

ON THE CHRONOLOGY OF *H* AND THE NEW *G* IN UKRAINIAN

GEORGE Y. SHEVELOV

Old Ukrainian records written in Cyrillic furnish no direct indication of the phonetic value of the letter *r* (hereafter “*g*”).¹ What is known is that its sound value in the original Cyrillic alphabet was [g], while in Modern Ukrainian it is [h]. Since the change affected all positions (except in the cluster *zg*, a problem which will not be treated in any detail in this article), native speakers felt no need to make any adjustments in the alphabet or orthography to reflect the change. Hence, suggestions concerning the mechanism and the chronology of the change were mostly speculative; a few others treated the textual evidence naively. Typically, it was assumed that *g* first changed into the voiced counterpart of *x*, usually denoted γ , which at some later point was pharyngealized into what is traditionally denoted *h*. Since the change *g* > γ occurred in the vast area from the Bavarian frontier to the Oka (i.e., in Czech, Slovak, Upper Sorbian, Belorussian, Ukrainian, and South Russian, as well as in some westernmost dialects of Slovene and some littoral dialects of Serbo-Croatian), it was relegated to prehistoric time.²

¹ For abbreviations of source titles, linguistic terminology, and references see Appendixes 1, 2, and 3 on pp. 150-152. In the transliteration of Old Ukrainian texts *r* is rendered as *g*, *н* and *и* as *i* and the *jers* are retained; in that of Middle Ukrainian texts, *r* is rendered as *h*, *н* and *и* as *y*, *ъ* as “”, *ь* as “’”, and *ы* as *ÿ*. The cutoff date is 1387 (which is purely conventional and does not imply that the sound changes in question occurred in or near that year). For both periods “*jat*” is rendered as *ě*, “*jus mal*” as *ę*, and “*fita*” as *th*, regardless of their phonetic value.

² “... als dialektische Erscheinungen späterslavischen Zeit betrachtet werden dürfen”—N. Trubetzkoy, *ZSPh* 1 (1924): 293; “... eine dialektische Erscheinung der urslavischen Periode”—N. Trubetzkoy, *Fs Miletich*, p. 270; “... at the very latest in the 10th century, more probably before 900”—Anderson, p. 561; although in part of Belorussian and South Russian “not until after” the fall of *jers* (Anderson, p. 565), which would put in doubt the Common Slavic scope of the change *g* > γ . Cf. the more cautious approach in my *Problems in the Formation of Belorussian* (New York, 1953), pp. 7-9.

The presence of γ as an intermediary between g and h cannot be doubted. It is well motivated by both articulatory and structural considerations; in addition, γ still exists in South Russian and, alongside h , in Belorussian. This implies that the student must establish two chronological dates, one for the passage of g to γ , and another for the change γ to h . At yet a later stage, whose chronology must also be determined, g was reintroduced (in positions other than in the cluster zg) into Ukrainian. These three chronological dates constitute the subject of this article. We will attempt to base answers on the concrete data of relative chronology, written records, and dialectal facts, and to abstain from any mental speculations in a factual vacuum.

1. In terms of relative chronology the spirantization of g into γ can be studied in connection with the following developments in Old Ukrainian:

a) It occurred after the split of $o\ddot{a}$ into \ddot{o} and \ddot{a} (eighth to mid-ninth century). OHG *ahorn* 'maple' has the expected distribution of a from a long vowel and o from a short one: OU **javoro* (MoU *javir*; its prothetic j - also points to that period). Yet OHG h has been replaced by v . Obviously, Slavic of the time, possibly including Proto-Ukrainian, had as yet no h . The word is not attested in Old Ukrainian texts, but the change $o > i$ and the widespread use of the word in Modern Ukrainian dialects make one assume its presence in Proto-Ukrainian and Old Ukrainian.

b) It occurred after the loss of weak *jers* (i.e., not before 1050). This is best seen by comparing some Ukrainian data with Slovak. In Slovak, **kǫde* 'where' became [gde] (spelled *kde*), not *+hde* or *+de*; apparently, after the loss of ǫ , when k by assimilation to d became g , the change $g > h$ was no longer operative.³ Consequently, g was maintained. In Ukrainian, on the contrary, one has to assume that MoU *de* comes from *hde*, i.e., that the sequence of changes was

$$k\ddot{o}de > kde > gde > hde > de.$$

This reasoning also applies to *todi* 'then' < *tǫgdě*.

Another alternative, the loss of g in the stage *gde*, is less plausible.

³ This is Trubetzkoy's argument for Czech (ZSPh 1 [1924]: 292). Strangely enough, he did not notice (or mention) that when applied to Ukrainian, this argument would lead to the conclusion that in that language g passed into γ after the loss of *jers*, and would thus undermine his view of the Common Slavic dialectal scope of the change.

Also, it is repudiated outright by the spellings *hde* from the time when the sound value of "g" as γ/h cannot be doubted: e.g., *nyhde* (Ch Włodawa 1536), *hde*, *tohdy* (Lst Braclav 1545, Lst Luc'k 1552 a.o.);⁴ the form *de* is not attested in Old Ukrainian. (In principle a simplification of the clusters *gd/kt* is, of course, quite possible; cf. *tytar* 'sexton' from Gr κτίτωρ, *dulja* 'a sort of pears' from P *gdula* < La *cydonea*).

c) It occurred before the change $\acute{e} > i$. Rm *círlig* 'hook' appears in Ukrainian as *gyrlýga* 'shepherd's stick', with *i* changed into *y* but *g* not changed into *h*—i.e., the word should have been borrowed either before the coalescence of *y* and *i* or just after it, during the short time when the language had no *i* (which was reintroduced through the change $\acute{e} > i$). The change $\acute{e} > i$ took place in Bukovyna-Podillja in the late thirteenth century, in Volhynia in the mid-fifteenth century. A borrowing of a Rumanian pastoral term is likely to have taken place about that time (the fourteenth to the sixteenth century). Compare also the treatment of Li (Žemait.) *Svidrigal* PN as *Švytrykhal* (Ch Żytomyr 1433).⁵

One may thus conclude that the spirantization of *g* occurred between the mid-eleventh and the fifteenth century, and in Bukovyna-Podillja in the late thirteenth century. For the Galician and Podilljan dialects this frame can be narrowed by reference to the fact that at the time of the change *ky*, *xy* > *ki*, *xi* the sequences *hy* were not affected. This change took place during the late thirteenth century. Apparently, *h* existed in that area at the time, whereas *g* no longer did.

Finally, a historical fact may be invoked—the acceptance of Christianity. Since all the original Christian names in Ukrainian contain *h*, the change $g > h$ (γ) clearly occurred after the conversion, i.e., after the tenth century. Otherwise, there would have been other substitutes for Gr γ as rendered by ChSl "g".

2. In using the data of written records, one must first reject certain spellings as irrelevant to the problem of chronology, despite some attempts to use them in solving this problem.

a) There are several instances of spellings with *x* instead of "g" in Old Ukrainian texts: *xod~~o~~* (corrected to *xod~~e~~to*) instead of *god~~o~~* 'year' in

⁴ *Arch Sang* 4 (1890) : 56; *AJuZR*, pt. 6, 1 (1887) : 21; *AJuZR*, pt. 7, 1 (1886) : 156, 171.

⁵ Rozov, p. 126.

GB 11th c; *k̃ñix̃č̃ii* instead of *k̃ñig̃č̃ii* 'savant' in Izb 1073; *xrouši* instead of presumably *grouši* 'pears' (Stud 12th c); *xr̃xa* instead of *gr̃xa* 'sin' gen sing (BGV 12th c), and a few more.⁶ However, *xod̃* should be disregarded because it is a corruption of a difficult text by a primitive scribe; *k̃ñix̃č̃ii* also occurs in Old Church Slavonic (*kñix̃č̃ii*—Supr) where it is a natural result of the dissimilation of two stops after the loss of *ъ*. The Old Ukrainian scribe restored the *jer* but retained the Old Church Slavonic consonant; *xr̃xa* is an anticipatory misspelling; and *xrouši*, which remains a completely isolated example, can only be a scribal error.

Not only are particular examples unsatisfactory, but the entire search for *γ/h* behind *x* is unacceptable. Whether "g" was [g] or [γ/h], it continually retained its phonemic identity, distinct from /x/, and there is no more reason to expect those two letters to be confused than, say, *b* and *p*, or *t* and *d*. Such confusions are possible only for foreigners accustomed to a language that has *x* but not *h* or vice versa, such as Rumanian and Hungarian. Actually, in Moldavian charters such confusions are by no means rare, e.g., *pana Hrynkova* ~ *pana Xrynka* 'Mr. Hryn'ko' gen sing (1414), *Tyhomyrovo selyšče* 'village of Tyxomyrovo' (1420), *ouxorskýx* ~ *ouhorskyx* 'Hungarian' loc pl (1423), *moxylu* (= *mohylu*) 'mound' acc sing (1425), *Xavrylovcy* GN (= *Havrylovci*) (1503) and many more.⁷ In the Transcarpathian dialects that were in constant contact with Hungarian, such confusion affected even some native words: *nexay* ~ *ñhay* 'let' (Kap 1640), *nehaj* (UK 1695), Mo *nahaj* instead of StU *nexáj*; also, *Myxal* PN became *Myhal* 'Michael' (apparently attested since 1492).⁸ But this situation does not appear in any record of the Old Ukrainian period.

b) In the roots *gñv-* 'ire' and *gñoj-*, rarely *gñn* 'drive', after prefixes ending in *z*, the initial consonant is omitted in some Old Ukrainian texts, e.g., *razñvaṽ* (Izb 1073), *izñijet̃* (Izb 1076), *razñvasẽ*

⁶ GB, p. 27; Izb 1073, f. 232v; A. Gorskij and K. Nevostruev, *Opisanie slavjanskix rukopisej Moskovskoj sinodal'noj biblioteki*, vol. 3, pt. 1. (Moscow, 1869; reprint Wiesbaden, 1964), p. 259; Kopko, p. 76 (cf. also F. V. Mareš in *Slavia* 32 [1963]: 424). For a more detailed discussion see my *Teasers and Appeasers* (Munich, 1971), pp. 159 ff.

⁷ M. Costăchescu, *Documentele Moldovenesti înainte de Ștefan cel Mare*, vol. 1 (Iași, 1931), pp. 103, 111, 135, 159, 168; I. Bogdan, *Documentele lui Ștefan cel Mare*, vol. 2 (Bucharest, 1913), p. 225.

⁸ J. Vašica in *Slovanský sborník věnovaný... Františku Pastrnkovi* (Prague, 1923), p. 14; Ju. Javorskij, *Novye rukopisnye naxodki v oblasti starinnoj karpatorusskoj pis'mennosti XVI-XVIII vekov* (Prague, 1931), p. 116; I. Pan'kevych in *Naukovyj zbirnyk Muzeju ukrajins'koji kul'tury v Svydnyku* 4 (Prešov, 1970): 90.

(Arx 1092, Z1st 12th c), *raznĕvanĕ* (BGV 12th c), *raznĕvanĕ*, *izna* (ŽSO 13th c), *raznĕvajetĕ* (PA 1307), *raznĕvasja* (XG 13-14th c), while it is retained in other texts or cases (e.g., *razgnĕvajetĕ*—Izb 1076, *razgnĕvanĕ*—Vyg 12th c, *razgnĕvatisja*—Usp 12th c, cf. *vǫzgnĕščajotĕ* ‘kindle’ 3rd pl—GB 11th c, *vǫzgnĕščĕše* past act part—LG 14th c).⁹

It is true that in the word-initial preconsonantal position *h* is easily subject to loss for articulatory reasons (besides *de* < *hde* ‘where’ as discussed above, cf. *Lykĕra* PN—Gr Γλυκερία, e.g., *Loukyrĕy* gen in Pom 1484, dial *lýna*, *ladýška* from *hlyna* ‘clay’, *hladyška* ‘jug’ [Rivne, E Volhynia], *rymýt*, *nizdó* from *hrymyt* ‘thunder’ 3rd sing, *hnizdo* ‘nest’ [scattered points in the upper reaches of the Dniester, Vinnycja oblast, Ce Polissja, Transcarpathia, Lemkivščyna]).¹⁰ Yet, in general, such loss of *h*- before sonants is not typical of Ukrainian.¹¹ In any case, the loss of the velar does not occur word-initially in *gnĕvĕ*—MoU *hniv*—but only in the cluster *zgn* and is to be taken against other cases of simplification of clusters in Old Ukrainian (and Common Slavic). This is particularly obvious if one remembers that Old (Northern) Polish texts also had *rozniewać*-type forms, whereas Polish never had the development *g* to *h*.¹²

c) The loss of the initial prevocalic velar is found in *ospodarĕ* ‘lord’ gen sing, in the inscription on the goblet of Prince Volodimir Davydovič of Černihiv, 1151—MoU *hospódár* ‘host’. Such forms reappear in the fourteenth century after an interval of more than two centuries (*ospodarĕ* along *hospodarĕ* gen sing—Ch 1386, Volhynia?; *ospodarju* dat sing—Ch Mold 1460, Ch Ostrih 1463, etc.),¹³ but then

⁹ Izb 1073, f. 145v.; Izb 1076, f. 237; Karskij, p. 48; I. Sreznevskij in *SbORJaS* 1 (1867): 28; Kopko, p. 77; A. Kolessa in *ASPh* 18 (1896): 223; I. Pan’kevych in *ZNTŠ* 123-124 (1917): 47; Sobolevskij, *Očerki*, p. 29; Izb 1076, f. 144v.; G. Sudnik in *Učenyje zapiski Instituta slavjanovedenija* 27 (1963): 177; Usp, f. 28b; GB, p. 210; Sobolevskij, *Očerki*, p. 75 (second pagination). The tradition continued, in part, into Middle Ukrainian: *raznĕvasĕ* (Izm 1496; see O. Trebin in *ZUNT* 7 [1910]: 15), *roznĕvav* (VP 1721; see J. Janów in *Prace filologiczne* 14 [1929]: 462). See also *Teasers and Appeasers*, p. 161.

¹⁰ *Pomianyky of Horodyshe*, ed. J. B. Rudnyc’kyj (Winnipeg, 1962), p. 18; H. Šylo in *Praci XII Respublikans’koji dialektolohičnoji narađy* (Kiev, 1971), p. 44; J. Dzendzelivs’kyj, *Konspekt z kursu ukrajins’koji dialektolohiji*, vol. 1 (Užhorod, 1965), p. 97.

¹¹ *Rabuváty* ‘rob’ is not a new form of *hrabuváty*, but a loanword from P *rabować* (from G *rauben*), and *Rýhir* along *Hrýhir* ‘Gregor’ probably goes back to Cz *Řehoř*. Tatar *aryamak* ‘Arab horse’ became U *hromak* and was borrowed by Polish, where it lost its *h*- and from which it returned into Ukrainian as *rumák*.

¹² T. Skulina in *Język polski* 40 (1960): 127 ff.

¹³ The inscription was reproduced many times, e.g., in B. Rybakov, *Russkie datirovannye nadpisi XI-XIV vekov* (Moscow, 1964), p. 28; also in G. Y. Shevelov and F. Holling,

they are explicable by the hypercorrect attitude toward developing *h*-prothesis. In Old Ukrainian the form used in 1151 is completely isolated. It can only be understood in light of the current treatment of *h* in foreign words, assuming that the word in question was borrowed as a high style expression from Czech (MoCz *hospodář*; otherwise, the word is attested in Old Ukrainian as *gospodarъ* in a text of Church Slavonic provenance, PS 11th c, with the meaning "master, owner" only). It is likely that in loanwords of the time prevocalic *h*- was not rendered at all or else replaced by *j*-, possibly subsequently (i.e., *h*+V- > V- > *j*+V-). Thus ON *Hqskuldr* PN became *Askoldъ* (e.g., Hyp 862), *Hákon* PN—*Jakunъ* (Hyp 945), *Hávaldr* PN—*Javolodъ* (Hyp 1209, 1211), *Helgi*, *Helga* PN—*Olъgъ*, *Olъga* (Hyp 964, 1096 a.o.); cf. as late as 1434 *oldovaly* 'pay homage' pl pret based on P *holdowali*.¹⁴ In this context, the form *ospodar-* does not prove the presence of the native *h* in 1151, but rather its absence.

d) Intervocalic velar is missing in the Cyrillic inscription *Ana rѣina*, presumably made by a Kievan courtier in the Latin charter issued in the names of King Philippe I of France and his mother Queen Ann from Kiev in 1063. The second word in the text is a transliteration of La *regina* or Fr *reine* 'queen'. However, the lack of *g* before *i* cannot be deemed a reflection of the Old Ukrainian pronunciation: in France by that time, *g* before front vowels had changed into either *j* or *ž* and the word should have sounded something like [rѣina]. Moreover, had *g* changed into *γ* or *h* by that time, foreign *γ* ~ *j* would be rendered by the Cyrillic "g". The case is, at any rate, irrelevant for the problem of the sound value of "g" in Old Ukrainian.¹⁵

3. Written records do, however, contain some oblique material for establishing the chronology of the spirantization of *g*. The following may be taken into consideration:

a) In the name "George" there is an interchange of "g" with [d'] and

A Reader in the History of the Eastern Slavic Languages (New York, 1968), p. 6. The charters are quoted from Rozov, p. 30; Jarošenko, p. 287; *Arch Sang* 1 (1887): 56. See also V. Demjančuk in *ZIFV* 15 (1927): 238.

¹⁴ *Sinajskij paterik*, ed. V. Golyšenko and V. Dubrovina (Moscow, 1967), p. 61 and passim. The Hypatian Chronicle is quoted with reference to the year of entry. *Oldovaly* is quoted by Jarošenko, p. 287, from a somewhat unreliable publication.

¹⁵ The text commonly referred to as "the signature of Anna Jaroslavna" in M. Prou, *Recueil des actes de Philippe I^{er} roi de France* (Paris, 1908), p. 48. The final part of the charter is reproduced in *ASPh* 42 (1929): 259. For this text's bearing on the problem of U *γ* ~ *h*, see E. Mel'nikov in *Slavjanskoe jazykoznanie*, AN SSSR (Moscow, 1959), p. 119.

j: *Gurgevskyi* (Hyp 1091), *ko Gur̃govu* (Hyp 1095), *iz Gurgeva* (Usp 12th c)—*Jur̃gii* (Hyp 1224), *Jur̃eva* (Hyp 1174)—*Djurdi* (Hyp 1135), *sz Djurgem̃* (Hyp 1157). In this word *g* is etymological, *j* goes back to Greek change *g* (γ) > *j* before front vowels (Gr Γεώργιος; cf. *añelom̃* 'angel' dat pl—Hyp 1110 based on Gr ἄγγελος) but [d'] points to the pronunciation of [g'] ruling out *h*.¹⁶ The concentration of [d'] forms is observed in the mid-twelfth century. They could not have been introduced by the fifteenth-century Russian copyist of the chronicle and must go back to the original text. One may infer that in, let us say, 1135-57, *g* had not yet changed into γ or *h*.

b) There are cases of foreign *g* being rendered as *k*: *Vilikail̃*, *Vykynt̃* PN (Hyp 1215), *Loñkogveni* PN (Hyp 1247) render Li *Villegayle*, *Wigint-Lengvenis*, respectively; in *g̃ercik-*, *ger̃cjuk̃* 'duke' from G *Herzog* (Hyp 1235, 1252) *k* renders German *g*, while "g" stands for German *h*. In charters, *Olk̃erta* PN gen (1352 Volhynia?), *Kediminoviča* PN gen (1363, area of Novhorod-Sivers'k) render Lithuanian names *Algirdas*, *Gediminas*.¹⁷ If *žaka* in Hyp 1251 ("i proide žaku pl̃enjaja") is based on Li *žāgas* 'haystack', *žagiñys* 'pale',¹⁸ this is another instance of substituting *k* for foreign *g*. Such substitutions make sense in a language that does not have *g*. Characteristically, they occur in entries of the thirteenth century. It may be inferred, therefore, that by 1215, *g* had changed into γ .

c) Prevocalic (and intervocalic) *h*, not *g*, is easily subject to interchange with sonantic spirants *v* and *j*, and vice versa. Such cases may be noted in the time after Old Ukrainian. In Modern Ukrainian, for example, one finds *horob̃ec̃* 'sparrow'—cf. R *vorob̃ej*, Br *verab̃ej*, P *wróbel*, Sk *vrabec*, Bg *vrab̃ec̃*; *jurb̃a* 'crowd'—cf. R *gur̃'bá*, Br *hur̃má*, P *hurma* 'herd'; *odjahatysja* 'dress'—cf. R *odevát*, Br *adzjavác̃*, P *odziejwac̃* (doublet *od̃evajusẽ* ~ *od̃ehajusja* in Adelp 1591; but later *h* prevails: *odehlysja*—KTS 1618, *od̃eha(n)e*—PB 1627, *od̃ehalnoe*

¹⁶ Interchanges of *g* and *g'* with *d* and *d'* are also frequent in MoU dialects, e.g. NKiev, NČernihiv *gle* 'for' (StU *dlja*); *gerd̃an* 'necklace', from Rm *gherd̃an* 'collar', in SKiev is *d'ordanký*; Hucul *l̃egin* ~ *l̃edin* 'lad', from Hg *legény*; in StU *dzýglyk* 'stool' goes back to P *zydel*, G *Siedel*, etc. The spellings *dju-* are reminiscent of the SC pronunciation with *d*, but OSC spellings of this word are either with *gu-* ~ *gju-* (*Gurgevik̃* 1380, *Gjur̃g* 1368) or with *ž-* (*Žor̃gi* 1289, *Žurg̃* 12th c) (*Monumenta Serbica*, ed. F. Miklosich [Vienna, 1858; reprinted Graz, 1964], pp. 195, 177, 56, 7).

¹⁷ Rozov, pp. 5, 8. For Lithuanian counterparts see K. Buga, *Rinktiniai raštai*, vol. 1 (Vilnius, 1958), pp. 246, 256, 227. Cf. also *Kediminoviča* in the "Psalter of Florence 1384," p. 18, quoted from the original unpublished manuscript (the courtesy of Professor Carlo Verdiani).

¹⁸ So assumed by A. Hens'ors'kyj, *Halyc'ko-volyns'kyj litopys* (Kiev, 1961), p. 96.

—PAK 1667, *oděhav'sę*—Rešet DG 1670);¹⁹ in loanwords *čahár* 'bush, shrub' from Osmanlı, Crimean *çayır* 'meadow, grass'; possibly *čavún* 'cast iron' from Turkic (Balkar *čoyun*, Karaim *čojun*); possibly *Tetijiv* GN if derived from *Tětij* PN, e.g., of a Cuman prince (attested in Laur 1185)²⁰ from Cuman *tetig* 'wise', assuming that the word entered into Old Ukrainian somewhat earlier and followed the regular development $g > \gamma$; this would also explain the rendition of Cuman *kičig* 'small' in another PN *Kočija* (Hyp 1103). In Old Ukrainian, a substitution $\nu < \rightarrow \gamma$ is possibly reflected in *Ivora* PN gen sing (Hyp 1180), if it stands for [ihora], but the example is not certain.²¹ Most such substitutions probably fall into the Middle Ukrainian period.

In sum, the evidence of the texts written in Cyrillic, indirect and sparse as it is, suggests that the spirantization of g occurred in the second half of the twelfth century or the beginning of the thirteenth (conventional orientation dates could be after 1157 and before 1215).

4. In Galicia, Pidljaššja, and Transcarpathia—areas that were in direct contact with the Western nations using the Roman alphabet—one may expect to find direct evidence on the pronunciation of Old Ukrainian "g": the Roman alphabet had two letters, g and h , in place of the one in the Cyrillic alphabet.

In Galicia, the Roman alphabet was rarely used prior to the Polish annexation, begun in 1349-1352. However, one does find *Hryczkone* 'Gregor' (1334, 1335) and more spellings with h (occasionally ch) after the occupation: *Belohoszcz* GN (Sandomierz 1356), *Hodowicza* PN (1371), *haliciensis* 'Galician' (1375), *Torhowycze* GN (1378), *Rohagyn* (sic!) GN, *haliciensis*, *Drohobicz* GN (Rome 1390), *Halicz* GN (Peremyšl' 1390).²² Jan Parkosz, the author of a treatise on Polish orthography (1440, available in a copy of 1460) giving the names of letters in the alphabet used by "Rutheni," called the fourth letter *lahol* (MoR *glagól*), with h after a and the initial preconsonantal h characteristically

¹⁹ *Adelphotes: Die erste gedruckte griechisch-kirchenslavische Grammatik*, ed. O. Horbatsch (Frankfurt-am-Main, 1973), p. 182; PB, p. 151; *Aktovye knigi poltavskogo gorodovogo urjada XVII-go veka.*, vol. 1, ed. V. Modzalevskij (Černihiv, 1912), p. 101; P. Žiteckij in *IORJaS* 10, no. 4 (1905): 56.

²⁰ The Laurentian Chronicle quoted from *Polnoe sobranie russkix letopisej*, vol. 1 (Moscow, 1962), with reference to the year of entry. Cf. A. Zajęzkowski, *Związki językowe połowiecko-słowiańskie* (Wrocław, 1949), p. 35.

²¹ *Ivor(ъ)* can be just another Slavic rendition of Scandinavian *Ingvarr*, on which *Igorъ* is also based.

²² *Akta grodzkie i ziemskie* 2 (L'viv, 1870): 5, 6, 12, and 3 (1872): 17, 86, 101. Cf. also Sobolevskij, *Očerki*, p. 106f., and in *RFV* 63 (1910): 111.

omitted.²³ In Pidljaššja, the city name *Hrubeschow* (founded in 1400) is attested in this form since 1446.²⁴ There are occasional spellings with *g* (*Bogdano* PN—L'viv 1376, *mogilla* 1378, *Bogdanowicz* PN—Peremyšl' 1427) but they are easily explained by Polish written tradition.²⁵ The presence of *γ* or *h* since 1334 is indisputable: however, this cannot be traced back any further in written records because earlier ones do not exist.

In the Transcarpathian regions, where relevant records seem to date back to 1215, *h* is attested since 1229, but *g* often appears afterwards: *Golosa* PN 1215,²⁶ *Galich* GN 1240, *Gallicia* GN 1254, *Mylgozt* PN 1266, *Mogula* GN 1266, *Bereg* GN 1263, *Igrischtya* GN 1377 vs. *Halicie rex* 1229, *Hillinua* RN (= *hlynna* 'of clay') 1270, *Kemonahurka* GN (= *Kamenna hurka* 'stone mountain') 1336, *Dolha* GN 1336, 1337, *Hwrniach* GN (= *hurnjak*), *Hyrip* GN (= *hryb* 'hill') 1370, villa *Poth(o)ren* (= *Podhoren* 'under hill') 1389, *Horbach* PN 1393; cf. also *Beregh* GN 1261, 1285, *Ungh* ~ *Ugh* RN 1285, 1288.²⁷ The interplay of *g* and *h* forms is understandable when one considers the complexity of the nationality situation in the area. Here Ukrainian settlements expanded alongside Rumanian, Hungarian, and, in part, Slovak, Polish, and Bulgarian ones, and scribes who wrote in Latin were, as a rule, Hungarian. Hungarians and Rumanians who learned the name of a village with *g* could have preserved this form after *g* had changed in the language of the Ukrainian population, and could have continued to use the corresponding form in writing. Conversely, *h* forms had

²³ *Materjały i prace Komisji językowej*, vol. 2 (Cracow, 1907), p. 398.

²⁴ S. Warchoń, *Nazwy miast Lubelszczyzny* (Lublin, 1964), p. 73.

²⁵ Cf. a spelling with *g* in this name as late as 1723: *Bokhdančenko* [Pyrjatyn town records]: *Storoženki, famil'nyj arxiv*, vol. 1 (Kiev, 1908), p. 23.

²⁶ As reproduced in the 1550 edition of *Regestrum Varadinense*: see J. Karácsonyi and S. Borovszky, *Regestrum Varadinense* (Budapest, 1903), pp. 176, 163.

²⁷ *Árpád-kori újkönyvtár* [Magyar történelmi emlékek—Monumenta Hungariae historica, ed. G. Wenzel (Budapest)] 4 (1862): 328; 6 (1867): 477; 7 (1869): 283, 361; 8 (1870): 261; *Zsigmondkori oklevéltár*, vol. 1 (Budapest, 1951), p. 311; V. Bélay, *Máramoros megye társadalma és nemzetiségei* (Budapest, 1943), p. 144; F. Maksai, *A középkori Szatmár megye* (Budapest, 1940), p. 146; F. Lónyay, *A nagylónyai és vásárosnaményi Lónyay-család eredete* (Budapest, 1941), pp. 137, 138, 142. All other data is quoted from L. Džže (Dezső), *Očerki po istorii zakarpatskix govorov* (Budapest, 1967), p. 61, with reference to *Nagymihályi és sztárai gróf Sztáray család oklevéltára*, and D. Csánki, *Magyarország történelmi földrajza a Hunyadiak korában*, publications which were not available to me; unfortunately, however, Dezső's references are sometimes imprecise. See also I. Pan'kevych, *Narys istoriji ukrajins'kyx zakarparts'kyx hovoriv*, vol. 1 (Prague, 1958) (= *Acta Universitatis Carolinae, Philologica* 1), pp. 37f., and in *Slavia* 24 (1955): 235. Cf. J. Dzendzelivs'kyj and P. Čučka in *Movoznavstvo* 2 (1968): 81.

no written tradition and must be taken at their face value. Even with utmost caution, it may still be said that, at least in some localities, γ or h was present not later than from 1229.²⁸

This conclusion is indirectly confirmed by the fact that Hungarian and Rumanian names of villages founded in the fourteenth century have preserved their g to this day, even among the Ukrainian population: *Cseng(ava)*—MoU *Čyngava*, *Negova*—*Njagovo* (from Rm *Neag(a)* PN) a.o. This may mean that in the fourteenth century the change $g > \gamma$ was no longer operative, which presupposes that it began a considerable time earlier.

5. In light of the preceding data, the spirantization of g should be placed in the late twelfth or the early thirteenth century. It was a sweeping change: g was not preserved in any position except in the cluster zg . The change occurred throughout Ukrainian territory. Using the available data, it is impossible to establish definitively the original center of its irradiation, although it was probably in the west or south-west of the country. Moreover, it was shared with Belorussian, from which it probably spread to South Russian (not necessarily immediately; unfortunately, documentation from that area is virtually non-existent). The spirantization of g in Czech is documented from about the same time (1169), in Slovak from 1108; in Upper Sorbian g apparently existed until the end of the thirteenth century. Yet, as shown in section 1-b above, in Slovak (and Czech) it actually occurred before the loss of *jers*, i.e., presumably in the tenth century. Thus, there were several independent areas of spirantization of g , certainly at least three—Czech and Slovak; Ukrainian, Belorussian, and South Russian; and Upper Serbian—and perhaps more if Slovak implemented spirantization independently from Czech, and South Russian independently from Belorussian (not to mention dialects of Slovene and Serbo-Croatian). The cluster zg was maintained without change in Belorussian and Slovak, as well as in Ukrainian.

Questioning the reasons for these changes is a special topic that will only be touched upon in this article. An attempt to deal with it was made by Trubetzkoy.²⁹ In brief outline, the following answer, which partially modifies his views, can be given.

²⁸ Examination of the names of towns and villages of Ukrainian origin in Moldavia which were probably founded in the thirteenth century leads to the same conclusion: Cf. *Horodiște*, *Horodea*, *Dolhasca*, *Halița*, *Hlina* a.o. See E. Petrovici in *RmSl* 4 (1960).

²⁹ In *Fs Miletič*, pp. 272 ff. Andersen's attempt to view this as a manifestation

The principal motivation for the change $g > \gamma$ seems to have been morphophonemic: by the twelfth century the alternants were spirants:

$$g : \check{z} : z$$

(*noga* 'foot' : *nozé* : *nóžka*). It would have been more consistent to have the first alternant also a spirant. Such a pattern existed in the alternation :

$$x : \check{s} : s$$

(*muxa* 'fly' : *musé* : *muška*). The third velar was a stop and had no spirants as alternants :

$$k : \check{c} : c$$

(*ruka* 'hand' : *rucé* : *ručka*). The change $g > \gamma$ introduced the complete identity of two series :

$$\gamma : \check{z} : z \quad \text{as} \quad x : \check{s} : s$$

The morphophonemic motivation for the spirantization of *g* is strongly confirmed by its preservation after *z*. In the cluster *zg*, the alternation was not with \check{z} but with \check{z} and, probably, not with *z* but with \check{z} —i.e., it precisely paralleled not the *x* series, but the *k* series :

$$(z)g : (\check{z})\check{z} : (z)\check{z} \quad \text{as} \quad k : \check{c} : c.$$

It is only logical that *g* underwent no spirantization in that cluster. (This makes superfluous Andersen's suggestion [558 ff.] that the reasons for the preservation of *g* in the cluster *zg* can be found only in the language situation before the loss of *jers*.)

There was no resistance on the part of the phonemic system. It was asymmetrical :

$$\begin{array}{c} k - g \\ x \end{array}$$

and so it remained after the change :

$$\begin{array}{c} k \\ x - \gamma. \end{array}$$

The stop *g* was no longer a phoneme : its preservation in the cluster *zg* was phonemically irrelevant because γ was not admitted in this position (except on morphemic boundaries between prefixes and roots, of the type MoU *uzhírja* 'slope', clearly a special case).

The subsequent shift of γ to a more back, pharyngeal articulation of *h* was phonemically and morphophonemically inconsequential;

of the alleged Proto-Ukrainian switch to the contrast tense vs. lax is not borne out by the factual data.

acoustically, the two sounds are nearly identical.³⁰ Since the language had no other pharyngeal consonants, this area was open to optional inroads without any ensuing phonemic shift. The switch from γ to h was probably accelerated by the development of prothetic h - (the sixteenth century at the latest). For a prothetic consonant the pharyngeal articulation was, so to speak, natural. When h arose in prothesis, the existence of two articulations, h and γ , became excessive and h was generalized. With this interpretation the change $\gamma > h$ can be tentatively placed into the sixteenth century.³¹ South Russian, which developed no prothetic h -, still preserves γ . In Belorussian, where prothetic h - only appears in the southwestern dialects, h and γ are in competition but γ is said to prevail (see *DABM*, maps 47, 48).

6. Frontal exposure of Middle Ukrainian to the Western languages brought about, among other things, a flood of Western words with g for which the language had no precise equivalent. On the other hand, the subsystem of velars had a vacancy for g because k lacked a voiced counterpart :

$$\begin{array}{c} k \text{ —} \\ x \text{ — } \gamma \end{array}$$

This created prerequisites for the reintroduction of g , which was absent in Old Ukrainian from the late twelfth or early thirteenth century.

The reintroduction of g is usually placed in the late fourteenth century because at that time (after 1387) a special digraph was introduced in secular writings to denote g : kh ;³² *Khyrdivyd* PN (Ch Łęczycza 1388), *Khastovt* PN (Ch Cracow 1392), *Ydykhyt* (Ch Cracow 1393). But certain circumstances call for caution. Available evidence indicates that the custom started in Polish chanceries. The first instances of its use by scribes in the Ukraine seem to date to 1424 (*Švytrykhylo* PN—Ch Snjatyn). Perhaps scribes better acquainted with Latin and Polish orthographic habits were dissatisfied with the non-distinction between

³⁰ In those dialects that do not admit voiced consonants in word-final position and before voiceless consonants, x characteristically appears as an alternant of h , e.g., [sn'ix], StU *snih* 'snow'.

³¹ The chronology of the change $\gamma > h$ must have been different—to wit, not later than the late thirteenth century—in those Southwestern dialects that shifted ky , xy to ki , xi but preserved hy unchanged. Whether they had prothetic h at that time is uncertain.

³² It recalls the Greek digraph with the same sound value. But Greek uses the two components in reverse order, e.g., MoGk γκάζι 'gas', γκρί 'gray' and, as Professor Ihor Ševčenko kindly informs me, the Greek digraph hardly appeared before the fifteenth century.

g and *h* in the Cyrillic written documents they issued, especially in proper names (all the earliest records concern such names), and therefore launched that digraph. Its use in the fifteenth century seems to have been limited primarily to proper names, such as *Son''khuškovyčju* dat sing (Ch 1446, Puni). Exceptionally, it was also used in some church books, but there, too, for proper names (*Khomoru* GN acc 'Gomorra'—Antonovec' Acts and Epistles 15th c). One comes across it in other words only from the sixteenth century: *khmaxom''* 'building' dat pl (Lstr Kremjanec' 1552), *khrunty* 'land property' nom pl (Krex 1571), *o dyfthonkhax''* 'diphthong' loc pl (LZ 1596). By the very end of the sixteenth century and the beginning of the seventeenth, attempts were made to use the Roman letter *g* or to introduce the special new Cyrillic letter *Г'*: *fěgoura* 'figure' (ClOstr 1599), *grono* 'cluster' (PB 1627), etc.; but the use of *kh* lasted into the eighteenth century (*Jakhello* PN—Hrabjanka 1710).³³

From these facts we can infer that the spellings of *kh* in the fourteenth and fifteenth centuries do not necessarily point to the reintroduction of *g* in the Ukrainian language outside of Transcarpathia and possibly Bukovyna.³⁴ Rather, they may have been an orthographic device to preserve in Cyrillic writings the identity of proper names as spelled in the Roman alphabet. It is most likely that *g* was reintroduced

³³ Rozov, pp. 38, 47, 48, 99; *Arch Sang*, p. 43; M. Karpinskij in *RFV* 19 (1888): 70; *AJuZR* pt. 7, 2 (1890): 28; I. Ohijenko, *Ukrajins'ka literaturna mova XVI-ho st.*, vol. 1: *Krexivs'kyj Apostol 1560-x r.* (Warsaw, 1930), p. 511; LZ, p. 88; *Pamjatky ukrajins'ko-rus'koji movy i literatury*, vol. 5 (L'viv, 1906), p. 201; PB, p. 48; H. Hrabjanka, *Děstvyja prezěl'noj y ot načala poljakov krvavšoj nebyvaloj brany Bohdana Xmel'nyckoho* (Kiev, 1854), p. 18.

The use of the digraph *kh* may best be understood if one assumes that scribes in Poland introduced it on the precedent of HG *kh*. In OHG and MHG writings (more specifically, in the Bavarian and Austrian scribal schools) *kh* was a graphic variant of *ch* (with *c* = [k]) to denote an affricated *k*; however, its sound value was hardly known to scribes in Poland. They saw the sign used, and since one for [g] was needed, they introduced it with that sound value. Less plausible is the possibility of patterning early U *kh* on the Low German scribal fashion (in MLG) of using *h* after various consonants, including *k*, without any sound value, as a sophistication device. See H. Paul, *Mittelhochdeutsche Grammatik* (Halle, 1944), p. 77; A. Lasch, *Mittelniederdeutsche Grammatik* (Halle, 1914), p. 136.

³⁴ For Bukovyna an earlier date for the reintroduction of *g* may be accepted, on the basis of the form (dialectal Carpathian) *kljag(a)* 'whey ferment', borrowed from Old Rm **kl'ag* (La *coagulum*), prior to the loss of *l'* in Rm (MoRm *cheag* [k'a-]); cf. *zgljaganoe moloko* in *Lucidarium* 1636 (Karskij, p. 544; the root-initial *g* from *k* by assimilation: cf. E. Vrabie in *RmSI* 14 [1967]: 110, 153f.). It is probable that Bukovyna was also instrumental in the transmission of *gyrlyga* to other regions of the Ukraine (see section 1-c above).

into spoken Ukrainian in the sixteenth century, and that possibly even then it was at first a feature of the educated. This would explain why Meletij Smotryc'kyj (1619) placed the letter *g* alongside *f*, *ks*, *ps*, and *th* as being *strannaja* 'foreign' ("slavjansku jazýku i kromě syx sostojaty mohušču") and specifically warned against confusing *g* and *h* by referring to the example *odygytrya*, a rarely used foreign word, vs. *hora* 'mountain', a commonly used Slavic one (1619).³⁵ This also accounts for the occasional, unexpected use of *kh* in foreign words in place of *h* (e.g., *kholdovat* 'pay homage'—Ch 1393, Molodečno—from P *holdować*!) or even in native words (*khlynŭ* 'clay' gen sing—LSF 1595).³⁶ On the other hand, *g* was certainly accepted in the common language not later than ca. 1600: this was the time of the first Ukrainian settlement in what is now the southern part of the Voronež oblast' of the RSFSR, and these dialects do, indeed, have *g* (e.g., *gnóttja* 'wicks', *gerlýga* 'shepherd's stick', etc.).³⁷

Columbia University

APPENDIX 1: ABBREVIATIONS OF SOURCE TITLES

- Adelp = Adelphotos: Hrammatyka dobrohlaholyvoho ellynoslovenskaho jazýka ... (1591)
 Arx = The Gospel of Archangel (1092)
 BGV = *Besědy na evangelija* by St. Gregor the Great (12th c)
 Ch = charter
 C10str = Cleric of Ostrih: Otpys na lyst... Ypatya; Ystorya o... florenskom synodě (1598)
 GB = "XIII slov Grigorija Bogoslova" (11th c)
 Hyp = Hypatian Chronicle
 Izb = Izbornik
 İzm = İzmarahd (1462-1496)
 Kap = Kapyšovs'kyj's Didactic Gospel (written in Galicia before 1640)
 Krex = Acts and Epistles of Krexiv Monastery
 Laur = Laurentian Chronicle
 LG = The Gospel of Luc'k
 LSF = Documents of the L'viv Stavropygian Brotherhood

³⁵ Meletij Smotryc'kyj, *Hrammatiki slavenskija pravilnoe syntagma*, ed. O. Horbatsch (Frankfurt-am-Main, 1974), pp. 8, 11. *Odygytrya*, literally "guide", was applied to certain icons of the Holy Virgin.

³⁶ Rozov, p. 43; M. Xudaš, *Leksyka ukrajins'kyx dilovyx dokumentiv kincja XVI-počatku XVII st.* (Kiev, 1961), p. 53.

³⁷ H. Solons'ka in *O. O. Potebnja i dejaki pytannja sučasnoji slavistyky* (Xarkiv, 1962), p. 243.

Lst	=	Lustracija (census)
LZ	=	Lavrentij Zyzanij, <i>Hrammatyka slovenska</i>
PA	=	The Pandects of Antiochus
PAK	=	Poltavs'ki aktovi knyhy [Town records of Poltava]
PB	=	Pamva Berynda: <i>Leksykon slavenoross'kyj</i>
Pom	=	pomjanyk [Book of commemoration]
Rešet DG	=	The Didactic Gospel of Rešetylivka by the priest Semyon Tymofěevyč
Stud	=	The Studion Statute
UK	=	Ključ, anthology of Uglja [Transcarpathia]
Usp	=	Uspenskij sbornik [Anthology of the Uspenskij Cathedral]
Vyg	=	Manuscript of Vyg and Leksa Monasteries
XG	=	The Gospel of Xolm (Chelm)
Z1st	=	Zlatostruj
ŽSO	=	Žytyje Savy Osvjaščennoho [The life of St. Sava]

APPENDIX 2: REFERENCES, WITH ABBREVIATIONS

AJuZR	=	<i>Arxiv Jugo-zapadnoj Rossii</i> (Kiev).
Andersen	=	Henning Andersen. "Lenition in Common Slavic." <i>Language</i> 45 (1969).
Arch Sang	=	<i>Archiwum ksiąg Lubartowiczów Sanguszków w Sławucie</i> (L'viv).
ASPh	=	<i>Archiv für slavische Philologie</i> .
DABM	=	<i>Dyjalektalahičny atlas belaruskaj movy</i> . Minsk, 1963
Fs Miletič	=	<i>Sbornik v čest na prof. L. Miletič</i> . Sofia, 1933.
GB	=	A. Budilovič. <i>Issledovanie jazyka drevneslavjanskogo perevoda XIII slov Grigorija Bogoslova</i> . St. Petersburg, 1871.
Hyp	=	AN SSSR, <i>Polnoe sobranie russkix letopisej</i> . Vol. 2: <i>Ipat'evskaja letopis'</i> . Moscow, 1962.
IORJaS	=	<i>Izvestija Otdelenija russkogo jazyka i slovesnosti</i> [of the Russian Academy of Sciences].
Izb 1073	=	<i>Izbornik velikogo knjazja Svjatoslava Jaroslaviča 1073 goda</i> . St. Petersburg, 1880.
Izb 1076	=	<i>Izbornik 1076 goda</i> . Edited by V. Golyšenko et al. Moscow, 1965.
Jarošenko	=	V. Jarošenko. "Ukrajins'ka mova v moldavs'kyx hramotax XIV-XV vv." <i>Zbirnyk Komisiji dlja doslidžennja istoriji ukrajins'koji movy</i> [of the Ukrainian Academy of Sciences]. Vol. 1. Kiev, 1931.
Karskij	=	E. Karskij. <i>Trudy po belorusskomu i drugim slavjanskim jazykam</i> . Moscow, 1962.
Kopko	=	P. Kopko. <i>Issledovanie o jazyke "Besed na Evangelija"</i> (sv. Grigorija Velikogo papy rimskogo) pamjatnika južnorusskogo XII veka. L'viv, 1909.
KTS	=	Kyryl Trankvilion Stavrovec'kyj. <i>Zercalo bohoslovyy</i> .
LZ	=	Lavrentij Zyzanij. <i>Hrammatyka slovenska</i> . Edited by G. Friedhof. Frankfurt-am-Main, 1972.
PB	=	<i>Leksykon slavenoros'kyj Pamvy Beryndy</i> . Edited by V. Nimčuk. Kiev, 1961.
RFV	=	<i>Russkij filologičeskij vestnik</i> .
RmSl	=	<i>Romanoslavica</i> (Bucharest).
Rozov	=	V. Rozov. <i>Ukrajins'ki hramoty</i> . Vol. 1. Kiev, 1928.

- Sobolevskij, *Očerki* = A. Sobolevskij. *Očerki iz istorii russkogo jazyka*. Kiev, 1884.
 Usp = *Uspenskij sbornik XII-XIII vv.* Edited by S. Kotkov. Moscow, 1971.
 ZIFV = *Zapysky Istoryčno-filolohičnoho viddilu* [of the Ukrainian Academy of Sciences].
 ZNTŠ = *Zapysky Naukovoho tovarystva imeny Tarasa Ševčenka*.
 ZSPh = *Zeitschrift für slavische Philologie*.
 ZUNT = *Zapysky Ukrajins'koho naukovooho tovarystva* (Kiev).

APPENDIX 3 : OTHER ABBREVIATIONS

Bg	= Bulgarian	N	= north(ern)
Br	= Belorussian	O	= Old
c	= century, centuries	OCS	= Old Church Slavonic
Ce	= central	ON	= Old Norse
ChSl	= Church Slavonic	Osm	= Osmanli
CS	= Common Slavic	P	= Polish
Cz	= Czech	PN	= personal name
E	= east(ern)	PU	= Proto-Ukrainian
Fr	= French	R	= Russian
G	= German	RN	= river name
GN	= geographical name	Rm	= Rumanian
GP	= Galician and Podilljan	S	= south(ern)
Gr	= Greek	SC	= Serbo-Croatian
HG	= High German	Sk	= Slovak
Hg	= Hungarian	Sl	= Slavic
KP	= Kievan and Polissjan	Sn	= Slovene
La	= Latin	St	= standard
Li	= Lithuanian	Tc	= Turkic
M	= Middle	U	= Ukrainian
m	= mid	US	= Upper Sorbian
Mo	= Modern	W	= west(ern)
Mold	= Moldavian		

Grammatical terms are abbreviated according to traditional forms.