PROCEEDINGS OF THE ROUND TABLE

ON

ASSURING THE FEASIBILITY OF STANDARDIZATION

WITHIN DIALECT CHAINS

NOORDWIJKERHOUT, THE NETHERLANDS

SEPTEMBER 1988

T. G. Bergman, *editor*

Summer Institute of Linguistics

Africa Area, Nairobi, Kenya

Africa Area, P.O. Box 44456, Nairobi, Kenya

CONTENTS

foreword

Of necessity, communication involves standardization. The sender and receiver adjust to each other's idiolect or dialect or language. For written communication to be used successfully, it is desirable for the sake of the people involved that a single form be used by as large a number of communities and dialects as possible. It is desirable because increasing the number of people who can communicate with each other increases the pool of potential authors and readers. Having more audience motivates the authors to write. Having more to read motivates literacy. Governments request maximum standardization in language planning. It reduces the cost to government and for education thus allowing them to accomplish what otherwise they find difficult or impossible. Knowing your neighbors better should also lower tension and promote unity.

Yet, the circle must not be drawn too large. If people cannot learn to understand the standard form easily and quickly, literacy will fail just as surely as it will if the circle is drawn too small. The chosen standard must be both understandable and desired by the people involved. Thus the task is to discover the optimum speech form to serve the maximum feasible number of dialects or languages; it involves both linguistic and non-linguistic factors.

In the past, boundary drawing has usually been part of dialect intelligibility analysis, modified subsequently by the results of language attitude evaluation. Political and social pressures in many places, however, indicate the need for efforts toward standardization over a broader scope of dialects and languages than has been assumed from intelligibility tests. Over time the written form for major languages such as English and German has adequately served dialects with wide differences. We need to find ways to facilitate and promote that in other language continua where the circumstances (political, social, motivational) make it appropriate. There is strong interest in, indeed insistence on, standardization in many countries of Africa. We assume this will include initial literacy and preparation of some literature in a greater number of dialects/languages coordinated with definite promotion and instruction toward a smaller number of standards.

To put it differently, standardization may be possible between speech varieties that are not comprehensible on first meeting, but which with adequate exposure may become comprehensible. One can talk of a two-day or of a three-week difference, for example, referring to the length of time living with the new variety before understanding it. People with widely differentiated speech may be able to agree on a standard written form while retaining differences in spoken form and pronunciation.

Although a large body of literature exists on language planning on a

national or large regional level, not much has been written for the local level. This round table conference was sponsored by SIL and the J. Howard Pew Freedom Trust in September 1988 to begin correcting that situation. It is anticipated that more will be developed on this subject in the future.

Frank Robbins
Africa Area Director
Summer Institute of Linguistics
Nairobi - Kenya

Ted Bergman
Task Assessment Coordinator
Summer Institute of Linguistics
Nairobi - KENYA

preface

The idea that the Summer Institute of Linguistics should proactively study the possibilities of wider dialect standardization is an idea that crystalized with Frank Robbins after talking with Mark Karan. Mark outlined the situation in southern Benin with the many Gbe dialects, the problems this presents to the Benin government, and the potential advantages that would accrue if the way to unite these many speech varieties could be found. Frank decided SIL should find ways to put its best efforts into wider standardization and asked me to organize the task.

Language planning at the national and regional level has been studied extensively. But almost nothing exists in the literature describing standardization on the local level. It was thought that a major contribution would be made if projects that SIL embarked upon should be well documented so that whether successful or not, others could learn from the experience.

The first phase of any such project is background research, next, language survey assessment, then, strategy planning. A proposal was written for this beginning phase which set objectives, outlined a plan of action, and estimated costs. Supplemental funding was requested and granted from the J. Howard Pew Freedom Trust. Eight dialect groups from different parts of Africa where SIL was working were selected and sociolinguists, both guests and members of SIL, were invited to attend a round table to discuss the issues and help each other with ideas and information. Travel expenses for the Round Table were provided by the Trust.

Since this was the first meeting in this effort, it was primarily the invited guests who had prepared material to present. For most participants, there was interaction on a more informal basis. Although it wss not planned beforehand, the quality of the prepared presentstions by our guests was such that it was felt that others would benefit if a proceedings were prepared for general distribution. A second round table meeting is planned for May 1989.

The chart which follows shows the eight African dialect clusters that were chosen for special study and development. The persons shown as SIL leaders were chosen by the SIL administrators of the countries involved and were each participants in the Round Table. They are Ole Bjorn Kristensen, Rene Vallette, Andrew Ring, Robert Carlson, Richard Watson, Keith Beavon and Gordon Williams. Other participants were Frank Robbins, Ethel Robbins, Elizabeth Johnson, Constance Kutsch Lojenga, Mark Karan, Deborah Hatfield, Kate Ring, and Ted Bergman in addition to the authors of the articles in this volume listed later.

THE EIGHT AFRICAN DIALECT CLUSTERS REPRESENTED AT THE ROUND TABLE ON DIALECT STANDARDIZATION, 1988

	TEKE	FULFULDE	MOLE	SENUFO	MORU-MA'DI	MEKAA	GBE	MANDE, N.
COUNTRIES	Congo, (Gabon, Zaire)	Senegal, Benin, Mauritania, Gambia, Guinea, Mali, Burkina, Cote d'Ivoire, Togo, Liberia, Ghana, Nigeria, Niger, Sudan, Cameroon, Chad, Cen. Afr. Rep.	Ghana	Burkina Faso, Cote d'Ivoire, Ghana, Mali	Sudan, Zaire, Uganda	Cameroon, (Eq. Guinea, C. A. R., Congo)	Benin (Togo, Nigeria)	Mali, Senegal, Cote d'Ivoire, Burkina Faso, Guinea-Bissau, Guinea, Gambia, Mauritania, Liberia, Sierra Leone
LGS. MAX/MIN	7 / 4	10 / 7	5 / 2	16 / 7	10 / 6	16 / 8	17 / 1-3	? 25 / 15
SIL LEADER entity	Kristensen Cen Af Gr	Vallette BF/Niger	Ring Ghana	Carlson CI/Mali	Watson Sudan	Beavon Cam/Chad	-- Togo/Benin	Williams Senegal/G/G-B
POPULATION	400,000	12,000,000	500,000	1,500,000	900,000	? 300,000	? 1,500,000	? 10,000,000+
LITERACY	? <50%	? <5%	5 - 10%	<25% in CI <5% BF & Mali	? 10 - 30%	5 - 25%	15% +/-	?
TRANSLATIONS finished	Yaka/Laali Kukuya Teke West.	Adamawa (Cam.) Parakou (Ben.) Toucouleur (Se) N. Burkina Faso	Moale Lauara Jirapa	3 NT 8	Lugbara, Avokaya, Ma'di	none Koozime Mekaa Bajyeli	Gen, Gun, Fon	Bambara Dyula (SIL) Malinke (NTM) Xassonke (Nor/F Mandinka (MEC) Kono (LBT) Soninke, plus ?
in-progress								

LIST OF CONTRIBUTORS

Prof. Dr. **Ursula Wiessmann**, who is the principal technical consultant to this project, gave the keynote address. Her paper concerns the Kaingang people with whom she worked in Brazil where standardization was successful. Not only does it provide us with a scientific case study, but it also provides inspiration that standardization, at least in the circumstance cited, is possible. She saw people with varying speech varieties come together to use a common literature who would not have done so at all based on the usual linguistic differences criteria.

Dr. **Etienne Sadembouo** proposes two procedures: how to combine community involvement and sociolinguistic expertise through the use of a language committee, and how to choose the best speech form out of a dialect complex for written standardization. He bases these recommendations on his very extensive review of each of the language programs in his country, Cameroon, where he has drawn from their experience in failures and successes. The typology and weighting procedure recommended for decision making was tried out by the participants of the Round Table who felt that it works very well. If it proves to be acceptable it provides the missing link between SIL's *Sociolinguistic Profile*, which is a checklist of factors important to decision making, and the decisions themselves. Dr. Sadembouo finds that even in the early stage of language survey assessment, the communities affected should participate in the planning.

Prof. Dr. H. B. C. Capo's paper concerns orthographic principles and ideas for uniting the huge number of Gbe dialects--22 spoken in southern Benin, 16 in Togo, 18 in Ghana, and 7 in Nigeria. Dr. Capo thinks that all speakers could learn to read the Gen variety with just a little effort and write the way they speak once a unified orthography could be agreed upon. He himself speaks four of the dialects belonging to three of the five clusters within the Gbe network.

Mr. **Leonce Bouka** has written a paper for us describing the Teke dialects in Congo and Gabon. His paper was translated for us from the French by Mr. Ole Bjorn Kristensen. Both these men have begun work on this dialect chain which has four main divisions and other subdivisions. Although he is Congolese he is not a native Teke speaker. His doctoral studies in Brussels are concerning the whole Teke continuum.

Dr. **Richard Watson** coordinates three survey teams conducting the first phase of research on the Moro-Ms'di dialect complex. One team works among the people living in Sudan, another works in Zaire and the third is in Uganda. His paper has to do with the orthography approach

necessary to standsrdize in the different nations with their differing literacy and political expectations.

Dr. **Musimbi Kanyoro** offers balance out of her knowledge of the Luiya, cautioning against combining too many dialects without adequate basis for doing so or without adequate provision of necessary concomitants. Dr. Kanyoro's native tongue is one of the 17 varieties of Luyia. Her grandfather was one of the principals involved when the Bible was produced in a "standard" Luyia. And, she has studied the language prfessionally. When the Scriptures were first published, they were received and bought with great enthusiasm. But despite great hope they have not been used widely at all. Verb tenses can change to mean opposite tenses in certain dialects, word meanings change drastically, only five of seven contrasting vowels are written, tone is not marked at all. People do not identify with it as their language. At the time when the "union translation" came out, the people were feeling a need for unity against other, larger groups which threatened them. Later when the threat was removed, there was more felt need for emphasizing individuality. As Dr. Kanyoro analyses the situation, several things must be recognized: Bible translation alone is not sufficient, other written literature must be produced as well; the orthography decided upon must be backed by the government and taught in the public schools; the churches, too, must support the Union translation; the mood of the people needs to be positive toward wanting to become unified.

MORU-MA'DI ORTHOGRAPHY PROBLEMS

RICHARD WATSON

Summer Institute of Linguistics

Sudan Branch

RICHARD WATSON

MORU-MA'DI ORTHOGRAPHY PROBLEMS

One of the complications of surveys is that of promoting alphabets before adequate attention has been given to the problems of standardization. This is especially true where people are eagerly awaiting an alphabet with which they can immediately begin writing and even publishing.

Since Moru-ma'di languages and dialects are not widely divergent in their phonemic inventories, it would seem to be both possible and beneficial to develop a standard alphabet for the whole chain. Unfortunately, there are several problems. These involve differences of inventories, interpretations, pressures from past or surrounding alphabets, and personal preferences. These problems are discussed for the following areas: 1) Implosives, 2) Prenasalized consonants, 3) The velar nasal, 4) Affricates, 5) VV versus VSV, 6) Tone, 7) Tongue-root position, 8) Differences of alphabetic orderings, and 9) Differences of word breaks.

1. Implosives. Ma'di has what could be seen as a full set of four implosives [ɓ, ɗ, ʃ, gɓ] or [ɓ, ɗ, y, w]. [ɓ] and [ɗ] are common to Moru-Ma'di languages. However, there are differences of opinion (by native speakers as well as linguists) whether the palatal is a stop [ʃ] or a semivowel [ʲy]. Furthermore, some dialects lack the labiovelar, and, when it is present, there are differences of opinion whether it is a stop [gɓ], a semivowel [ʷw], or a labialized glottal stop [ʔʷ]. Torben Andersen (1986b. 194) has charted the palatal and labiovelar implosives 'structurally' as stops for Ma'di, but he later analyzes [gɓ] as a labialized glottal glide [ʔʷ], parallel to [ɓʷ], etc.

Whether one wants to treat the palatal as /'j/, /'y/, or a neutralization of the two seems academic; but the fact that some people are writing 'j or jh and others 'y or yh is a bit more serious. Personally, I do not see any problem with using either 'j or 'y as long as there is consistency, that is, as long as those dialects sharing a common dictionary and literature use only one or the other. However, some groups are confused: some people using one and some the other, some people using one for some words but the other for other words, etc. This is rather serious in the case of ts, dz versus c, j, described under (4) below, as all four sections appear in the Ma'di dictionary (Bilbao, et al 1984) with both different words and identical words.

Moving to national preferences, Sudan and Uganda are quite set in their use of apostrophe plus consonant for implosives. This includes Avokaya, Kaliko, Moru, Ma'di, Lulubo, and Lugbara. In Zaire there is pressure for consonant plus h. On the one hand, I don't believe it is difficult for 'b readers of one country to consistently switch to bh in reading material produced in another country, and vice versa. I also recognize that apostrophes can be messy. However, I find two problems with the consonant plus h combination. First, it is not the normal use of this combination, and its normal use is probably needed in nearby Nilotic languages, as it is in Sudan and Uganda, where th, nh are used for dentals in contrast with alveolars. Secondly, a Zairian Kakwa attending the Sudanese Kaliko Language Committee meetings in Base, Zaire in August 1988 gave a rather heated speech in favor of 'b, etc., as being truly "African" and the choice of the Bari, Kakwa, Ma'di, and Lugbara translation committees, whereas he labeled bh, etc. as "French and colonial".

2. Prenasalized consonants. Prenasalization is ordinarily written with m before bilabial consonants and with n before postlabial consonants. The problem is with the prenasalized 'bilabiodental' fricative, which is more bilabial [ɓ] in some dialects and more dental [v] in others. Some of those with the more labial /v/ were introduced to nv first and have

no problem with it; but others insist on mv. The Ma'di dictionary (1984), using speakers from different dialect areas, lists some words under mv and others under nv.

3. The velar nasal. The prenasalized velar atop /ng/ is common to all Moru-Ma'di dialects; but some also have /ŋ/ and others do not. Since ng is used for /ng/, the question is what to use for /ŋ/. ŋ is used in Sudan and Uganda; ng' is used in Kenya and has been proposed for Zaire. The latter is much simpler for typewriters and typesetters; but those who are used to ŋ consider it to be more African.

4. Affricates. /ts/, /dz/, and /ndz/ are sometimes heard as more alveolar and sometimes as more palatal, depending upon dialect and linguistic environment. In some dialects they are written as digraphs (trigraph in the case of ndz), and in some as c, j, nj. In Ma'di both spellings are used, partly depending upon environment and partly on dialect and personal preference; so there is confusion. I believe that c and j are more common in Sudan and Uganda, ts and dz in Zaire but both systems are used in Sudan. c and j have the advantage of fewer characters and no new ones since both are learned in English and French. However, it may be more important to determine which pair has the widest use and encourage consistent use of that.

5. VV versus VSV. Most syllables in Moru-Ma'di languages are CV sequences. Only a few are V syllables. Therefore, one often finds V.V or CV.V sequences written with a semivowel between, especially in such cases as /ia/ written as iya and /ua/ written as uwa. In Southern Sudan it is even common to find /ai/ written as ayi. There is some esthetic quality in the use of semivowels, especially in names. However, there is confusion as well. There is a lot of variation in spellings as some people insert the superfluous semi-vowel and some do not and some wonder what to do about other combinations. (In Lugbara I find ia, ie, aa, au, ai, oa, ua, uaa.) Even h is sometimes inserted where it does not exist. However, when I have had time to help a speaker test his own

native reaction as to when a semivowel is present and when it is not, I have found him to be well able to make such judgments and to be happier with his choice of when to write it and when not to. I don't know that allowing for VV sequences would help or hinder standardization; but I find it more linguisticslly satisfying to accept a language as it is than to impose a phonetic or esthetic addition.

6. Tone. Moru-Ma'di languages and dialects ordinarily have three tones, though at least some dialects of Lugbara have an extra-high tone as well (Andersen 1986a). In most cases no tones have been written and where they have been, there is no standard. Marking tones is very important for both lexical and grammatical reasons, and I would say that the only reason they were not previously written was that western linguists and missionsries were poor at hearing and analyzing them and they had the notion thst not to write suprasegmentals was to "keep the alphsbets simple for uneducated natives" (parsphrase from Rejaf Report 1928). It was recommended by the Rejaf Conference thst high tone be written "where needed," but this was too vague and few westerners could even distinguish the tones.

Note also the following quote from Crazzolara in his report on the Ma'di orthography meeting in Moyo in 1955:

> In listing the above words, and their meanings, two essential elements of the Ma'di Language, Intonation and Vowel-Shandes, hsve been treated as nonextant, while they do exist; caution therefore in sctual speech! In popular publicstions their rendering is considered impossible.

Where tones are written, the high tone is ordinarily marked by ths acute accent. (I do not know what, if anything, im used to write 'extra-high'.) In Avokaya, where tonss are now written and read fluently, mid tone is marked with a macron and low tone with a tilde. At some point,

our SIL linguists intend to stop marking mid tone. I objected to the use of tilde for low tone, but I was overruled on the grounds that it is more distinctive than grave which can be confused with a poorly written acute or might cause 'mirror image' problems, especially for readers suffering dislexia.

For the Ma'di language committee, our linguist gave the choice of marking mid tones with dieresis (¨) or low with tilde. Those involved chose the dieresis for mid because they saw the tilde as being too big and bold. However, after a year of testing there has been rejection of the dieresis because that has been traditionally used to mark [+ATR] vowels (in Ma'di only [+ATR] ü was written and that was changed to o̱ in the most recent Catholic publications). Though I do not like the use of dieresis for [+ATR], I symphathize with the rejection of dieresis for mid tone. I also object to marking mid rather than low because low is less frequent and is important as a grammatical marker.

Although I recognize the potential problem of using acute and grave together, I have seen them used together with great success;[1] so I believe that the problem can be overcome with adequate teaching and practice. In VietNam the acute is always started from the top and brought down to the left, while the grave is started at the top and brought down to the right, like the two sides of a temple roof. The natural tendency of the grave to flatten out in handwritten materials probably helps to overcome the 'mirror image' problem.

7. Tongue-root position. In the past, adequate marking of tongue-root position seemed to me to be very important, as it is in Southeast Asia.[2] I still believe it is important; however, my thinking has been greatly modified by two factors. First, I believe that marking tone is much more important and should, therefore, have priority of diacritic marks above words. My reason for saying this is twofold: a three tone system makes a potential difference of three lexemes in a single syllable, nine in a disallsbic form, etc.; whereas plus/minus [ATR] usually only makes a

potential difference of two lexemes no matter how long the form. Furthermore, Moro-Ma'di people are much more aware of tones and can more easily learn to read and write them.

The second factor to modify my thinking is that [ATR] quality in many African languages is difficult for both native speakers and expatriates to learn to distinguish and read and write accurately, and [ATR] quality can change with the addition of a suffix (and often from one village to another). Therefore, I conclude that it is not practical to mark [ATR] with a symbol that is hard to alter. The symbols ɛ̲ and ɔ̲ were introduced in Sudan to mark [-ATR] mid vowels. But I consider that to have been a poor choice for two reasons. First, it was not systematic: only the mid vowels were marked because they were easier for westerners to hear, but in Moru-Ma'di languages the [ATR] distinction is diminishing in mid vowels more quickly than high vowels--where it was not marked at all. Secondly, dialectal or grammatical switching required the awkwardness of erasing ɛ̲ or ɔ̲ in order to replace them with [+ATR] e̲ or o̲. Thirdly, I believe it is poor policy to mark the 'unmarked' form. The regressive [-ATR] vowels occur more frequently, and they do not need to be changed at all if only innate [+ATR] vowels are marked, as just one [+ATR] marking in a word signifies the [+ATR] 'coloring' of the whole word (depending on the rules of the language). (A case can be made that regressive vowels do not undergo any phonemic change, but rather, undergo one degree or other of phonetic 'coloring' by the addition of a [+ATR] feature to the word.) I also believe it is psycholinguistically better to mark a 'marked' feature, though I have not had opportunity to test this hypothesis. Note that as the mid [ATR] distinction disappears, a language could be writing ɛ̲ or ɔ̲ but not e̲ or o̲ at all. In fact, some, such as Ma'di have simply ignored the recommended ɛ̲ and ɔ̲ symbols and used e̲ and o̲ exclusively.

Though I recognize problems with a 'dot-under' symbol,[3] the above factors have led me to believe that 'dot-under' is a good choice for marking [+ATR]. It does not interfere with the tone marks. It is easily

added to those vowels for which it is innate or grammatically marked. It is easily scanned for its coloring of other vowels in the same words. If it is left off, it is easily added. If it is put in by mistake, it is easily erased or whited out. It occurs only where it marks a 'marked' difference and it does not create awkwardness for the more frequent, unmarked vowels.

Unfortunately, the barring of [-ATR] vowels, encouraged in Zaire, clashes with the above reasons, like the ɛ and ɔ.

8. Differences of alphabetic ordering. As linguists, many of us would prefer to have each phoneme treated as a unit in the alphabetic sequence and dictionary divisions. For example, I put a 'B section in my dictionary following the B section. However, traditional dictionaries may simply put the 'b's at the end of the b's, the 'ba's after the ba's, etc., or may mix them arbitrarily. Linguists also differ in their compromises with the traditional--perhaps separating the 'b's from the b's, but including the mb's and mv'a under the m'a, etc. And, who decides what order of tones to follow? I use high-mid-low ordering, but low-mid-high would be more logical for those treating low as 1 and high as 3, and, mid should probably occur first if it is the unmarked form.

I don't like to be forced into a traditional straitjacket, or any other straitjacket. However, I believe it is very helpful for the people of a language area to have a standard alphabetic ordering and standard divisions in their dictionaries. It is frustrating enough to have to look for TS if you started out looking for C, and even worse if you then have to go clear through the T section.

Whatever alphabet or alphabets are used, I hope that we will also do what we can to help develop a common alphabetic ordering.

9. Differences of Word Breaks. I am only able to introduce this point since I have not had opportunity to get beyond Moru-Ma'di phonemics;

however, I have discussed word breaks with our linguists enough to know that they are not clearcut. I understand that there is confusion.

In his report on the Ma'di Orthography (1955) Crazzolara said,

> As the Absolute Form of Personal Pronouns is an entity by itself and has in most cases to be used detachedly, so logic suggests that it be used in its full and uncontracted form also before verbs in the Imperative or other moods and tenses: as in anyi edzi mani ta! bring me a thing! etc. etc.
> In familiar talking it is often easy to get the impression that words are contracted, while actually they may not be. Nevertheless, there exists no plausible reason why such "Apparent" contractions should be effected in writing, to the detriment of clearness. With identical conditions in Logbara the natives (and everybody) always write words fully: they have become accustomed to it and object strongly to suggested contractions.

As in (4) above, I question Crazzolara's conculsion, happy that English writers are free to use common contractions, such as I'm, don't, can't, in writing as in speaking.

I hope that linguists and literacy people involved in Moru-Ma'di will soon be able to present us with data and recommendations concerning each of the problems mentioned here, as well as any others that I may have missed.

Notes

1. The Vietnamese orthography marks six tones very successfully, using *acute* (á) for high-rising, *grave* (à) for low-falling, *tilde* (ã) for high-broken, *glottal* (a) for low-rising, *dot-under* (ạ) for low-broken, and *nothing* (a) for high-level. (The symbols are the same but the tones differ somewhat in southern and central Vietnamese dialects).

2. Many Mon-Khmer languages of Southeast Asia have [ATR/RTR] vowel systems which double the number of vowel phonemes. However, there is no additional tone and little or no vowel harmony assimilation.

3. As mentioned in note 1, the *dot-under* is used very successfully to mark one of six tones. The only problem I was aware of was the typewriter modification to add a dead key with a lowered period.

Bibliography

Andersen, Torben 1984. Word Order and Aspect in Moru. *Journal of African Languages and Linguistics* 6.19-34.

_____ 1986a. Verbal Inflexion in Moru. *Afrika und Ubersee* 69.19-43.

_____ 1986b. Tone Splitting and Vowel Quality: Evidence from Lugbara. *Studies in African Linguistics*, 17.55-68.

_____ 1986c. The Phonemic System of Madi, *Afrika und Ubersee*, 69.193-207.

_____ (to appear). Vowel Harmony in Moru. Proceedings of the 2nd Nilo-Saharan colloquium.

_____ and Didier L. Goyvaerts 1986. Reflexivity and Logophoricity in Moro-Ma'di. *Folia Linguistica* 20.297-318.

Bilbao, G., Fr. Osmundo, Fr. Luigi Moizi, et al. 1984. Dictionary: Ma'di-English, English-Ma'di, Limone: Casa Comboni.

Crazzolara, Fr. J. P. 1955. Ma'di Orthography: Established at Moyo Meeting September the 15th, 1955.

Rejaf Language Conference 1928. Report of Proceedings. (Held at Rejaf, Mongalla Province, Sudan 9th to 14th April 1928. J.G. Matthews, Secretary for Education, Health, etc.)