Is Niuean an Endangered Language Species? Annotated Results of a Niue Schools Language Survey¹

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Introduction

The aim of this survey, carried out in May 1994, was to obtain data to study language ecology on Niue (cf. Muhlhauser, 1992). The main area in question is the status of the indigenous Niuean language, especially compared to English, which appears to be making inroads and may endanger the survival of Niuean.

As the future of Niuean rests with the young people of Niue, it was felt that a language survey should be directed at them.

Methodology

The one-page questionnaire (see Appendix) consisted of 12 questions. The first four are of a demographic nature, while questions 5 to 9 inquire into the use and domains of spoken and written language. The last three questions were designed to elicit attitudes towards Niuean and English.

¹This is a revised version of a survey report first prepared for the Niue Dictionary Project and members of the Niuen educational establishment, and subsequently presented as a paper at the Seventh International Conference on Austronesian Linguistics, Symposium on endangered languages, 22-27 August, 1994, Leiden, Holland.

The question as to whether or not to conduct the survey in Niuean was given some consideration. Given that the survey was to be conducted at both Niue Primary School and Niue High School, it was pointed out by local educationists that most written material is in English, hence students would be well used to a questionnaire in English. A questionnaire in Niuean would too narrowly restrict the focus on those Niuean students who can read Niuean well (the suggestion being that more students can read English better than Niuean). While this was an unproven bias in the first place - hence the survey - it was felt that it would be better to comply with prevailing perceptions. If in fact the survey indicated student support for the Niuean language, it could be said that such an opinion, expressed in English, would carry additional weight.

To counteract the 'written English' it was suggested to have the questions explained to the students in 'spoken Niuean', especially at the Primary School level. This would be done by the teachers (at the time of the survey all Primary School teachers involved were fluent speakers of Niuean). The survey organiser would go from class to class, distributing copies of the questionnaire, explaining it in Niuean. All major explanations and elaborations with reference to individual questions were repeated in all classes (for details see individual questions below). Generally the surveyor tried to convey the impression that he and the survey were essentially sympathetic to the Niuean language and concerned about its survival. Students were asked to treat all questions with reference to life on Niue and with reference to their present situation as students and adolescents living on Niue. Students had the opportunity before and during the completion of the questionnaire, to ask for help (either in Niuean or English).

At Niue High School (which includes the Intermediate School) most of the teachers were fluent in Niuean, except for three, and the same procedures were followed.

Results

The presentation of results is organised as follows:

- the question rephrased or as given in the questionnaire, with explanations as given to the respondents
- numerical and percentile results
- comments

Survey subjects

Niue Primary School (NPS) Classes 4, 5 and 6.

Roll number of Classes 4, 5, and 6: 150 Completed questionnaires obtained: 131

Note that Niue has only one Primary School, situated in Alofi, catering for all primary students on Niue. Students of Classes 1 to 3 were considered too young to be able to understand and complete the questionnaire.

Niue High School (NHS) forms 1, 2, 3, 4, 5 and 6.

Roll number: 320
Completed questionnaires obtained: 292

Note that Forms 1 and 2 are considered Intermediate School. There is no Form 7.

Total number of completed questionnaires obtained, NPS and NHS: 423

This number comprises about 75% of all students on Niue at the time of the survey in May 1994.

1. Demographic data

Questions 1 to 4 deal with common demographic data, but with a focus on the high mobility of Niueans.

1.1 Question One: age brackets

	NPS	NHS	Total
5 - 10	129	7	136 (32%)
11 - 15	2	240	242 (57%)
16 - 20 '	0	45	45 (11%)

1.2 Question Two: place of birth

	NPS	NHS	Total
Niue	90	227	317 (75%)
New Zealand	34	47	81 (19%)
Fiji	3	6	9
Tonga	1	4	5
Nauru	1	3	4
Tokelau	0	2	2
Australia	1	1	2
Papua New Guinea	1	0	1
Cook Islands	0	ı	1
India	0	l i	1

The high rate of students born in New Zealand (19%) includes a small number of New Zealand expatriates. The main explanation is that many Niuean women go to New Zealand to give birth and then return to Niue after some months. The sprinkling of other 'places of birth' is made up of a mixture of expatriates and immigrants.

1.3 This question was orally explained to students as follows;

- if you have lived on Niue, having been overseas for more than a few weeks, but less than a year (added up if away on more than one occasion), then you tick 'most of my life'.
- if you have been away from Niue for more than a year (added up if away on more than on occasion), then calculate the YEAR(S) you have been living on Niue, and fill in the line years out of my age of '.

	NPS	NHS	TOTAL
All My Life Most of My Life	66 44	113 47	179 (43%) 91 (22%)
Other	21	132	143 (35%

Over half of all Niuean students have been overseas and away from Niue for extended periods of time (the high percentage does however include the small number of sons and daughters of expatriate workers, as well as five students from Nauru and Tokelau, here to do their fifth and sixth forms). This extraordinary mobility is mainly explained by the fact that Niueans have New Zealand citizenship and can travel to New Zealand without restriction. Historically this has now resulted in some 12,000 Niueans permanently living in New Zealand, while at the time of the survey about only 2,000 Niueans remain on Niue. Virtually every Niuean has relatives in New Zealand. Given the Polynesian tradition of bringing up children within the extended families, it is a frequent occurrence that Niuean children spend time in New Zealand with relatives, even if their parents remain on Niue.

This mobility has of course had considerable impact on the language development of such children. The exposure to New Zealand English may be of varying degrees (less so for pre-schoolers, but more so for children attending New Zealand schools for a period of time), but regardless of the time spent in New Zealand, the acquisition of New Zealand English is vastly accelerated compared to those students who have spent all their life on Niue. Already there are some Niuean students who spent most of their life in New Zealand, and on their return to Niue they hardly speak any Niuean. If they are

still fairly young, they will re-acquire Niuean in a relatively short time, but the older they are the more they will depend on English only. As we will see from further survey results below, Niuean is still much more alive at Niue Primary School than at Niue High School.

1.4 Question Four: gender

	NPS	NHS	TOTAL
Male	64	135	199 (47%)
Female	67	157	224 (53%)

A possible inference is that at intermediate/high school age more male than female students are sent to schools in New Zealand.

Language use

The following four questions were designed to elicit data on which languages are spoken and where, with one additional question on which language is mainly used for writing. The responses have not been tested quantitatively, and as such should be treated as personal attitudes students have towards their own language use and that of their caregivers. However, all these questions were accompanied by oral explanations, for example as to what 'spoken fluency of a language' entails. Still my impression is that many students were too optimistic in their assessment of their spoken fluency of English in particular.

2.1 Question Five: What language(s) can you speak well?

All respondents first received a fairly detailed explanation (in both Niuean and English, where Niuean speaking teachers were present) as to what it means to 'speak a language well'. By way of examples it was pointed out that two

people should be able to have an extended everyday conversation - say, what happened at a recent village show day - without any hesitation, if both speak the language well.

	NPS	NHS	TOTAL
Niuean only	51	61	111 (26%)
Niuean & English	57	175	232 (55%)
Niuean/English & Other(s)	0	23	23 (5%)
Niuean & Other(s) not including English	7	2	9 (3%)
English only	12	28	40 (9%)
English & Other(s) not including Niuean	4	3	7 (2%)

The categories Niue/Eng & Other(s) and Niuean & Other(s) not incl. Eng. is made up of sons and daughters of Pacific Island immigrants, mainly of Tongan, Samoan, Tuvaluan, Cook Island and Fiji-Rotuman extraction, and who at home, or amongst each other at school, still speak their parents' language.

The categories English only and English & Other(s) not incl. Niu clearly includes all students whose parents are expatriate workers (at the time of the survey these were mainly New Zealanders, Australians, Fiji-Indians and Indians) as well as the five exchange students from Nauru and Tokelau. However, the total number of 47 exceeds the number in this category and thus must include some 20 Niuean students who would have stated that they only speak English well (no foreign languages such as French or Japanese are taught at school). This may well include a few recent arrivals from New Zealand, who had spent most of their life there and had more or less lost their Niuean. Included may also be a few Niuean students whose Niuean parents speak mostly English at home, specifically in the belief that Niuean would only hinder their educational aspirations. Whether these are exceptional cases or the beginning of a trend is at this stage difficult to say.

As the categories Niuean and Niuean & English are clearly made up of only Niuean students, we note the very high number (55%) of Niuean students who consider themselves bilingual (Niuean and English) as far as spoken language is We note that there is a dramatic increase in this bilingual concerned. perception in high school. The main reason for this is the current educational language policy whereby there is a preparatory transition from Niuean to English from Junior Primary to Senior Primary (and still extending to some degree to the Intermediate level at NHS), whilst at Secondary School the medium of instruction is English only, following the New Zealand curriculum in virtually every respect (Niuean culture is taught as a stand-alone subject, but is not a New Zealand School Certificate subject). Since all the school exams in fifth and sixth form must be in English only, there is tremendous pressure for the teachers to use English, even if they are much more fluent in Niuean. A small number of expatriate teachers at HOD level from New Zealand ensure that English comes to the fore, especially at fifth and sixth form level. Niuean teachers - few of whom I believe to be fully bilingual themselves - who tend to teach the lower levels will often use spoken Niuean to back up their English texts, or will speak Niuean for class room management purposes.

From my perspective (also based on my experience as an expatriate teacher in the Cook Islands in 1992) it is highly questionable if such a system leads to 'spoken fluency in English', let alone 'written competence in English'. Nevertheless, since the aim of the educational system leads the outcome (rather than the other way round) it simply becomes a perception, if not a belief, that full competence in English is being acquired. Given this belief - backed up by 55% of students - it must be on the other hand a great worry for the current education system that a significant 26% of Niuean students consider themselves fluent only in Niuean (granted that some of them are still on the lower rungs of the English acquisition ladder).

What the figures suggest foremost is the strong desire by many Niuean students to be fully bilingual, that is fluent in Niuean and English. Whether the education system, with its meagre resources can deliver this result, is another question.

2.2 Question Six: language you speak most often at home

By way of explanation it was emphasised that the question relates to you and what language you speak more or most often in the home environment, regardless of what language other members of the home environment speak.

	NPS	NHS	TOTAL
Niuean	109	226	335 (79%)
English	20	60	80 (19%)
Other	2	6	8 (2%)

The main point to take from figures is that Niuean is the language of the home. A most reassuring result for the Niuean language, but also a great danger as this is the last bastion of defence. The figures suggest that small inroads are being made already. Inroads of the sort now becoming prevalent in New Zealand: young Pacific Islanders speaking English in their home environment while the older members still speak in their native Pacific language. The younger generation still understand, say, their Niuean, but are unable and/or reluctant to reply in Niuean. When the language of the home environment is under attack, then this is the last step towards language death. Niuean in Niue is a long way from it, but steps must be taken now to ensure that it stays that way.

A further danger is that if Niuean becomes more or less only associated with the home environment, then its status is diminished, especially in the eyes of those who often, rightly or wrongly, associate the home with backwardness and being out of touch with the modern world. The younger generation can be very unforgiving when it comes to a morally, socially and educationally stultifying home environment controlled by the older generation. When they ultimately discard the home, they unfortunately discard the language with it, because they see it as an instrument of oppression.

Niuean, therefore, must adjust to the needs of the young generation, and the older generation must refrain from scolding those who want to deliver Niuean into the 21st century by way of innovation, often accompanied by a disregard for old conventions. The survival of the Niuean language will depend on it.

2.3 Question Seven: language of the caregivers at home

Again it was emphasised that before answering this question, careful thought should be given as to what language the students hear most often in the home environment, whereby the definition of caregiver or parents includes all the older members of the extended family.

	NPS	NHS	TOTAL
Niuean	111	244	355 (84%)
English	15	41	56 (13%)
Other	5	7	12 (3%)

Again a most encouraging result for the Niuean language. It is good to know that the parental generation holds on to their Niuean language, thus leading the way for the younger generation. The first language is always learnt at home, hence the English idiom 'mother tongue' is as true for English as for any other language. Once a 'first language' has been acquired, it is hard (but not impossible) to take it away. It is therefore absolutely crucial for the survival of the Niuean language that the language is first nurtured in the home environment.

Experience in other countries, such as New Zealand, has shown that where language death has occurred in the home environment it is extremely difficult to resurrect the language, even with the best of will and generous resources. There is a tremendous effort in New Zealand to re-establish the Maori language with language nests (kohanga reo) at pre-school level, but it is very difficult to become fully fluent in Maori when there is no Maori fluency in the home. The same would be true for Niuean, or any other language unfortunate enough to be taken away from a 'mother's tongue'. One can only hope that the mothers of Niue will rise to the tremendous challenge ahead.

2.4 Question Eight: student language at school

A qualification was added to the question in that the students were asked to think only about what language they mainly used when in class and/or with a teacher engaged in teaching. Included in this is not only student-teacher communication but also student-to-student communication, such as during group work.

	NPS	NHS	TOTAL
Niuean	92	53	145 (34%)
English	39	239	278 (66%)
Other	0	0	0

While the result correctly mirrors the educational policies whereby there is a transition from Niuean to English in the Primary School and the full use of English in the Secondary School (see also 2.1), it is only a perception and belief fostered by the education system without due regard to the realities of the outcomes.

It may well be that the vast majority of Niuean students speak English during active teaching/learning, because they have to, but I question the quality of that English. English is clearly their 'second' language and they are in the process of acquiring increasing levels of competence, with varying degrees of success, and yet virtually from Form 1 onwards, the teaching of the New Zealand curriculum is based on the assumption that all students are fully competent in English (speaking, listening, writing, reading).

If anyone suggested to a French, Japanese or German educator that French/Japanese/German teachers who are also reasonably competent in English as their second language should teach an English curriculum in English, and on top of that let their French/Japanese/German students compete with the English students from an English country - they would think this was madness. The demands placed on students and teachers would be simply impossible. Yet this is more or less what occurs on Niue, and I have the greatest admiration for the students and teachers alike who struggle against all the odds and still achieve quite amazing results. Just imagine how much better the results would be if all teaching was done in the 'mother tongue'!

In the absence of quantitative data on the competence of spoken English, one can advance opinions either way. (In the next section, however, I will

consider some available data on the competence of written English for NHS students). The main point here is that English is clearly perceived as the language of education. This important implication is further discussed in the next section.

2.5 Question Nine: the language you write in most often

This question was phrased so as to include 'writing' in all domains, not only at school, even though it would be expected that most writing is done at school or for school.

	NPS	NHS	TOTAL
Niuean	58	36	94 (22%)
English	73	256	329 (78%)
Other	0	0	0

Again these figures mirror the official education policy, whereby written English (78%) significantly outperforms spoken English (66%).

What the results of this question and the previous question clearly suggest is that English is the language of education. There are two major issues here: one, if so, how well are Niuean students adapted to this dictum, and, secondly, what are the implications for the Niuean language?

It was argued in previous sections on spoken English, that I had my doubts about students being fluent in spoken English, even though a very large number of students perceive themselves as fully competent in both English and Niuean. To be fair, the current question does not explicitly ask students if they think they are fully competent in written English, but as they have to use written English anyway, the question of competence is an obvious one. The only available data are New Zealand School Certificate English results which crucially depend on reading and writing skills as expected of native English speakers (as well as coping with exam pressures as such). From this perspective it will come as no great surprise that the pass rates for Niuean

students are very low: records from the years 1990 to 1993 show pass rates between 10% and 17% (this is not taking into account numbers of fifth form students placed in so-called 'practical classes' who do not sit the exams, as they would further depress the pass rate statistics). At face value this would indicate that at least for written English there is only a low level of competency (there would be very few New Zealand schools where NZSC English results are that low). In the light of Niuean student perceptions of nearly 80% writing in English, some 66% speaking English and some 55% being fluent in Niuean and English, the NZSC English results show these beliefs to be far too optimistic.

Given then that there is some evidence for my proposition that English is a second language for the vast majority of Niuean students, it must be recognised that if Niue wants to achieve true bilingual status for her students, then highly specialised resources, especially in teaching English as a second language, would have to be used. English and Niuean would need to have equal status, and all educational materials would have to reflect this. Fluency in two languages is not easily achieved and to base education on such a premise would be a novel enterprise, and if done well, would no doubt be considered one of the great advances in modern education. I am not aware of any place in the world where such a policy has succeeded in a positive way (I would suggest that many corrupted language policies have been tried, especially in the Pacific Islands, typically by colonial powers who sought to disempower indigenous language, and often succeeded in doing so).

What are the implications of all this for the Niuean language? The English language itself was once in a similar situation (see Crowley, 1986): before the 14th century the English language in England had a very low status as a spoken language only, while most of the education was conducted in foreign languages such as Latin, Greek and French. From the 15th to the early 16th century, the status of English increased as more and more education was conducted in English. From the year 1755 (the year Dr Samuel Johnson published the first ever comprehensive monolingual dictionary of the English language) until today English has been the dominant language in all domains, including of course in education. Niuean is now in the same situation as English was in the 14th century (or if we are very optimistic, we are close to the year 1755, as the Niue Dictionary Project will next year start work on the first ever monolingual

dictionary of the Niuean language). The message is clear: only when a language is also the language of education does it fulfil its role as a national language. A language that is not part and parcel of education cannot progress and keep up with an ever changing world. So, will Niuean ever again become the language of education (as is surely was before colonisation)? Is there any support for the Niuean language amongst the young Niueans?

3. Attitudes towards Niuean and English

The last three questions were designed to elicit opinions on the value students place on Niuean and English. The previous results from questions 5 to 9 seem to suggest that the use of Niuean is under attack and in decline, being especially vulnerable due to its status as a 'home' language only, having been replaced by English as the language of education. Are these trends actually supported by the language values students hold? Or are these trends imposed upon them? As we shall see below, there is a clear answer to that.

3.1 Question Ten: usefulness

The question 'which language do you think is more useful?' was accompanied by an explanation which stressed that any answer should reflect 'usefulness' for living on Niue and not anywhere else (but not to deny that a knowledge of 'foreign' languages is useful for travel, trade, diplomacy and other fields). What was meant to be discouraged was the possible notion that English is most useful as a one-way ticket out of Niue, and while many thousands of Niueans have taken that option (and no doubt will continue to do so) it would be counterproductive in terms of the present survey.

	NPS	NHS	TOTAL
Niuean	62	41	103 (25%)
English	18	38	56 (13%)
Equal Value	51	213	264 (62%)

These figures may surprise those who would have expected a marked support for the usefulness of English, especially as the language of education. In fact the majority (62%) rate Niuean as having equal value with English and a sizeable 25% put Niuean alone in front. Despite English having the enforced status of he language of education, there are obviously very positive attitudes to the Niuean language.

In terms of modern language ecology this is a positive sign: Niueans are willing, and I believe proud, to identify with their own language, not only in the home, but as demonstrated here, as a complete identification with life on Niue (and which, in my mind, must surely include education). Even though Niuean is actually not used much in domains such as education, commerce, law and government, there is still the 'perception' that Niuean is most useful, at least as much as English, if not more so than English.

It is now the second time that the students' perceptions and/or beliefs are in conflict with the realities (the first was the widely held perception that they were bilingual, when in fact that is highly questionable). One possible explanation is that when people are subjected to a form of cultural deprivation (in this case the diminishing status of one's own language) there is a need to compensate, thus the belief that an equal gain in acquiring English makes up for the loss in Niuean. In terms of holistic psychology and language ecology what is required then, is the restoration of one's identity within a social and cultural context that makes such identification possible. Language must come somewhere near the top within that context. It would be very difficult to be a confident and proud Niuean without the Niuean language. The Niuean students know this and have expressed this fundamental truth quite clearly, even though the present realities may not be in line with this.

3.2 Question Eleven: better off with English only?

This question is really the reverse of question 10, and as such a control question to see whether or not there is consistency in the responses. In other words, if question 10 had yielded strong support for the usefulness of English only, one would expect a similar response to question 11, or vice versa!

	NPS	NHS	TOTAL
Yes	27	9	36 (9%)
No	80	246	326 (77%)
Don't Know	24	37	61 (14%)

The resounding 'no' (77%) matches well with the support given to Niuean in question 10. Again as a hard-nosed, free-market enthusiast one might have expected that more would be sympathetic to the notions of 'if you cannot beat them you might as well join them' or 'the market place demands English, so let's have it'. Or to pursue the seemingly logical argument: if we do have to have our education in English, wouldn't we better off to speak English from year 1, so we can be native English speakers, just like the students of New Zealand with whom we have to compete in the exams?

The reason students say 'no' to that proposition is that the consequence would be the loss of their identity as Niueans, at least to a considerable degree. The question then is: can you have it both ways? Remain faithful to Niue and her Niuean language and succeed in the English world via the New Zealand education system? As pointed out earlier, the idea of being fully bilingual (i.e. 'having it both ways') is not an impossible one, but would require very comprehensive educational strategies. Does Niue have the resources and the political will to even consider this? If the only other realistic (and good) choice is to have only Niuean as the language of the island (and learn English as a foreign language, much as Germans, French and Japanese do) then perhaps it looks less daunting, especially to those who are strongly opposed to Niuean as the language of education (the further question is of course 'who are those Niueans who oppose Niuean as the language of education? - certainly not the students).

3.3 Question Twelve: Protect Niuean from dying out?

The possibility of language death was explained to the students, and examples from Australia (cf. Schmidt, 1990) were given. New Zealand Maori (cf. Waite, 1992) was also cited as being close to language death, but that great efforts are being made by the Maori people to have their language survive. While Niuean is still relatively healthy, there are signs of its decline. Should

we let it go and eventually let it die a natural death? Wait and see? Or should we do something now and protect Niuean from decline? However, options of what exactly could be done, were not discussed.

	NPS	NHS	TOTAL
Yes	117	233	350 (83%)
No	6	29	35 (8%)
Don't Know	8	30	38 (9%)

Again the figures are a very clear vote in favour of the Niuean language, and a demand that something be done to make sure that Niuean has a secure future. That plea must surely be directed at the policy makers of Niue, and further afield to New Zealand and to international agencies such as UNESCO. The inception of the Niue Dictionary Project is a step in the right direction, but a few dictionaries alone will not do the job of securing the survival of Niuean. Bold and innovative steps need to be taken with regard to planning (cf. Baldauf & Luke, 1990). A complete re-think of national priorities may be at stake. Basic philosophy may be in need of re-checking: at what cost economic development? remain a proud Niuean speaking and learning in his/her own language, but relatively poor in the eyes of Western materialistic development? Declare Niuean the only national language or become an inferior linguistic appendage to New Zealand and Australia.

There is an indication that the young generation of Niue may well start to contemplate such questions, and who knows, even find some answers that are of lasting benefit to Niue and to the rest of the world. There is no reason why a tiny island community such as Niue could not show the world how it is done. That is what ecology is all about; sometimes the smallest organisms are the most important when it comes to re-establishing harmony and well-being in the larger body. So the Niuean students say: Let us keep Niuean for Niue. I may add: and for the rest of the world, because we need the diversity of languages just as much as we need the diversity of biological species.

References

- Baldauf, R. and Luke, A. (eds.) (1990). Language Planning and Education in Australasia and the South Pacific. Clevedon: Multilingual Matters.
- Crowley, T. (1986). Dictionary Making. Course Books One and Two. The University of the South Pacific Extension Services.
- Mühlhäusler, P. (1992). Preserving languages or Language scologies? A top-down approach to language survival. Oceanic Linguistics 31.2:163-180.
- Schmidt, A. (1990). The loss of Australia's aboriginal language heritage. Canberra: Australia Institute of Aboriginal Studies.
- Waite, J. (1992). Acteureo. Speaking for ourselves. Wellington: Learning Media.

NIUE LANGUAGE SCHOOLS SURVEY 1994

Please answer in the space p		of your choice.
1. AGE: 5-10 [] . 11-15 [] 16-20[] 21-25[]
2. BORN IN:	NIUE [] NEW 2	ZEALAND [] Other
3. LIVED IN NIUE: ALL I	MY LIFE [] MOST	OF MY LIFE ()
	YEARS OU	T OF MY AGE OF
4. GENDER:	MALE [] FEMA	LE()
5. What languages can you S	PEAK well (not necessa	rily 'write')?
		TONGAN [] SAMOAN [] Other(s)
6. What language do YOU sp	eak most often in your l	home?
NIUEAN []	ENGLISH []	Other
7. At home, what language de	your parents or caregi	vers SPEAK most often?
NIUEAN []	ENGLISH []	Other
8. At school, in the classroon	n with your teachers, wh	ast language do you SPEAK most often?
NIUEAN []	ENGLISH []	Other
9. At school and at home, wh	at language do you mos	n often WRITE in?
NIUEAN []	ENGLISH []	Other
10. Which language do you t	hink is more useful?	
NIUEAN [] 11. Do you think it would be		EQUAL VALUE [] eak ONLY English?
YES [] 12. Do you think the N iucan	NO [] a language should be pro	DON'T KNOW [] stected from dying out?
YES []	NO []	DON'T KNOW []