

The Term "Human Being" and the Problem of Abortion

Those who favor the practice of direct abortion usually maintain that the killing of a human fetus is not the killing of a human being. They admit that a fetus procreated by human parents is a living being and a human fetus. But they refuse to admit that a fetus is a living human being. Opponents of abortion, on the other hand, maintain that this is a deliberate dodge. If a box is small and blue then why not call it a small blue box? Similarly, if a fetus is a human and a living being then why not call it a living human being?

This objection is very important, and must be understood if the problem of abortion is ever to be got straight. The assumption being made, which I regard as mistaken, is that the meaning of a compound noun is always the result of a simple combination of non-ambiguous components and that this combination never involves a shift in meaning. But what fluent English speaker would seriously maintain that if a tray is made of ash it necessarily follows that it is an ashtray? If black guards protect someone does this mean that they are necessarily blackguards?

I do not wish to belabor this point. It is obvious that the meaning of a compound noun is not necessarily the result of simple addition. What is not as obvious is that there is a similar shift in meaning when "human" and "being" combine to form the compound "human being."

Part of the dictionary entries for "being," "fetus," "human," and "human being" read	
<i>being</i> ₁ → [Noun],	(That which has existence); <SR>.*
<i>being</i> ₂ → [Noun],	(Individual which has or has had an independent nature capable of sustaining and regulating its own metabolic pattern); <SR>.
<i>fetus</i> → [Noun],	(Physical object), (Living), (Animal), (Vertebrate), (Unborn Progeny); <SR>.
<i>human</i> → [Adjective],	(Of or pertaining to members of the family Hominidae); <SR>.
<i>human being</i> → [Compound Noun],	(Physical object), (Living), (Animal), (Mammal), (Individual which has or has had an independent nature capable of sustaining and regulating its own metabolic pattern); <SR>.

It is true to say that every human being is human. But given this lexical structure it is not true that every being that has human characteristics is a human being. Moreover, it is not true that every human fetus is a human being.

There are two reasons for the latter claim. First, the fluent English speaker understands that the word "being" is used ambiguously, that the sentence "Every human fetus is a human being" can be paraphrased to read "Every human fetus *being*₁ is a human *being*₂." Second, and more important, he realizes that the underlying structure of this sen-

* This form of a dictionary entry is to be interpreted as follows: first, there is the orthographical representation of the word, then the syntactic marker, and finally, the lexical reading. The Selection Restriction, *SR*, expresses necessary and sufficient conditions for that reading to combine with others to form non-anomalous sentences. See Katz and Postal, *An Integrated Theory of Linguistic Descriptions* (Cambridge, Massachusetts: M.I.T. Press, 1964), pp. 12–17; Jerrold Katz, *The Philosophy of Language* (New York: Harper and Row, 1966), pp. 151–161.

tence is self-contradictory. For the fluent English speaker understands that to say that "Every human fetus being₁ is a human being₂" is in essence to say that "All unborn human progeny are born human progeny."

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Surnames and Women's "Liberation"

Anyone who reads these days is aware of the avalanche of recent writing on Women's Liberation. The fact that our surnames are patronymic has bothered some Liberationists. A recent article on "The Equality of Women" by Marion Bromly (in *Friends Journal*, Philadelphia, January 1, 1971) devotes some interesting paragraphs to the "troublesome matter of names," and by names, of course, she means surnames.

The surname is troublesome to this author, a married Liberationist, because her married name is that of her husband. And of course, her maiden name is that of her father. But, if she were to use the married name of her mother, it would also be a patronymic — the surname of her mother's husband. And if she were to use the maiden name of her mother, it would be the surname of her mother's father. How is the Liberationist to free herself of this intolerable burden?

The author seizes upon a popular attitude toward names to help her with her "dramatic" solution. This attitude is the viewpoint that a name does not matter much (to non-Liberationists), that what is important is who and what a person is, not the name one happens to carry. If this is true, she argues, it should be possible to assume a completely new name at marriage. She advocates that newly-weds chose a "new name, different from that of either partner." If the husband were to consent to this procedure, the new name would "reflect their feeling of equality," and it might even serve as a "basis for strengthening [their] commitment to each other."

But this solution would not help those Liberationists who do not marry. For them, as well as for those who do, an alternative solution (unmentioned by Mrs. Bromley) might be to hyphenate the surname, as some Europeans already do, by combining the family names of both the mother and the father. Even the maiden name of the mother could be used, and it could be placed first in the compound name, if the position of the name were to be considered symbolically important. In writing, the mathematical symbol of equality could even be used, instead of the hyphen, in order to satisfy the most demanding egalitarians.

This proposal is not as revolutionary as it may at first sight seem to be. The use of compound surnames is, and has long been, firmly established in certain geographic and demographic areas of the Old World. It is also commonly met with in Latin America. What others can do, we can also do. There are other values in the proposed procedure. It would satisfy the Liberationists' concern for onomastic equality. It might also be a palatable practice to married women who are not in The Movement. It would be a boon to both professional and amateur genealogists, who are recurrently challenged in their efforts to find out who married whom. Lines of legal affinal inheritance would be clearly indicated. It is also usually not prohibitively expensive legally to change one's name.

Such new names would be sociologically realistic, for they would reveal and embody the increasingly democratic structure of our modern social fabric. This practice, to which certainly we all could adjust, might somewhat complicate the study of personal names, but it might also make it both more interesting and more challenging.

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ADDENDA ET CORRIGENDA
 R. M. R. AND BEATRICE L. HALL'S
 "SOME APPARENT ORTHOGRAPHIC INCONSISTENCIES
 IN AMERICAN FAMILY NAMES OF YIDDISH ORIGIN"¹

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p. 250 The Yiddish names are *tsipoyre* (seldom used) and (very common) *feygl* (a back formation from *feygele*), not *tsipore* and *foygl*. *Ruth* is uncommon but by no means "not traditional." Cf. *risl* (diminutive of *rus*).

p. 251 *rozentol* and *mandelboym* should be transcribed *royzntol* and *mandlboym*. How could Jewish family names be subject to "the same phonological changes as were the other morphemes in the language" if they date from only the nineteenth century? What nineteenth or twentieth-century phonological changes were there that they might have undergone? Would a Yiddish-speaker named *Rosenthal* actually pronounce his name *royzntol*? Was *Rosenberg* *royznbarg*? Rather than speculate, the Halls might have done some field-work among Eastern European immigrants; they would then have arrived at a totally different conclusion, *viz.*, that many Jews *did* pronounce their names in the German fashion (depending on their knowledge of the language or attitude towards Yiddish and German).

Hebrew parallels for *sheyme* and *gil* are certainly found in Modern Israeli Hebrew: *yafa*, *tova*. Whether they are calqued on Yiddish or not remains to be investigated.

Life Is With People, far from being "extremely perceptive," describes Jewish life in the *town* (= *shtetl*) not the *village* (= *dorf*); it is an oft-repeated stereotype that Jews lived in villages. Actually, though, the *shtetl* was an urban, not a rural, phenomenon. And what of the hundreds of thousands of Jews who lived in the large cities of Eastern Europe before 1939? Surely their attitudes must be considered as well.

p. 252 Family names were spelled according to German orthographic conventions wherever German was the local prestige language (e.g. Courland), not only in Germany or Austria-Hungary.

If the "East-European Yiddish-speaking Jew felt himself to be speaking a kind of German," if "Yiddish for him was not really a language in its own right. . .," why didn't

¹ *Names* 17: 4 (December, 1969), 250–262. Mr. Gold is Technical Advisor to the YIVO Committee on Yiddish Terminology, a member of the Committee for the Implementation of the Standardized Yiddish Orthography, an editor of the Yiddish quarterly, *Yugntruf*, teaches Yiddish in the Columbia University summer school and is a published writer in Yiddish linguistics. In a letter dated April 6, 1971, Mr. Gold comments, "The Halls' article in the December 1969 issue of *Names* has just now come to my attention. Enclosed is a fourteen-page list of corrections which, in all fairness to your readers, deserves to be brought to their attention. I find it hard to believe how such a paper could be published: unfamiliarity with the dialects of Yiddish, with Jewish history, failure to use appropriate literature, repetition of popular misconceptions, and hasty conclusions based on unreliable evidence are the hallmarks of this work." *Names*, therefore, in the interests of good scholarship, publishes his list of corrections *in toto* and without further editorial comment. [The writer has used the YIVO transcription in his present discussion.]

he call it *daytsh* "German"?² Actually the term *yidish* "Jewish" (implying a feeling of separateness, of distinctness from German) has been in use for centuries. The term *zhargon* entered East-European Yiddish usage quite late and was never used despicatively by native-speakers of Yiddish (cf. the Halls' reference in ft. 6); once this term entered Yiddish it lost its negative connotations. Whether it is now a derogatory term for "most linguistically naive speakers of Yiddish" remains to be proven.

p. 253 In what sense was there a "traditional disregard" for Yiddish? Rabbis preached in Yiddish; it was the language of instruction in the *kheyder* and the *yeshive*, the vehicle of Talmudic disputation, of argumentation before communal courts of law, and the normal means of oral communication for every member of the community in every situation. Hebrew, it is true, had its place as the language of prayer and as a written means of communication among the learned, but this in no way implied a "disregard" of Yiddish. Each language had its specific *functions* in the Jewish community, co-existing in a perfect symbiosis. Perhaps what is meant by "disregard" is that Hebrew had more *prestigious* functions than Yiddish.

In Eastern Europe the Haskala *never* "attempted to convert all speakers of Yiddish into speakers of German." This statement is applicable only to Germany and Austria-Hungary.

Though some scholars have argued for the OHG origin of Yiddish, reference to MHG cognates is sufficient and more suitable for all practical purposes. The problem, incidentally, is due in some measure to controversy over the precise geographic and chronological delimitation of OHG and MHG.

It would be useful to have corroboration for the statement that "a strange woman [was addressed] as *baleboste* . . ."³

It is a popular misconception that all /sh/'s shifted to /s/ in Northeastern Yiddish. For the precise developments see Uriel Weinreich 1952.

p. 254 Herzog's "terming" the dialects Central and Northeastern Yiddish is in no way novel. These are the usual designations for which credit is probably due Max Weinreich.

Galitsyanish and *litvak* (sic) are not the "traditional" names nor do they have any status whatsoever in serious linguistic research. *Galitsyaner yidish* is a designation used by English speaking American Jews only; it had absolutely no currency in Europe and is downright misleading (would a Yiddish-speaker from northern Poland consider himself to be speaking *galitsyaner yidish*?); *litvak* is always a noun, never an adjective (= *litvish*). The traditional (though geographically imprecise) names are *poyleish yidish* and *litvish yidish*.

Consonantism is far from uniform in Yiddish. Cf. Prilutski 1917; /s/ and /z/ do not contrast in all positions: in varieties of Yiddish where stops and fricatives are devoiced word-finally, these phonemes have merged; /x/ and /h/ are not phonemic in all varieties of Yiddish. Yiddish for "prince" is *firshht*, not *first*. The opposition /s/ : /sh/ was not "neutralized in favor of /s/ in all positions"; cf. Weinreich 1952 for details.

p. 255 The phonological changes are not the result of *i*-umlaut in Yiddish. Rather, they stem from the loss of rounding in front vowels.

² An older name for Yiddish, *taytsh*, is irrelevant for the period under discussion (nineteenth century) since phonological and semantic change had by this time obscured the relationship between this word and *daytsh* "German" or *Deutsch*.

³ In Warsaw religious Jews either had no particular appellative for women or said *zayt azoy gut* (literally) "please." Secular Jews said *froy* "woman" and some also used the term *yidene* "Jewess" (though others felt this to be somewhat impolite). In Brest-Litovsk, *zagt nor* "say," *hert mir* "listen to me" or *hert zikh mir ayn* were used. Inquiries among several Yiddish linguists and native-speakers failed to reveal *baleboste*.

The stressed vowel in *shlufn* is only rarely long in CY. "City" can also be rendered as *shtuit* in CY. The proper gloss for *aker* is "plow." The stressed vowel in *brider* is long in CY. CY for "skin" is usually *hout* or *houit*; *höt* is restricted to Northcentral Yiddish. Since vowel-length is distinctive in CY, words such as *hint*, *bin* and *fin* should be marked as having short vowels. "Already" is also *sheym* or *shim* in parts of NEY.

p. 256 The earliest dated piece of Yiddish writing is from 1272 or 1273. Its existence has been known since 1963 and at least three detailed analyses have been devoted to it (e.g. Max Weinreich 1963).

Regarding the claim that "any attempt to standardize the orthography would have been seen as an unnecessary expenditure..." the fact is that Yiddish spelling had been fairly well codified long before the nineteenth century. An examination of older Yiddish texts immediately reveals this. The first rules for Yiddish spelling, in fact, date from 1514 (Boeschenstein 1514).

The correct transcription is *apikorsim* "apostates." A more objective term like *secular Jews* or *liberals* would be more appropriate here.

The statements that "writing conventions remained for the most part an ideal rather than a reality" and "each man continued to be his own spelling master" are decidedly not borne out by a comparative examination of Yiddish texts.

There is little or no correlation between degree of piety and interest in spelling reform. One of the most radical reformers, S. Birnbaum, is in fact a strictly orthodox Jew. Some orthodox publications follow the rules laid down by the (secularist) YIVO Institute for Jewish Research, whereas others use the same spelling as the (socialist) *Jewish Daily Forward*.

p. 257 There should be no *pasekh* under the *alef*. The Yiddish press (e.g., the *Forward* and many religious publications) still used the silent *hey*. In the Soviet system, Hebrew-Aramaic-origin words are spelled morphophonemically, not "phonetically."⁴

The YIVO's Yiddish name is *yidisher visnshaftlekher institut* (*institut* is masculine, not feminine). The YIVO orthography is used by many other publications as well: *Di goldene keyt*, *Davke*, *Oyfn shvel*, *Yugntruf*, *Enge-Benge*, etc.). Designating the spelling systems as "Polish" or "Galician" is absolutely meaningless. Spelling differences arose for ideological reasons and not because of any regional differentiation.

p. 258 *Shteinshleifer* is pronounced *shtaynshläfer* in CY.

If /s/ shifted to /sh/ before stops, liquids and nasals, how does one explain *stire*, *ston*, *spodik*, *slup*, *snop*, *sdom*, *statut*, *student*, etc.?

p. 259 Appropriate examples of names with Jewish semantic content would be *shoykhet* "ritual slaughterer" or *rabinovitsh* "rabbi's son." What, however, is the "Jewish" semantic content of *Goldberg* "gold mountain" or *Rosenthal* "rose valley"?

Shpetner is not a *nomen agentis* (entirely unrelated to *shpet* "late") but the masculine, singular, nominative form of the Slavic-origin adjective *shpetne* "ugly, hideous" (cf. Polish *szpetny*). Furthermore, *-ner* is found in German as well: cf. *Aulner*, *Bildner*, *Büdner*, *Hübner*, *Hüfner*, *Kärrner*, *Kellner*, *Klempner*, *Kürschner*, *Pjörtner*, *Redner*, *Rentner*, *Schaffner*, *Schuldner*, *Söldner*, *Zöllner*, etc.

In Standard German the sibilant in *Insel* is voiced; /s/ is found only in non-standard speech.

Herzog's treatment of Southeastern Yiddish is much sketchier, not because Atlas materials are incomplete, but simply because SEY was not the subject of his study (cf. the title of his monograph). Moreover, his maps deal with too small an area (northern

⁴ The term *Hebrew-Aramaic* is customary since *Hebrew* is too narrow a designation for this component of Yiddish.

Poland) to permit extrapolation for *all* of Eastern Yiddish. Hence some of the errors noted below.

p. 260 *karsh* is not limited to NEY; it is found in Rumania, the Ukraine, Hungary, Eastern Galicia and large portions of Poland. Even if it were limited to NEY, the Halls are actually claiming that this feature (*er* > *ar*) is characteristic of NEY, whereas in point of fact it is a general Yiddish phenomenon (cf. German *fertig, sterben, März*, Yiddish *fartik, shtarbn, marts*, etc.).

Roznwurcl is properly *royznavortsl*.

All the examples given for CY apply to Southeastern Yiddish as well (SEY). Hence the cover term Southern Yiddish (CY + SEY) should have been used.

p. 261 "dust" is *shteyb* in NEY, not *shtoyb*. The CY rendition is *shtoyb*, not *shtob*. In no variety of Yiddish is it pronounced *shtob* and the Yiddish family name *Shtob* is therefore unrelated to Yiddish *shtoyb/shteyb*.

Yiddish *vaynsht* does have a MSG cognate: *Weichsel*. The Yiddish form results from a contamination with *vayn* "wine."

Unless the pronunciation of *Tiger* is known (*tayger* or *tiger*), it cannot definitely be linked to "CY *tayger*." Moreover there is no such word as *tayger* "doughman" (= *knetter*) and the origin of this family name is therefore unclear.

Have "families turned all [?] /o/ into /a/?" It would be more cautious to say that *one* /o/ has become /a/: that of *volkn*, nothing else.

On what statistics is the conclusion based that "the preponderant majority" of dialectally localizable Yiddish names are of CY origin? Certainly not on just 21 examples. Also, since all of the "CY" examples are equally representative of SEY (see above), is such a preponderance not to be expected? Furthermore, given the general similarity between Standard Yiddish and NEY phonology, one suspects that many "NEY" names are borne by speakers of other dialects who have *standardized* their family names.⁵ The fact that several names are dialectally localizable as CY is not noteworthy at all; one could just as easily say then that virtually all *unrecognizable* names are dialectally NEY.

It would be misleading to read too much into this finding anyway; if Yiddish-speakers had such disdain for their language (sic), why should "we find greater efforts to retain some orthography which will preserve the pronunciation of the name in the speaker's dialect of Yiddish"? Correlations between spelling and degree of piety, westernization or attitudes towards Yiddish are on extremely shaky ground.⁶ Many other factors would have to be taken into account before any examination of telephone directories yields plausible conclusions.⁷

⁵ E.g., *tsikerman* is definitely localizable as SY, but *tsukerman* may be NEY or the standardized version of *tsikerman*. A further complication is that names may be spelled according to one orthographic norm but pronounced in several ways. Since Yiddish spelling is interdialectal (one system serving all speakers), a Yiddish-speaker might transliterate the letter *vav* (which is pronounced /u/ in NEY and /i/ in SY) as *u*, but pronounce it /i/ rather than /u/. Or names may be written according to German norms, but pronounced as in one of the Yiddish dialects; the late president of the Hebrew Union College, for instance, wrote his name *Glueck*, but pronounced it /glik/. See *The New York Times*, article cited in References, below.

⁶ Especially since the orthographic shape of most names was determined by non-Jewish government officials, not the bearers themselves.

⁷ E.g. the fact that emigration from the Soviet Union was virtually cut off after the Revolution. Most of NEY (Belorussia, northern Ukraine) was under Soviet control and this *might* be a factor in explaining the preponderance of SY names.

"Haskalah was strongest . . . in Russia and Lithuania." Lithuania was of course part of Russia in the period under discussion. ". . . Hassidism was strongest in the Ukraine and Poland." The Ukraine and Poland were also part of Russia. May we infer from this confusion that what is meant by *Russia* is actually *Belorussia*?

References

- Boeschenstein, Johannes. *Elementale introductorium in hebraes litteras teutonice & hebraice legendas*, Augsburg, 1514.
- The New York Times*, "Dr. Nelson Glueck Dead at 70," February 14, 1971, p. 75.
- Prilutski, Noyakh. *Der yidisher konsonantizm*, vol. I (= his *Yidische dialektologische Forshungen I*), Warsaw, 1917.
- Weinreich, Max. "A yidisher zats fun far zibn hundert yor," *Yidische shprakh* XXIII: 87–93 (December, 1963).
- Weinreich, Uriel. "*Sabesdiker losn* in Yiddish: a Problem of Linguistic Affinity," *Word* 8: 360–377 (1952).

[July 1971 postscript]. The co-existence of Yiddish and Hebrew in a perfect symbiosis in Eastern Europe has been sketched by Max Weinreich in "Inevynikste tsveyshprakhikeyt in ashkenaz biz der haskole: facta un bagrifn," *Di goldene keyt* 35 (1959). The term **galitsyaner yidish* for CY is doubly misleading since only a portion of CY was spoken in Galicia and only part of Galicia spoke CY. The terms OHG and MHG, coined by Jacob Grimm, were based on an examination of German literature, i.e. they designate *literary periods*. Confusion arose when they were extended to cover *linguistic periods*; Hugo Moser, for example, in his *Deutsche Sprachgeschichte*⁴ (Stuttgart, 1961), p. 101 prefers pre-German (450–750), Early German (750–1170), High Medieval German (1170–1250), Late Medieval German (1250–1500), New (High) German (1500–present). The 1272 document has recently been analyzed by Walter Röll, "Das älteste datierte jüdisch-deutsche Sprachdenkmal: ein Verspaar im Wormser Machsor von 1272–73," *Zeitschrift für Mundartforschung* 33:127–38 (1966). M. Weinreich 1963 cites other pertinent studies. There is no known *nomen agentis* derived from *shpetn* "to leer" (**shpeter?*), though related *opshpetn* "to ridicule" does have *opshpeter*. That *shpetner* is a Jewish surname is beyond a doubt however (listed for instance in Sh. Vaysenberg, "*Di yidische familye-nemen in ukraine*," *Filologische shriftn*, Vol. 3, Vilna, 1929, 313-66, see p. 366). Other German *-ner* nouns include *Brückner, Büttner, Gleisner, Harfner, Kätner, Pfründner*, as well as countless family names: *Bittner, Blattner, Bogner, Büchner, Credner, Eichner, Fechner, Flaschner, Deffner, Geldner, Gerstner, Gessner, Graubner, Gschlifner, Gschwendtner, Gürtner, Hafner, Hartner, He(f)ner, Hettner, Hintner, Hoepfner, Hopfner, Kampfner, Kästner, Kettner, Kirchner, Kirchgassner, Klausner, Kufner, Legner, Leuschner, Lockner, Lösener, Mätzer, Meissner, Messner, Oelsner, Plattner, Pöhner, Rauschner, Reis(s)ner, Roegner, Sandner, Scheibner, Schiefner, Stötzer, Strassner, Stroessner, Suttner, Täschner, Tetzner, Trippner, Wörner, Zebetner, Zenner, Zwirner*, etc. Cf. L. Sütterlin, *Geschichte der Nomina Agentis im Germansichen* (Strassburg, 1887), p. 104: "In vielen Fällen, besonders in sekundärer Verwendung trat *ario* Wörter an, die selbst mit einem *n-* oder *l-*Suffix versehen waren: ahd. *gartinari*. . . . In solchen Formen wurde das *n*. . . von seinem Nomen losgelöst und als zu *ario* gehörig empfunden. . . . So entstanden, insonderheit auf dem continentaldeutschen Sprachgebieten, neue Suffixe. Beispiele für diese Erscheinung finden sich oben zahlreich: vg. noch mhd. *bildenaere* 'Bildner'." The *er > ar* phenomenon is, within Eastern Yiddish, actually characteristic of SY and especially some portions of CY: cf. CY *arger, fartsn, larnen, varter* vs. more widespread (i.e. NEY) *erger, fertsn, lerner, verter*. Herzog's monograph does not show "the close cul-

tural connection between CY and SEY." Herzog dealt with an area that measures not more than 175 by 200 miles; this area contains only 13 CY locations and eleven SEY locations, too little for reliable extrapolation. Correlation of cultural isoglosses and linguistic isoglosses represents no "departure from previous work." Such correlations were mentioned as early as 1933 (Leonard Bloomfield, *Language*, New York, p. 343) and are implicit in the work of e.g. Paul Geiger and Richard Weiss (cf. their *Atlas der Schweizerischen Volkskunde*, Zurich, 1950ff). Recently gathered data on appellatives for women include: Łomża: *zayt azoy gut*; *fraylin* "Miss"; *madam*. Zvinyache (near Chernovtsy): *mume* (literally "aunt"), *zayt azoy gut*; *ikh bet aykh iber* "excuse me"; *zayt zhe moykhl* "excuse me"; or (somewhat impolite) *yidene* "Jewess" (*fraylin* and *madam* were not used). The Halls should have cited as the source of their (mis)information on *baleboste Life Is With People*, p. 129. Finally, though no reliable immigration figures are available, the preponderance of SY surnames in this country may in fact be due to the larger numbers of SY-speakers in the United States; one has the subjective impression that most East European Jewish immigrants here are — at least nowadays — speakers of SY rather than NEY. A final complication is the problem of Jews with "double" surnames. For example, the distinguished Bible translator writes his name (*Khayem*) *Shoys* in Yiddish, but (*Hayyim*) *Schauss* in English. *Kaufman/Koyfman*, *Roskies/Roskes*, *Nussbaum/Nusboym*, etc. present similar difficulties.