يەر بۇرۇنقى گۈزەل تۈسىنى ئەمەلگە قايتۇرۇۋاپتۇ.
بۇ يەر بۇرۇنقى گۈزەل تۈسۈن ئەمەس ئىدى.
This place was restored to the beautiful landscape of the past.
This place is not the beautiful Tok Village anymore.
53 ئۇنىڭ ھەممە ئىسىرىدە بۇ خىل ئوبرازلار بار.
ئۇنىڭ ھەممە ئىقتىدار ۋە ئالاھىدىلىكى بۇ كىتابتا بار.
Each of his works has the same prototype.
Every function and feature of it is introduced in this book.
54 ئۇلار بۇ تاملار دېن سەكرەپ تۇتۇپتۇ.
ئۇلار بۇ تۈلۈقلەمما بۇلىنى ئالدى.
They climbed over these walls.
They confiscated this compensation fee.
55 ئالىمنىڭ دادىسى قولىدىن ھېچ نەش كەلمەيدىغان ئادەم ئىكەن.
ئالىمنىڭ دادىسى ئىنۋەت ئۈچۈن جىننى بىرىدىغان ئادەم ئىدى.

- Alimu's father can do nothing well.
Alimu's father is keen on face-saving.
56 ئىرىمك شاخلىرىدىكى قۇشلارنىڭ كۆپلىكىدىن ئادىمىنىڭ ئەقلى ھىمران قالدۇ.
ئىرىمك شاخلىرىدىكى گېرمانىيە ئەسكەرلىرى تەسلىم بولۇشنى رەت قىلىپتۇ.
The great number of birds on the tree is shocking.
The Germans on the tree refused to surrender.
57 سەن تۈنۈگۈن ئۈيۈڭدەن ھىچنەمە ئالماي چىقىپسەن.
سەن تۈنۈگۈن ئالىيۇمىن دۇكىنىدا كۆرۈشكەن ئادەم بۈگۈن سەنى ئۈزۈپ كەپتىكەن.
You took nothing with you when you left home yesterday.
The person who you met in the Aluminum shop yesterday came to you.
58 بۇ ئىگىز بويۇق ئىنقىلابچى بىگىتنىڭ كۆزىدە جاسارەت باققىپ تۇراتتى..
بۇ ئىگىز بويۇق ئىنقىلابچى بىگىتنىڭ بايراق كۆتۈرۈپ ماڭدىغانلىقىنى ھەممەيلىم بىلىدۇ.
We can see the courage from the tall revolution soldier's eyes.
Everyone knows that the tall and young revolutionaries left with a flag.
59 بۇ خىل پائالىيەتنى ئۆتكۈزۈشنىڭ ئىشلىرى يۈرۈشۈپ تۇرغان كارخانا ئۈچۈن پايدىسى كۆپ.
بۇ خىل پائالىيەتنى ئۆتكۈزۈشنىڭ سائىمەت نۇرۇنلىرىغا پايدىسى كۆپ.
It is good for the factory to do something like organizing the activities.
It is good for the industrial enterprises to organize the activities.
60 قارا قىچرىنىڭ بويىدىكى زىل قوڭغۇراق ئاۋازى پۈتۈن مەھەللىگە ئاڭلىنىپ تۇراتتى.
قارا قىچرىنىڭ سىرىقۇيا يىمىدىغانلىقىنى سەن بىلمەيسەن.
The sound of bells hung around the neck of the black mule spread throughout the street.
You do not know that the mule do not eat licorice.
61 تاماشا دېگەننى تاغلا! دا قىلسا بولغىدەك.
تاماشا دېگەننى ئۇكرائىن شەھەرلىرىدە قىلساڭ بولىدۇ.
The best place for sightseeing the tourist is in the mountains.
Ukraine is a good place if you want to travel.
62 سەزنى تۇرغان كىشىنىڭ ئىسمىنى بىلىدىغان ئادەم تاپساق بولاتتى.
سەزنى تۇرغان كىشىنىڭ خوجاينى بىلەن ئالاقىسى بولۇشى مۇمكىن.
You can find someone who knows the name of the person that hit you.
The one who hit you may be related to the boss.
63 سەن ھەدىسلا ئۇنىڭ يېشىغا كىلىپ ۋاراك - چۈرۈك قىلسەن.
سەن ھەدىسلا ئۇنىڭ يىمۇاغ ۋە چاپانلىرى بىلەن ھەپلىشىدىكەن.
You can always make a hassle in front of him.
You can always look after his Jacket and belt.
64 ئۇنىڭ ھەممە ئىشىنى ئويىدىن ئەمگەن بۇل بىلەن پۈتتۈرۈشى ناتايىن.
ئۇنىڭ ھەممە ئىشى ئاشكارە بولسا بولمايدۇ.
The money from home cannot solve his problems.
All the things about him cannot be disclosed.
65 بۇ قىتمى پائالىيەت جايىدا ئىلىپ بىرىلدى.
بۇ قىتمى پائالىيەت جىڭگىل بازىرىدا ئىلىپ بىرىلدى.
The event was organized very well as planned.
The event was held at Qin Geli Bazaar.
66 بۇ خىل ئادەت مىڭنىڭ خىزمىتىنى چەكلەيدىكەن.
بۇ خىل ئادەت مەرىپەت ئارقىلىق ئۈچۈن ياخشى شارائىت ھازىرلدى.

- This habit may limit the function of the brain.
This habit is good for learning and disseminating the knowledge.
67 مەن بۇنداق قەدىمىي ئويلىمىڭىزگە بەك قىزىقمەن.
مەن بۇنداق قەدىمىي تەرخىمەك ئۆستۈرۈش ئۇسۇلىنى كۆرۈپ باقمىشىمەن.
I am particularly interested in these ancient houses.
I have not seen this traditional method of cultivating cucumber.
68 بۇ قىلىمى ئويلىمىز ناھايىتى ياخشى ئورۇندىن تاللاندى.
بۇ قىلىمى ئاكىسىغا ئەمەل خىزمىتى ئاياغلىشىش ئالدىدا تۇرماقتا.
The location of the houses is well selected.
The prevention of disease is coming to an end.
69 مۇئەللىمنىڭ بايقى سۆزلىرى ماڭا يەنە بىر نىھام بولدى.
مۇئەللىمنىڭ بايقى پىرىنسىپ ۋە قائىدىلەرنى نىمە ئۈچۈن تۈزۈپ چىققانلىقىنى ھىچ بىلمىدىم.
The teacher's words just now inspired me once again.
I do not understand why the teacher listed the rules of law just now.
70 قاسىم قىزىنىڭ كۆڭلىنى كۆتۈرۈش ئۈچۈن قىلىمىنى قالمىدى.
قاسىم قىزىنىڭ سۇغۇرتا تولىمىنى ئۆزىنىڭ قىلىۋاپتۇ.
Kasimu tried her best to improve her daughter's mood.
Kasimu took her daughter's premiums into her own property.
71 بۇ تارىخنىڭ قەدىمىي نىزلىرى ھەققىدە ئىزدىنىپ بېقىڭ.
بۇ تارىخنىڭ قەدىمىي كونترول مەركىزىنى تېپىش كىرەك.
You should research on these ancient ruins.
You should find the root of this history.
72 مەدەنىيەتنىڭ ئۇيغۇرلار قىزىنى نەپەسكە چوڭ قىلىدۇ.
مەدەنىيەتنىڭ ئۇيغۇرلار كۆكتات ۋە مېۋىنىڭ شېئالىق رولىنى بۇرۇنلا بايقىغان.
The civilized Uyghur teach their daughters to be very polite.
The civilized Uyghur knew the medical value of vegetables and fruits for a long time.
73 باتۇر ئوغلانلار ئۆزىنىڭ شەھىرىنى قوغداش ئۈچۈن كۆپ باھانىلىق كۆرسەتتى.
باتۇر ئوغلانلار ئۆزىنىڭ مۇداپىئە سىپىنى قايتىدىن چىڭىتتى.
The brave soldiers showed the spirit of prowess to defend their cities.
The brave soldiers have re-organized the line of defense.
74 ئۇ خەلقنىڭ ئازادلىقى ئۈچۈن ھاياتىنى قۇربان قىلدى.
ئۇ خەلقنىڭ ئازادلىقى ئۈچۈن مەسلىھەت قىلىنغان ئىشنى ئەستايىدىل ئورۇندىدى.
He sacrificed his own life for the liberation of the people.
He completed the task according to previous discussion for the liberation of the people.
75 ھەممىمىز ئۆزىمىزنىڭ تىلىدا سۆزلىسەك نىمە دېگەن ياخشى.
ھەممىمىز ئۆزىمىزنىڭ ئىدىيە ساپايىمىزنى ئۆزگەرتەيلى.
It's good to talk in our mother tongue.
We'd better to change the psychological quality.
76 گۈلزارنىڭ ئاچىسى ئويىنى بەك پاكىز تۇتىدىكەن.
گۈلزارنىڭ ئاچىسى ئەخلاق دەرسى بېرىدىكەن.
Gulizhaer's sister always cleans up the houses.
Gulizhaer's sister gives the lessons on ideology.
77 بۇ يىلقى پىلاندا چوڭ ئۆزگىرىش بولدى.
بۇ يىلقى تەشكىلات خىزمىتىدە تۆھپىسى زور ئۇنىڭ بۇ يىلىدا مەن توي قىلىپ بولغان.

There are lots of changes in his plan this year.
There are lots of contributions to the organization on his part this year.

78 ئۇنىڭ بۇ يىلىدا مەن توي قىلىپ بولغان.

ئۇنىڭ بۇ قەيسەر ئىرادىسى مېنى قايىل قىلدى.

I had already been married at his age.

His strong will impressed me.

79 مەن ئادەتتە يوللارنى ياخشى بىلىمەن.

مەن ئادەتتە يەكشەنبە كۈنلىرى ئۆيدە بولىمەن.

I am usually not very familiar with the road conditions.

I am usually at home on Sunday.

80 مەن ھازىر بۇ يەردە ئىشلەشنى ياقتۇرۇپ قالدىم.

مەن ھازىر بۇ يەردە ئىقتىساد باشقۇرۇشنى ئۈگەنگەن ئىمەن.

I think I like working here.

I am here to study management and economics.

81 مۇئەللىمنىڭ سۆزىدىن سېتىپ ئېلىش ۋاز كەچمەيدىغانلىقىنى بىلىمەن.

مۇئەللىمنىڭ سۆزىدىن بىر ئىشنى ھەققىدە توختىلىۋاتقىنىنى بىلىمەن.

I know the teacher will not give up on her class from her words.

I know that the teacher is talking about Brazil from her words.

82 بۇ ئۆيلەرگە گۈللىرىدىن تەزىپ قويساق بولغۇدەك.

بۇ ئۆيلەرگە ئىلىۋېتىش ۋە زامانىۋى ئۆي جاھازىلىرى تولىمۇ يارىشىپتۇ.

I can put some flowers in the room.

The TV and modern furniture fit the room very well.

83 ھازىر دۆلەتمىزدە ئىشلىتىلىۋاتقان چوڭ بىر مەسىلە بولۇپ قالدى.

ھازىر دۆلەتمىزدە ئېلېكترون قۇرۇلۇشى ئېلىپ بېرىلىۋاتىدۇ.

Unemployment in our country has become a very important issue.

Airport construction is under way in China.

84 مەن بۇ قېتىم شىۋېتچە قايتىپ كېلىمەن.

مەن بۇ قېتىم ئۆزىمىزنىڭ ئىقتىسادىغا بىرىشنى پىلانلىدىم.

I try to come back before July.

I intend to go to Ukraine this time.

85 مەن ئەزەلدىن دادامنىڭ ئىسمىدىن بۇ گەپلەرنى ئاڭلىماپتەكەنمەن.

مەن ئەزەلدىن دادامنىڭ بىر ئىسىم بولۇشنى ئويلايمەن.

I have never heard these words from my father.

I always dream of my father to be a professor.

86 ئۇنىڭ ئەينى چاغدىكى چىرايىدىن ئەسەرمۇ قالمىغاندى.

ئۇنىڭ ئەينى چاغدىكى ئەدەبىيات ۋە پەلسەپەگە بولغان قىزىقىشى ئىخچە تۈزگەن مەپتۇ.

There was no any expression on his face.

His enthusiasm for literature and philosophy did not change.

87 بىز ئۇنىڭ رولىنى ئەستىن چىقارماستىن كېرەك.

بىز ئۇنىڭ ئەمگەك ئەمۋالىسى بولغانلىقىنى تەبرىكلەيمىز.

We cannot forget its functions.

We congratulate him for being a model worker.

88 ماڭا نىسبەتەن ئۇنىڭ سۆزلىرى تولىمۇ ئورۇنلۇق بولىدۇ.

ماڭا نىسبەتەن ئۇنىڭ تەربىيە ئەھمىيىتى بەك چوڭ.

His every word is reasonable for me.
It has a high value of education for me.