Multifunctionality in Icelandic morphology: Inflectional endings as diacritics

Morphophonemics: stems, suffixes and ablauts
The morphophonemic structure of Icelandic words distinguishes between stems and endings. Thus nominal forms like hest-ur ‘horse-NOM’, hest-a ‘horse-ACC.PL’, hest-um ‘horse-DAT.PL’ show the stem hest- with the suffixes –ur, –a and –um. Importantly, the same structure of stems and endings is used in verbal conjugation: drep-ur ‘kills’ – drep-a ‘they kill’ - drep-um ‘we kill’ etc. The permitted inflectional affixes form a phonologically delimited set, and the forms that appear in the linguistic signal are subject to systematic morphophonemic restrictions. Possible vowels are: /a/, /æ/, /a:/; possible consonants: /l/, /n/, /ml/, /sl/, /fl, /l/. The endings are maximally disyllabic but sometimes segmentable by “fission” (cf. below). The morphophonemic restrictions are part of the language specific word phonological system (the “inventory”, cf. McCarthy 2002:70). In some instances ablaut and umlaut forms will be learned as word forms satisfying morphological conditions otherwise satisfied by endings, and there is room for morphophonemic or phonotactic regualrities, e.g. stating that certain endings call for u-umlaut: land - lönd-um ‘land-DAT.PL’ (*land-um); fara ‘go’ för-um ‘we go’ (*far-um). In some cases ablaut or umlaut are the only surface signal to which morphological distinctions can refer, cf. e.g. plural land – lönd.

Sample monosyllabic affixes
\[ -a/ \] <N,GEN,PL> dag-a ‘days-GEN’; systr-a ‘sisters-GEN’, góð-a ‘good-ACC.FEM’;
\[ -a/ \] <N,FEM,NOM,SG> stúlk-a ‘a girl’; <V,PRES,3PL> far-a ‘go’, kalla ‘(they) call’;
\[ -a/ \] <V,INF> far-a ‘to go’ tal-a ‘to speak’
\[ -a/ \] <N,FEM,GEN,PL> kirk-na ‘churches-GEN’, sagn-a ‘stories-GEN’;
\[ -a/ \] <A,GEN,PL> góð-ra ‘good-GEN.PL’
\[ -a/ \] <N,GEN,PL> hest-ar ‘horses’; <N,FEM,SG> vin-ar ‘friends’;
\[ -a/ \] <V,2.I.P.SG, PRES> tal-ar ‘speak(s)’
\[ -u/ \] <N,NOM,MASC> han-i ‘cock’; <A,NOM,SG,DEF> góð-i ‘good-DEF’;
\[ -u/ \] <V,1.SG,PRES> deim-i ‘I judge’, <V,1.PL.SG, PRES,SBJ> tak-i ‘take-SBJ’
\[ -u/ \] <V,PARTICIPLE> : kom-in ‘(have) come’;
\[ -u/ \] <N,MASC,ACC,DEF> hest-inn ‘the horse-ACC’
\[ -ur/ \] <N,A,NOM,PL> gest-ir ‘guests’, góð-ir ‘good-NOM.PL’; <V,2.SG,PRES>
dem-ir ‘judges’; <V,2.SG,PRES,SBJ> tak-ir ‘you take-SBJ’; <V,2.SG,PRES>
kalla-ðir ‘called’
\[ -v/ \] <N,NEUT,PL,GEN> hjört-u ‘hears-PL’; <N,FEM,SG,-NOM> stúlk-u ‘girl-OBLIQUE’;
\[ -v/ \] <A,NEUT,SG,-NOM> góð-u ‘good-NEUT,OBLIQUE’; <V,3.PL,PAST>
fóra ‘they went’
fór-um ‘we went’, kölluð-um ‘we called’
\[ -sl/ \] <N,GEN,SG,MASC/NEUT> hest-s ‘horse’
\[ -t/ \] <A,NEUT,SG> gul-t ‘yellow-NEUT’, vista ‘certain-NEUT’;
\[ -t/ \] <V,PARTICIPLE> fær-t
‘moved’
\[ -ið/ \] <N,NOM,NEUT,DEF> barn-ið ‘the child’; <V,PARTICIPLE> far-ið ‘gone-

NEUT’
\[ -að/ \] <V,PARTICIPLE> kall-að ‘called-NEUT’

Sample polysyllabic (and segmentable) affixes
\[ -ur/ \] <N,NOM,SG,MASC> hest-ur-inn ‘the horse’
\[ -ar/ \] <N,FEM,ACC,DEF> bók-in-a ‘the book’
/að-ir/ <V,PAST,2.SG> kall-að-ir ‘you called’

Sample ablaut patterns

i-umlaut: /a/ → /eð/: tak ‘to take’ – tekur ‘takes’, /œ/ → /l/: köttur ‘cat’ – kettir ‘cats’


Morphological markers and disambiguation

Rögnvaldsson (1990) assumes 55 noun declensions, whereas Müller (2005) reduces the number by allowing syncretism within certain “domains”, but leaving out verbal conjugation. A generalisation is obviously missed which is that a limited set of forms and ablaut relations are used across word classes as exponents of morphological features or morphomes (cf. Aronoff 1994: 22-29), represented above in angled brackets: < ... >.

The paper suggests that the suffixes and vowel relations are diacritics added to stems, forming linguistic signals of the type word. This means that the morphological exponence depends on the context, and the diacritics do not as such have meaning. The meaning of the signal is derived from the text. The disambiguation follows the same principles as any sort of resolution of polysemy, i.e. by reading the context. Thus /-ir/ in the context of a noun stem: gest-ir ‘guests’ is interpreted as <NOM.PL>, and in the context of a verb stem: dæm-ir ‘judges’, as <2.SG>, much in the same way as the form á in the context á hest is interpreted as a preposition governing the accusative case: ‘onto a horse-ACC’ (movement), or as part of a verb phrase ‘owns a horse’, but in á hest ‘on a horse-DAT’, the meaning is stative. In certain cases the interpretation and disambiguation may be segmented (by “fission”, see Müller 2005:247 and references), e.g. between <PAST> and <2.SG> in þú kall-að-ir ‘you called’. Here the past tense stem kall-að (root+affix) takes the ending /-ir/, but the same form occurs in the inflected participle kall-að-ir ‘called-PL.MASC’ (Peir eru kallaðir ‘They are called’).

This approach, viewing morphological exponence in inflection in terms of diacritic markers of word forms, seems to fit well into the general framework of usage based grammar, according to which “constructions are the basic units of morposyntax”, and grammar is “emergent from experience, ever coming into being rather than static, categorical and fixed” (Bybee 2006:714). This also harmonises to some extent at least with approaches recognising inflectional paradigms (e.g. Wunderlich 1996), and models using concatenation, with endings inserted into syntactically generated trees (e.g. Halle & Marantz 1993, Bye & Svenonous 2012) or by rules which add endings to stems, should consider ways of representing facts like the ones summarised above in a transparent manner.

References: