This conclusion naturally raises the question of what to do when the criteria we examine do not agree with each other. Since that is not the situation at hand, any attempt at an answer here would be mere speculation. I suspect the process of weighing conflicting criteria against each other will have to make reference to situation-specific factors, but this question will have to await future research into a more ambiguous language situation.

These findings reemphasize the importance of fieldwork in Papua New Guinea (Koch et al. 2014) and highlight our considerable lack of knowledge regarding the more remote parts of the country. The language maps that circulate of Madang Province have changed little since Z'graggen's pioneering work, although it is clear that they still need much revision. For example, the village of Lai, shown in map 1, is found on a number of maps of the province, but language maps consistently mark the stretch of the Ramu south of Apali territory as uninhabited. This raises an obvious question: what language do the residents of Lai speak? The village is not mentioned by Z'graggen, nor has it been visited by any other surveyor that I am aware of. The best information I have found comes from a recent survey conducted by New Tribes Missions (Hamb and Sutton 2012) in which the surveyors spoke with residents of Sepu about the situation downriver. Their consultants believed that the residents of Lai spoke a language similar to their own, but we clearly stand to benefit a great deal from more detailed linguistic surveying of the area.

## **APPENDIX 1. WORDLISTS**

The two wordlists are given below, ordered by Swadesh number. Where a meaning has been excluded from my count, the corresponding number is simply skipped. In the Cognate column, *y* means 'cognate', *n* means 'not cognate', *y*? means 'probably cognate', and *n*? means 'probably not cognate'.

#	Meaning	Magi	Aisi	Cognate
1	Ι	yi	ya	y
2	thou	na	na	У
3	we	ari	ani	y y?
4	this	naku	naku	У
2 3 4 5 6 7 8	that	araku	araku	y y?
6	who	niŋe	nini	y?
7	what	ai	ai	У
8	no	magi	mabiŋ	n
10	many	mugum	maŋgima	n
11	one	pabra	pabra	У
12	two	agrenda	agrenda	У
13	big	kuŋar	kuŋar	У
14	long	garaŋ	garaŋ	У
15	small	animini	animini	У
16	woman	abi	abi	У
17	man	kur	kuru	У
19	fish	kyaŋi	kyaŋi	У
20	bird	kapi	kapi	У
21	dog	api	apir	У
22	louse	imaŋ	imu	y y?
23	tree	te	tar	У
24	seed	kisir	kisir	У
25	leaf	tewad	taŋar	n

#	Meaning	Magi	Aisi	Cognate
26	root	kinam	kirir	n
28	skin	sigid (dib?)*	dibi	y?
29	flesh	kisiki	kisiki	y
30	blood	igam	igam	ÿ
31	bone	kañaŋ	dagar	n
32	grease	siraŋ	siri	y?
33	egg	kimĎi	anoŋ	'n
35	tail	kwari	kwari	У
37	hair	sisi	ari	n
38	head	katam	katam	У
39	ear	duwag	dugag	y?
40	eye	tami	tami	y
41	nose	mumukatam	mumu	ý
42	mouth	simbikatam	sumboi	y?
43	tooth	maki	maki	У
44	tongue	migin	sagwi	n
46	foot	angi	aŋgi	У
47	knee	kugad	koge	y?
48	hand	kimib	kumob	y
49	belly	kitim	kumu	n
50	neck	sakum	nagum	n
51	breasts	ami	ami	У
53	liver	mapim	umbaŋ	n
55	eat	n-	n-	У
56	bite	is-	is-	y
57	see	timbr-	timbr-	ý
58	hear	ir-	ir-	y?
60	sleep	ambit kin-	aŋgɨn-	n
61	die	kum-	kum-	У
62	kill	iw-	iw-	y
63	swim	aŋ sud-	aŋ sor-	y
64	fly	pug-	brir am-†	n?
65	walk	kr-	kr-	У
66	come	ye-	wi-	n
68	sit	miŋga kin-	kinigam-	n
69	stand	dugwa pam-	togapam-	y?
70	give	igw-	igw-	y
71	say	S-	u-	n
72	sun	wayaŋ	wayaŋ	У
73	moon	irina	irina	ÿ
74	star	tindi	tendi	ÿ
75	water	aŋ	aŋ	ý
76	rain	aŋ	am	n?
77	stone	gwande	gwande	У
78	sand	misab	upo	n
79	earth	bi	ur	У
80	cloud	kami	kamo	y
81	smoke	apis	pisi	У
82	fire	ab	ab	y
83	ash	ibur	ibir	У
84	burn	tu-	tu-	y
85	path	kib	kib	y
86	mountain	param	ware	n
90	white	kiki	mor, niŋ	n
91	black	griŋ	greŋ	У
92	night	uminda	urakir	n
94	cold	karu	kibur	n
95	full	mitate	yakarate	n

MAGI

#	Meaning	Magi	Aisi	Cognate
96	new	arim?	kiki	n?
97	good	upɨnaŋ	urunda	n
99	dry	ginaŋ	genaŋ	У
100	name	ib	ib	У

\* One Magi consultant provided *dib*, but another considered it an Aisi loan and gave *sigid*.

† Z'graggen (1980a:64) recorded Aisi puge-, but my consultant rejected it.

## **APPENDIX 2. MAGH TEXT**

The following is a brief text in Magi, as told by Jori Umban. It is called "They made a road" ("Kib tuguramsun" in Magi, "Ol wokim rot" in Tok Pisin), and it deals with the construction of a road near the village of Wanang. It is transcribed in rough intonation units, although I have often combined separate intonation units onto the same line for space reasons and indicated the boundary with punctuation. The translation from Magi into Tok Pisin is his; the translation from Tok Pisin into English is mine.

Oke. Yi asad mu uku-byan. Asad ka-ku ka-nga. okay 1sG story SPEC tell-1sG.FUT story MD-NOM MD-ADJZ 'Okei. Mi bai mekim wanpela stori. Stori em olsem.' 'Okay. I'm going to tell a story. The story goes like this.'

Ari mandi, minde kwari ki-te-r. 1PL before grass.sp tail stay-HAB-1PL 'Bifo mipela save stap long tel bilong kunai.' 'We used to live at the tail end of a kunai field.'

Minde kwari kiti kiti, tam-ikar ga, ab-is-uŋ. grass.sp tail stay.ss stay.ss put-1PL.DS TOP speak-FPST-3PL 'Mipela stap long tel bilong kunai i go go na, ol i tok.' 'We lived by the field for a long time, and then they spoke.'

Joswan=da, Jon Opan=da. Sebya kinaŋ tikaye-uŋ ab-is-uŋ. Joswan=COM John Opan=COM survey group? bring-3PL.IPST speak-FPST-3PL 'Joswan wantaim John Opan. "Ol kisim ol sevey lain i kam," ol tok olsem.' 'Joswan and John Opan did. "They're bringing some surveyors," they said.'

Kib narikuŋ tugram-bi si. Ki ka-nɨŋ aŋandam-s-ar. path 2PL.POSS make-NMLZ BEN speech MD-ACC hear-FPST-1PL "Ol laik wokim rot bilong yupela." Mipela harim dispela toktok." "To build you guys a road." We heard this news.'

Anandami kiti kiti, kin-ikar ga bikman arikun mu, hear stay.ss stay.ss stay-1PL.Ds TOP big.man 1PL.POSS SPEC 'Mipela harim i stap na, mipela i stap na, wanpela bikman bilong mipela,' 'We were hearing this, and we stayed, and one of our big men,'

ib nuku, Markus. Nu niri=ra sab tam-is-i. Sebya sab. name 3sg.Poss Markus 3sg 3PL=COM work put-FPST-3sg survey work 'Nem bilong en Markus. Em wok wantaim ol. Em wok sevey.' 'His name was Markus. He worked with them, on the survey work.'