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WHAT AGREES WITH WHAT IN WHAT, GENERALLY SPEAKING?

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Preface of 24 August 1994

This working paper—conceived and written in January 1992 and eventually, in a spare couple of minutes, presented to the EUROTYP Noun Phrase Group at its Celtic Fringe assembly in Edinburgh on Saturday, 18 September 1993—reports the results of a quick survey of agreements in fifty languages, not including Pictish.

In order to save precious time and space, the style is deliberately tabular rather than epic. Abbreviations abound, but I am confident none will be found exceptionally enigmatic: i (as in iObj) is of course shorthand for indirect, Nmb for Number, Psn for Person (not Postcrastinal nor Prehesternal), Gnd for Gender, Cas for Case, attrN for attributive Noun (a.k.a. possessor, as in '*Gulliver* 'is travels'), and so on. Regrettably, the EUROTYP Guidelines were unavailable at the time of writing, or else bare triliteral Psn would have been Pers, Gnd Gend, and so on.

No ink will be wasted here on grappling with the proper definition and delimitation of agreement. That is what you get, for instance, in *EUROTYP Working Paper* VII/5. What will be examined is a range of patterns of overt co-variance between syntactic co-constituents that, I trust, will qualify as prototypical agreement on the narrowest understanding of this notion. The emphasis is on the noun phrase as one domain of agreement in its relation to the clause as its other major domain.

My sources were descriptive grammars or grammar sketches that happened to be at my elbow; credits are supplied upon request. (It has momentarily slipped my memory, though, who on earth I consulted for Archi and Dyirbal.) However numerous and grave my sins of omission and commission in exploiting them, I trust the fourteen implicational generalisations about what (=target) may agree with what (=controller) in what (=category) that my database has let me induce, presented in plain unabbreviated prose and accompanied by reminiscences of EUROTYP cross-group-fertilization, are

not wide of the truth, and are not the changeable products of inadequate sampling either (as might have been suspected, with Pictish unrepresented!).

> "*No Trust*! Look at your agreement, Barber; you must trust. Trust men. Just try the experiment of trusting men for this one little trip."
>
> (Herman Melville, *The Confidence Man*)

Genetic distribution of languages in the sample (n=50)

Khoisan	1	Austro-Asiatic	1
Niger-Congo	1	Austronesian	3
Afroasiatic	6	Papuan	2
Indo-European	6	Pama-Nyungan	1
Uralic	6	Eskimo-Aleut	1
Altaic	4	Macro-Siouan	1
Chukchi-Kamchatkan	1	Penutian	2
Northwest Caucasian	1	Uto-Aztecan	2
Northeast Caucasian	3	Andean-Equatorial	1
South Caucasian	2	isolates	4
Dravidian	1		

Although critical comments would be a bit premature,
do not hesitate to use this space for such purposes
if you feel you cannot hold out
(and who in the Noun Phrase Group can?)

Database

Language (Affiliation)	Controller	Target	Categories	Conditions
Abkhaz (NWCaucasian)	Sbj	V	Nmb, Psn, Gnd	
	dObj	V	Nmb, Psn, Gnd	
	iObj	V	Nmb, Psn, Gnd	
Arabic (Afroasiatic)	Sbj	V	Nmb, Psn, Gnd	Sbj + V
	Sbj	V	Psn, Gnd	V + Sbj
	Sbj	V_{Prtcpl}	Cas	Passive
	Sbj	predAdj	Nmb, Gnd, Cas	
	N	Dem	Nmb, Gnd	
	N	attrAdj	Nmb, Gnd, Cas, Def	
Archi (NECaucasian)	Abs	V, Aux	Nmb, Gnd	
	Sbj	Aux	Nmb, Gnd	Imperf
	Abs/Subj	VModif	Nmb, Gnd	
Modern Aramaic (Afroasiatic)	Sbj	V	Nmb, Gnd	except V_{exist}
	N	attrAdj	Nmb, Gnd	
Avar (NECaucasian)	Sbj	V	Nmb, Gnd	
	dObj	V	Nmb, Gnd	
	N	attrAdj	Gnd, Cas	
Basque (isolate)	Sbj	V	Nmb, Psn, Gnd	Perf
	Obj	V	Nmb, Psn, Gnd	Perf
	Abs	V	Nmb, Psn, Gnd	Imperf
	Erg	V	Nmb, Psn, Gnd	Imperf (Gnd only with 2Sg Aux)

Beja	Sbj	V	Nmb, Psn, Gnd	
(Afroasiatic)	N	attrAdj	Nmb, Gnd, Cas, Def	Def only if N + Adj
	N	Dem	Nmb, Gnd, Cas, Def	(ditto)
Buginese	Erg/Abs	V	Psn	(Nmb hardly de-
(Austronesian)	(Topic)			veloped, perhaps
	attrN	N	Psn	only 1Psn)
Burushaski	Sbj	V	Nmb, Psn, Gnd	
(isolate)	Obj	V	Gnd	(lexical)
	Compl	Postp	Nmb, Psn, Gnd	
	N	attrAdj	Nmb	
	N	Dem	Nmb, Gnd	
Buryat	Sbj	V	Nmb, Psn	
(Altaic)	N	attrAdj	Nmb	optional
Chukchi	Sbj	V	Nmb, Psn	
(Chukchi-Kamchatkan)	dObj	V	Nmb, Psn	
	iObj	V	Nmb, Psn	only 'give', iObj=1/2Psn
Dyirbal	N	attrAdj	Cas	
(Pama-Nyungan)	N	Class Cas		
	N	attrN Cas		
English	Sbj	V	Nmb, Psn	Ind, Pres (less
(Indo-European)				constrained *be*)
	N	Dem	Nmb	
	PsnPro	N	Nmb	(*we smokers*)
Erzya-Mordva	Sbj	V	Nmb, Psn	
(Uralic)	dObj	V	Nmb, Psn	dObj=def

Estonian	Sbj	V	Nmb, Psn	not with Infer
(Uralic)				and Neg
	N	attrAdj	Nmb, Cas	not in all Cases
Evenki	Sbj	V	Nmb, Psn	
(Altaic)	N	attrAdj	Nmb, Cas, Poss	
	attrN	N	Nmb, Psn	
Finnish	Sbj	V	Nmb, Psn	
(Uralic)	N	attrAdj	Nmb, Cas	not all Adj,
				not N + Adj
Fore	Sbj	V	Nmb, Psn	
(Papuan)	Obj	V	Nmb, Psn	
French	Sbj	V	Nmb, Psn	
(Indo-European)	dObj	V_{Prtcpl}	Nmb, Gnd	dObj + V_{Prtcpl}
	N	attrAdj	Nmb, Gnd	
	N	Dem	Nmb, Gnd	
	N	Art	Nmb, Gnd	
Georgian	Sbj	V	Nmb, Psn	
(SCaucasian)	Obj	V	Nmb, Psn	
	N	attrAdj	Cas, Nmb	cons.-stem Adj
German	Sbj	V	Nmb, Psn	
(Indo-European)	Sbj	predN	Cas	
	dObj	predN	Cas	
	N	attrAdj	Nmb, Cas, Gnd	Adj + N
	N	Art	Nmb, Cas, Gnd	
	N	Dem	Nmb, Cas, Gnd	

West Greenlandic	Sbj	Vb	Nmb, Psn	
(Eskimo-Aleut)	Obj	Vb	Nmb, Psn	
	attrN	N	Nmb, Psn	
	N	Dem	Nmb, Cas	
	N	attrAdj	Nmb, Cas	if attrAdj is participle of $V_{intrans}$
Hausa	Sbj	V	Nmb, Psn, Gnd	Aspect
(Afroasiatic)	N	attrN	Nmb, Gnd	
	N	Dem	Nmb, Gnd	
Israeli Hebrew	Sbj	V	Nmb, Psn, Gnd	except Existential
(Afroasiatic)	N	attrAdj	Nmb, Gnd, Def	
Ho	Sbj	V	Nmb, Psn, Gnd	
(Austro-Asiatic)	dObj	V	Nmb, Psn, Gnd	
	iObj	V	Nmb, Psn, Gnd	
	N	Dem	Nmb, Gnd	
Hopi	Sbj	V	Nmb	
(Uto-Aztecan)	attrN	N	Nmb, Psn	
	N	Dem	Nmb, Cas	
Hungarian	Sbj	V	Nmb, Psn	
(Uralic)	Sbj	predAdj	Nmb	
	attrN	N	Nmb, Psn	
Jacaltec	Sbj/Erg	V	Nmb, Psn	
(Penutian)	Obj/Abs	V	Nmb, Psn	
	attrN	N	Nmb, Psn	
	N	Num	Gnd	
Kannada	Sbj	V	Nmb, Psn, Gnd	
(Dravidian)	N	Dem	Nmb, Cas, Gnd	

Ket	Sbj	V	Nmb, Psn, Gnd	
(Uralic)	dObj	V	Nmb, Psn, Gnd	
	attrN	N	Nmb, Psn, Gnd	
Latin	Sbj	V	Nmb, Psn	
(Indo-European)	Sbj	predAdj	Nmb, Cas, Gnd	
	Sbj	predN	Nmb, Cas	
	dObj	predAdj	Nmb, Cas, Gnd	
	dObj	predN	Nmb, Cas	
	N	attrAdj	Nmb, Cas, Gnd	
	N	Dem	Nmb, Cas, Gnd	
Lithuanian	Sbj	V	Nmb, Psn	Nmb in 3Psn not
(Indo-European)				distinguished
	Sbj	V_{Prtcpl}	Nmb, Cas, Gnd	
	N	attrAdj	Nmb, Cas, Gnd	
	N	Dem	Nmb, Cas, Gnd	
Mansi	Sbj	V	Nmb, Psn	
(Uralic)	dObj	V	Nmb	dObj=def
	attrN	N	Nmb, Psn	
Mohawk	Sbj	V	Nmb, Psn, Gnd	
(Macro-Siouan)	Obj	V	Nmb, Psn, Gnd	
Mongolian	Sbj	predN	Nmb	
(Altaic)				
Nama	Sbj	V	Nmb, Psn, Gnd	
(Khoisan)	Obj	V	Nmb, Psn, Gnd	
	PsnPro	N	Nmb, Psn, Gnd	('we small men')
Nivkh	Sbj	V	Nmb	
(isolate)	(Sbj)	V	Nmb, Psn	Imperative
	Sbj	V_{Ger}	Nmb, Psn	

Palauan	Erg	V	Nmb, Psn	
(Austronesian)	Abs	V	Nmb, Psn	
	attrN	N	Nmb, Psn	
	N	Dem	Nmb, Gnd	
Bolivian Quechua	Sbj	V	Nmb, Psn	
(Andean-Equatorial)	Obj	V	Nmb, Psn	
	attrN	N	Nmb, Psn	
Russian	Sbj	V	Nmb, Psn	Pres
(Indo-European)	Sbj	V	Nmb, Gnd	Pret
	N	attrAdj	Nmb, Gnd, Cas	
	N	Dem	Nmb, Gnd, Cas	
Samoan	Sbj	V	Nmb	
(Austronesian)	Sbj	predAdj	Nmb	
	N	Dem	Nmb	(only few nouns
	N	attrAdj	Nmb	inflect for Pl)
Sumerian	Sbj	V	Nmb, Psn	Imperf (marû)
(isolate)	Abs	V	Nmb, Psn	Perf (ham7u)
	Erg	V	Nmb, Psn, Gnd	Perf (ham7u)
Swahili	Sbj	V	Nmb, Psn, Gnd	
(Niger-Congo)	Obj	V	Nmb, Psn, Gnd	Obj=def
	N	attrN	Nmb, Gnd	
	N	attrAdj	Nmb, Gnd	
	N	Dem	Nmb, Gnd	
Svan	Sbj	V	Nmb, Psn	
(SCaucasian)	Obj	V	Nmb, Psn	
	N	attrAdj	Cas	only N + Adj
Tabasaran	Sbj	V	Nmb, Psn, Gnd	
(NECaucasian)	dObj	V	Nmb, Psn, Gnd	
	N	attrAdj	Gnd	

Tamazight	Sbj	V	Nmb, Psn, Gnd	
(Afroasiatic)	dObj	V	Nmb, Psn, Gnd	
	iObj	V	Nmb, Psn, Gnd	
Coast Tsimshian	Abs	V	Nmb, Psn	
(Penutian)	Erg	V	Nmb, Psn	
	N	attrAdj	Nmb	
Turkish	Sbj	V	Nmb, Psn	
(Altaic)	attrN	N	Nmb, Psn	
Ute	Sbj	V	Nmb, Psn	(separate Nmb
(Uto-Aztecan)	Obj	V	Nmb, Psn	marker)
	N	attrAdj	Nmb, Cas	only N + Adj (contrastive)
	N	Dem	Nmb, Gnd	
	N	defArt	Nmb, Gnd	
Yimas	Sbj	V	Nmb, Psn, Gnd	(but separate
(Papuan)	dObj	V	Nmb, Psn, Gnd	Nmb marker)
	iObj	V	Nmb, Psn, Gnd	
	N	attrAdj	Nmb, Gnd	
	N	Dem	Nmb, Gnd	

The right-hand column in the database table, giving conditions which an agreement is subject to—such as 'only if Subject precedes Verb' (Sbj + V)—is largely ignored for present purposes.

Inducing generalisations

Clause	NP	number of languages	percent
+	+	37	74%
+	-	12	24%
-	+	1	2%
-	-	numerous	

Table 1. Agreement Domains: Clause and Noun Phrase
(Percentages only calculated for languages with agreement)

Distribution of languages in sample (n=50), with pluses and minuses arranged as in Table 1:

+ + Arabic, Modern Aramaic, Avar, Beja, Buginese, Burushaski, Buryat, English, Estonian, Evenki, Finnish, French, Georgian, German, West Greenlandic, Hausa, Israeli Hebrew, Ho, Hopi, Hungarian, Jacaltec, Kannada, Ket, Latin, Lithuanian, Mansi, Palauan, Bolivian Quechua, Russian, Samoan, Swahili, Svan, Tabasaran, Coast Tsimshian, Turkish, Ute, Yimas

+ - Abkhaz, Archi, Basque, Chukchi, Erzya-Mordva, Fore, Mohawk, Mongolian, Nama, Nivkh, Sumerian, Tamazight

- + Dyirbal

- - [Afrikaans, Mandarin ...]

Induced generalisations:

1. If there is agreement within NPs, there is, almost certainly, also agreement within clauses.
2. If there is agreement within clauses, agreement is likelier to be used than not to be used also within NPs.

Those who were present in the dungeon at Donostia on Thursday, 3 September 1992, as the Word Order and Noun Phrase Groups joined forces on the occasion of the EUROTYP Plenary Conference, might remember Anna Siewierska and Dik Bakker putting forward, and handing out, a list of implications induced from their own, exclusively European database. Some were about agreement, including this one:

> If attributive adjectives agree in Gender, then (without exception) verbs agree with subject in Person.

Though relativised to particular agreement categories, this Siewierska-Bakker (Euro-) implication is in the same spirit as my No. 1, giving the clause priority over the NP as an agreement domain.

But unlike the Siewierska-Bakker implication, No. 1 is not an absolute law, for in one language that happened to get into my sample as a representative of the Antipodes, NPs take priority over clauses for agreement. As Hamlet (1604: I.5, Second Quarto) did not observe without reason, there are more things in Heaven and Earth, Horatio, than are dreamt of in our EUROTYP Guidelines. Nonetheless, in the case at issue, the NP-internal agreement category in Dyirbal, where verbs outlandishly do not agree with subjects in person, is not gender but case—which is consistent with the categorially relativised, Strasbourg-funded implication of Siewierska and Bakker's. Actually, fairly close to home, just across the water from the Danish court at Elsinore, attributive adjectives agree in gender but verbs do not agree with subjects in person (but at best only in number). Alas, Swedish did not make it into my sample nor was it, at the Donostia stage, in that of Siewierska and Bakker. As I am reliably informed by a female inhabitant of the capital city of that country, Spoken Swedish does away with verbal number agreement too, thereby earning a -+ in Table 1 and thus joining Dyirbal. The rest is silence (to quote again Hamlet, loc. cit.).

Determiner	Modifier	Head Noun	number of languages	percent
+	+	+	0	0.0%
+	+	-	15	39.5%
+	-	+	1	2.6%
-	+	+	2	5.3%
+	-	-	4	10.5%
-	+	-	10	26.3%
-	-	+	6	15.8%
-	-	-	12	

Table 2. Targets in NP-internal Agreement
(Percentages only calculated for languages with NP-internal agreement)

Distribution of languages in sample (n=50):

+ + +	Ø
+ + -	Arabic, Beja, Burushaski, Dyirbal, French, German, West Greenlandic, Hausa (Mod = attrN rather than attrAdj), Latin, Lithuanian, Russian, Samoan, Swahili, Ute, Yimas
+ - +	Palauan
- + +	Evenki, Jacaltec (Mod = Num rather than attrAdj)
+ - -	English, Ho, Hopi, Kannada
- + -	Modern Aramaic, Avar, Buryat, Estonian, Finnish, Georgian, Israeli Hebrew, Svan, Tabasaran, Coast Tsimshian
- - +	Buginese, Hungarian, Ket, Mansi, Bolivian Quechua, Turkish
- - -	Abkhaz, Archi, Basque, Chukchi, Erzya-Mordva, Fore, Mohawk, Mongolian, Nama, Nivkh, Sumerian, Tamazight

Note added in proof: At least in Archi, Avar, and Israeli Hebrew certain NP-internal agreements have been inadvertently overlooked. Most importantly, Israeli Hebrew should presumably have +++, which affects generalisation No. 3 below.

Induced generalisations:

3. If determiners and modifiers agree both with head nouns, head nouns do not agree with attributive nouns, and vice versa.
   [Holds for determiners and modifiers also individually, albeit only statistically.]
4. If determiners agree within NPs, modifiers are likelier also to agree than not to agree.

Thanks to our colleagues in the Word Order Group who had joined us in the Donostia dungeon, we know that Europe abides by this hierarchy of agreement targets:

demonstrative > attributive adjective > predicative adjective > article

When comparing this with my No. 2, it should be noted that I have—perhaps unwisely—lumped together all kinds of words that may reasonably be said to have determiner function, awarding a plus whenever any of them agrees; my generalisation would be clearer with an added *some*: 'If some determiners ...'. I am therefore unable to tell from Table 2 whether determiners owe their top rank in my hierarchy (which is Determiners > Modifiers) solely to demonstratives and whether articles are actually worse agreers than attributive adjectives. That this is indeed the appropriate interpretation is suggested, first, by a look back at the database table, where only a very few languages are listed with articles as agreement targets (French, German, Ute)—and they all have demonstratives and adjectives as targets as well. And there are, second, the first three of the five individual implications between agreement targets, relativised to particular categories, that the Siewierska-Bakker hierarchy is derived from (keeping in mind, though, that these are Euro-laws):

a. If article agrees in Gender, then (without exception) demonstrative agrees in Gender.
b. If article agrees in Number, then (without exception) demonstrative agrees in Number.
c. If article agrees in Gender, then (without exception) attributive adjective agrees in Gender.
d. If predicative adjective agrees in Gender, then (without exception) attributive adjective agrees in Gender.
e. If predicative adjective agrees in Gender, then (without exception) demonstrative agrees in Gender.

Number	Person	Gender	number of languages	percent
+	+	+	16	29.6%
+	+	-	26	48.1%
+	-	+	5	9.3%
-	+	+	1	1.9%
+	-	-	4	7.4%
-	+	-	1	1.9%
-	-	+	1	1.9%
-	-	-	2	

Table 3. Categories in Verb Agreement
(Percentages only calculated for languages with verb agreement)

Distribution of languages in sample (n=56, since some languages appear in more than one class):

+ + +	Abkhaz, Arabic (Sbj+V), Basque, Beja, Burushaski, Hausa, Israeli Hebrew, Ho, Kannada, Ket, Mohawk, Nama, Swahili, Tabasaran, Tamazight, Yimas
+ + -	Buryat, Chukchi, English, Erzya-Mordva, Estonian, Evenki, Finnish, Fore, French, Georgian, German, West Greenlandic, Hungarian, Jacaltec, Latin, Lithuanian, Mansi, Nivkh (V_{Ger}, Imp), Palauan, Bolivian Quechua, Russian (Pres), Sumerian, Svan, Coast Tsimshian, Turkish, Ute
+ - +	Archi, Modern Aramaic, Avar, French (V_{Prtcpl}, controller: dObj), Russian (Pret)
- + +	Arabic (V+Sbj)
+ - -	Hopi, Mansi (controller: dObj), Nivkh, Samoan
- + -	Buginese
- - +	Burushaski (controller: dObj)
- - -	Dyirbal, Mongolian

Induced generalisations:

5. If verbs agree in Number, they are very likely also to agree in Person.
6. If verbs agree in Person, they are even likelier also to agree in Number.
7. If verbs agree in Gender, they are very likely also to agree in Number.
8. If verbs agree in Person, they are likelier not to agree than to agree in Gender.
9. If verbs agree in Gender, they are likelier to agree than not to agree in Person.

Use this space for further comments, questions, constructive criticism if you have been able to replenish supply since page 2

Number	Gender	Case	Definiteness	Person	number of languages	percent
+	-	-	-	-	5	11.1%
-	+	-	-	-	2	4.4%
-	-	+	-	-	2	4.4%
-	-	-	+	-	0	
-	-	-	-	+	1	2.2%
+	+	-	-	-	10	22.2%
+	-	+	-	-	6	13.3%
+	-	-	+	-	0	
+	-	-	-	+	9	20.0%
-	+	+	-	-	1	2.2%
-	+	-	+	-	0	
-	+	-	-	+	0	
-	-	+	+	-	0	
-	-	+	-	+	0	
-	-	-	+	+	0	
+	+	+	-	-	5	11.1%
+	+	-	+	-	1	2.2%
+	+	-	-	+	1	2.2%
all other combinations of three pluses					0	
+	+	+	+	-	2	4.4%
all other combinations of four pluses					0	
+	+	+	+	+	0	

Table 4. Categories in NP-internal Agreement

Distribution of languages in sample (n=45, with some languages appearing in more than one class):

+ - - - -	Burushaski, Buryat, English, Samoan, Coast Tsimshian
- + - - -	Jacaltec, Tabasaran
- - + - -	Dyirbal, Svan
- - - + -	Ø
- - - - +	Buginese
+ + - - -	Arabic, Modern Aramaic, Burushaski, French, Hausa, Ho, Palauan, Swahili, Ute, Yimas
+ - + - -	Estonian, Finnish, Georgian, West Greenlandic, Hopi, Ute
+ - - + -	Ø
+ - - - +	Evenki, West Greenlandic, Hopi, Hungarian, Jacaltec, Mansi, Palauan, Bolivian Quechua, Turkish
+ + + - -	German, Kannada, Latin, Lithuanian, Russian
+ + - + -	Israeli Hebrew
+ + - - +	Ket
+ + + + -	Arabic, Beja

Induced generalisations:

10. If NP-internal constituents agree in only a single category, this will not be Definiteness; it will most likely be Number.
11. If NP-internal constituents agree in two categories, these will most likely be Number and Gender or Number and Person, depending on whether the targets are modifiers/determiners (and the controllers head nouns) or head nouns (and the controllers attributive nouns). The second-most likely combination of two categories with modifier/determiner targets is that of Number and Case; and the only other permissible combination of two categories is that of Gender and Case.
12. If NP-internal constituents agree in more than two categories, the maximum being four, these will always include Number and Gender and very likely also Case.

In the Donostia dungeon Anna Siewierska and Dik Bakker also put forward a (Euro-)hierarchy of agreement categories, as derived from five (Euro-)implications between individual categories, relativised to particular (identical or distinct) agreement targets:

Number > Gender > Case

a. If demonstrative agrees in Gender, then (without exception) demonstrative agrees in Number.
b. If demonstrative agrees in Case, then (with one exception: Northern Saami) demonstrative agrees in Number.
c. If article agrees in Gender, then (without exception) article agrees in Number.
d. If predicative adjective agrees in Gender, then (without exception) attributive adjective agrees in Number.
e. If predicative adjective agrees in Gender, then (without exception) demonstrative agrees in Number.

When my implications Nos. 10-12 are being combined, they might be interpreted as being consistent with the (less comprehensive) Siewierska-Bakker hierarchy. But it is only on a preferential basis that number here outranks gender, and gender in turn case: there are languages in my database, including some European ones, where NP-internal targets agree in case but not gender (Dyirbal, Svan, Estonian, Finnish, Georgian, West Greenlandic, Hopi, Ute), in case but not number (Dyirbal, Svan—thus teaming up with Siewierska and Bakker's Northern Saami), and in gender but not number (Jacaltec, Tabasaran). In fact, in most of these instances the agreement targets that select categories not adjacent on the Siewierska-Bakker hierarchy are attributive adjectives, which strictly speaking does the relevant Siewierska-Bakker implications (a-c) no harm, then, because these specifically refer to demonstratives and articles. It is only in West Greenlandic and Hopi that demonstratives select non-adjacent agreement categories, viz. number and case; but this is a combination that is permitted rather than prohibited by Siewierska-Bakker (implication b). What Siewierska and Bakker would have had to claim to get all three categories of their hierarchy linearly ordered relative to each other, rather than only two pairs (Number > Case, Number > Gender), is that if demonstrative agrees in case, it will also agree in gender. This is the implication that West Greenlandic and Hopi offend against.

Clause	NP	number of languages	percent
+	+	33	82.5%
+	-	4	10.0%
-	+	2	5.0%
-	-	1	2.5%

Table 5. Number as an Agreement Category in Two Domains
(for languages with agreement within both clauses and NPs)

Distribution of languages within sample (n=40, with some languages appearing in more than one class):

+ + Arabic, Modern Aramaic, Beja, Burushaski, Buryat, English, Estonian, Evenki, Finnish, French, Georgian, German, West Greenlandic, Hausa, Israeli Hebrew, Ho, Hopi, Hungarian, Jacaltec, Kannada, Ket, Latin, Lithuanian, Mansi, Palauan, Bolivian Quechua, Russian, Samoan, Swahili, Coast Tsimshian, Turkish, Ute, Yimas

+ - Avar, Jacaltec, Svan, Tabasaran

- + Arabic, Burushaski

- - Buginese

Induced generalisations:

13. For languages which have agreement both within clauses and within NPs, if NP-constituents agree in Number, clause-constituents will almost certainly also agree in Number.
14. For languages which have agreement both within clauses and within NPs, if clause-constituents agree in Number, NP-constituents are very likely also to agree in Number.

There are surely more laws than these fourteen that one might want to induce concerning what may or may not agree with what in what; but these are discoveries that must be left for other occasions. If they make the deadline of 30 November 1994, they will be duly recorded in *EUROTYP Working Paper* VII/26. Come to think of it, quite a few such discoveries have already been made by Edith, Grev, and other companions in the Donostia dungeon, in *The Bank*'s Monboddo Backroom, at *Jimmy's* of Valletta, and other such convivial venues.