# The Greek Adverbs in -δην -δον -δα

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The famous Greek adverbs in  $-\delta\eta v$ ,  $-\delta ov$ , and  $-\delta\alpha$  are well attested in all periods of the language, and are made either to nominal stems in which case they denote manner or distribution or more commonly to verbal roots where they function somewhat like absolutives and refer to a verbal activity that is subordinate to or concomitant with the action of the main verb.<sup>1</sup> The type has received numerous discussions in the last hundred or so years, and while many correct things have been said about its history and development, there is still no fully convincing account of its origins.<sup>2</sup> The purpose of this short contribution is to solve the question of the type's origins once and for all.

# Distributional and Derivational Facts

All three adverbial types have the same basic functions, although they differ slightly in their distributional and derivational relationships.<sup>3</sup>

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<sup>&</sup>lt;sup>1</sup> For a good survey of the usage of the type, see Haas 1956: 130ff.

<sup>&</sup>lt;sup>2</sup> For a convenient survey of proposed explanations, see Schwyzer 1938: 626f.

<sup>&</sup>lt;sup>3</sup> Here and below only material from early Greek epic has been included. Although these formations remain productive in later Greek, their derivational behavior does not differ significantly from what is found in epic. For a collection of later material, see Frohwein 1868: 109ff.

1.) -δην has two subtypes:<sup>4</sup>

<ul> <li>Α. ἀμβλήδην X476 'with sudden bursts'</li> </ul>	λίγδην χ278 'grazing'
$\pi$ αραβλήδην Δ6 + 'with a side meaning'	κλήδην I11 'by name'
ύποβλήδην A292 + 'thrown in by the way'	όνομακλήδην δ278 'id.'
βάδην N516 + 'step by step'	έξονομακλήδην Χ415 δ278 μ250 + 'id.'
προβάδην Hes.Op.729 + 'as one walks'	κρύβδην λ455 π153 + 'secretly'
διαρρήδην <i>hMerc</i> .313 + 'expressly'	μίγδην <i>hMerc</i> .494 + 'promiscuously'
ἐμπλήγδην Υ132 'rashly'	συναΐγδην Hes.Sc.189 'pressing together'
ἐπιγράβδην Φ166 'grazing' ἐπιλίγδην Ρ599 + 'grazing'	τμήδην H262 'with cutting'
<ul> <li>Β. ἀμβολάδην Φ364 +</li> <li>'bubbling up'</li> </ul>	ἐπιτροχάδην Γ213 σ26 'glibly'
ἐπιστολάδην Hes.Sc.287 'girt up'	μεταδρομάδην E80 + 'running after'
ἐπιστροφάδην K483 Φ20 hMerc.210 + 'turning this way and that'	προτροπάδην Π304 + 'turned fowards'

The first subtype is made directly to the zero grade of the verbal root and agrees in vocalism and basic stem shape with what is found in the matching to-participle and  $\sigma_1/\tau_1$ -noun, cf., e.g.,  $\tau_{\mu\eta}\delta\eta_{\nu}$  'with cutting, so as to cut':  $\tau_{\mu\eta}\tau_{0}\delta_{0}S$ . + 'cut,'  $\tau_{\mu}\eta\sigma_{0}\varsigma_{0}Pl$ . + 'cutting.' The close synchronic relationship between these adverbs and their corresponding verbs is made clear by the forms ovo $\mu\alpha\kappa\lambda\eta\delta\eta\nu$  and ėξονο $\mu\alpha\kappa\lambda\eta\delta\eta\nu$  which are made directly to the verbal phrase (ėξ) ὄνο $\mu\alpha\kappa\lambda$ είν τινα Hom. +.

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<sup>&</sup>lt;sup>4</sup> All instances in early epic are noted below, with '+' indicating that the formation is also attested in later material. Definitions are given after LSJ, modified where necessary with reference to the LdfgE.

The second type closely resembles Greek verbal nouns and adjectives in - $\alpha\delta$ - like  $\delta/\dot{\eta}$  vou $\alpha\zeta$ , - $\alpha\delta\circ\zeta$  Pi.Hdt. + 'one who roams for pasture' by showing o-grade vocalism in the root and inserting the element - $\dot{\alpha}$ - before the suffix, and in many cases co-occur with such formations, cf.  $\dot{\alpha}\mu\beta\circ\lambda\dot{\alpha}\delta\etav$ :  $\dot{\alpha}\mu\beta\circ\lambda\dot{\alpha}\zeta$  X. 'thrown up,'  $\dot{\epsilon}\pi\iota\sigma\tau\circ\lambda\dot{\alpha}\delta\etav$ :  $\sigma\tau\circ\lambda\dot{\alpha}\zeta$  E.*Hel*.1480 (v.l.) + 'moving in close array,'  $\dot{\epsilon}\pi\iota\sigma\tau
ho\phi\alpha\delta\etav$ :  $\sigma\tau
ho\phi\alpha\zeta$  S. + 'turning around, revolving,'  $\mu\epsilon\tau\alpha\delta
ho\mu\dot{\alpha}\delta\etav$ :  $\delta
ho\mu\dot{\alpha}\zeta$  S. + 'turning.'<sup>5</sup> The bridge between the two types is found in ( $\pi
ho$ ) $\beta\dot{\alpha}\delta\eta\nu$  which is formally ambiguous between a straight deverbal formation made to the stem of the to-participle and  $\sigma\iota$ -noun and one which correlates with the  $\dot{\alpha}\delta$ -stem found in  $\dot{\epsilon}\mu\beta\dot{\alpha}\zeta$ , - $\dot{\alpha}\delta\circ\zeta$  Hdt. + 'felt-shoe, slipper,' etc.

2.) -oov is divided between deverbative and denominative formations, with further subdivisions:

A. Deverbative Formations

ἀμφαδόν Η243 Ι370 α296 ξ330 + 'openly'	ἐγκλιδόν <i>hHom</i> .23.3 + 'leaning, bent down'
ἀνασταδόν 1671 Ψ469 'standing up'	παρακλιδόν δ348 hVen.182 + 'swerving'
ἀποσταδόν O556 'from afar'	έλκηδόν Hes.Sc.302 'by dragging'
έπισταδόν μ392 v54 + 'successively'	ἐμβαδόν 0505 + 'by land'
παρασταδόν O22 κ173 + 'standing beside'	έμπελαδόν Hes.Op.734 'near'
περισταδόν N551 + 'standing around'	ρυδόν 0426 'abundantly'
άναφανδόν Π178 + 'openly'	σχεδόν E458 freq. 'near'

<sup>&</sup>lt;sup>5</sup> Note that many of these formations can also be interpreted as denominative to α-stem nouns, cf. ἀμβολάδην: ἀμβολή Pi. + 'striking up; throwing up,' ἐπιστροφάδην: ἐπιστροφή A. + 'turning about; moving up and down,' μεταδρομάδην: μεταδρομή E. + 'pursuit, chase.'

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ἐξαναφανδόν Y48 'id.' διακριδόν M103 + 'eminently'	αὐτοσχεδόν H273 N496 O708 Π319 'id.' ἐπισχεδόν hAp.3 + 'near at hand'
B. Denominative Formations	
[ἀμοιβηδόν Σ506 + 'alternately': ἀμοιβή] <sup>6</sup> ἀγεληδόν Π160 + 'in herds': ἀγέλη βοτρυδόν B89 + 'in clusters': βότρυς κλαγγηδόν B463 'with a din': κλαγγή ὑμιληδόν Hes.Sc.170 'in troops': ὅμιλος πυργηδόν M43 N152 O618 + 'in masses': πύργος σφαιρηδόν N204 + 'like a sphere': σφαῖρα φαλαγγηδόν O360 + 'in phalanxes': φάλαγξ	<ul> <li>ἰλαδόν B93 + 'in troops': ἴλη</li> <li>ὁμιλαδόν M3 O277 + 'in groups': ὅμιλος</li> <li>καταφυλαδόν B668 + 'in tribes': φυλή</li> <li>κατωμαδόν O352 Ψ500 + 'on the shoulders'</li> <li>πανθυμαδόν σ33 'very angrily': θυμός</li> </ul>

The deverbative formations line up closely with what is found among the stems in  $-\delta\eta\nu$ . Most are made to the zero grade of the verbal root, and have the same stem shape that is found in the to-participle and  $\sigma_1/\tau_1$ -noun. This is also the case with  $\dot{\epsilon}\lambda\kappa\eta\delta\delta\nu$ (Hes.Sc.302) and  $\sigma\chi\epsilon\delta\delta\nu$ . The former is derived from  $\dot{\epsilon}\lambda\kappa\epsilon\omega$ Hom. + 'drag about, tear asunder' and is based on the outerpresent stem  $\dot{\epsilon}\lambda\kappa\eta$ - (aor.  $\eta\lambda\kappa\eta\sigma\alpha$ , participle  $*\dot{\epsilon}\lambda\kappa\eta\tau\delta\varsigma$ ), while  $\sigma\chi\epsilon\delta\delta\nu$  pairs with  $\check{\epsilon}\chi\omega$  Hom. + 'have, hold' and has been made to the alternative stem  $\sigma\chi\epsilon$ - that appears in the aorist  $\check{\epsilon}\sigma\chi\epsilon\sigma\delta\nu$ Hom. + 'hold; hold back,' the apparent to-participle  $\kappa\alpha\tau\alpha\sigma\chi\epsilon\tau\circ\varsigma$ S. + 'held back,' and the  $\sigma_1$ -nouns  $\dot{\epsilon}\pi$ ( $\sigma\chi\epsilon\sigma\iota\varsigma$  Hom. + 'delay,'

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<sup>&</sup>lt;sup>6</sup> ἀμοιβηδόν 'alternately' appears at  $\Sigma$  506 as a varia lectio (Aristarchus, Z) for the ἀμοιβηδίς of the manuscript tradition (cf.  $\sigma$  310, hCer.326).

ὑπόσχεσις Hom. + 'undertaking,' etc.<sup>7</sup> The hapax ἐμπελαδόν (Hes. Op. 734) is presumably derived by way of the s-aorist, whose stem was identical for all non-ablauting verbs with that of the τo-participle and σι/τι-noun, viz. ἤλκησα: ἑλκηδόν :: ἐνεπέλασα :  $x, x \Rightarrow ἐμπελαδόν$ .

The denominative formations fall into two classes depending on the form of the suffix that is used. As a general matter these formations are rare and constitute a semantically coherent group, something that has clearly played a role in their development. The first denominative type is made by adding the suffix  $-\eta\delta\delta\nu$ or simply  $-\delta\delta\nu$  directly to the nominal stem. This type has arisen as a secondary offshoot of the deverbative formations,<sup>8</sup> and has its origins in forms like  $\delta\mu\lambda\eta\delta\delta\nu$  which, although originally deverbative – cf.  $\delta\mu\lambda\delta\omega$  Hom. + 'consort with; throng' –, were also interpretable as denominative<sup>9</sup> – viz.  $\delta\mu\lambda\delta\omega \rightarrow \delta\mu\lambda\rho\varsigma$ ,

<sup>8</sup> See Schwyzer 1938: 626. This follows directly from the general rarity and semantic coherence of the type over against the deverbative formations and further from the difficulty that seeing it as the source of the deverbative formations would entail. Needless to say, it is preferable to explain the denominatives as an offshoot of the deverbative type rather than to assume they have a separate unrelated origin.

<sup>9</sup> As Meier-Brügger 1991: 171-2 has convincingly argued, indirect evidence for an additional Homeric or pre-Homeric adverb ὑπηδόν 'gefolgs-weise, im Gefolge' survives in Homeric ὑπηδός 'attendant, companion.' This has been made either as a denominative formation to the word \*ὑπά 'attendance, companionship' (*vel sim.*) that is the source of ὀπάων 'attendant, companion' or, perhaps more likely, as a deverbative formation to a denominative verb \*ὀπά 'follow, attend' that has otherwise disappeared.

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<sup>&</sup>lt;sup>7</sup> This stem has ultimately been extracted out of the inherited potential or necessitative formation that appears in Hom. + ἄσχετος/ἀάσχετος 'not to be checked,' ἀνσχετός/ἀνασχετός 'bearable,' etc. which on the basis of regular το-participles with potential or necessitative meaning like ἄρρητος 'unsaid' and 'unspeakable' was reanalyzed as a regular το-participle ἄ-σχε-τος to a basic stem σχε-. On these potential/necessitative forms and their Indo-European background, see Vine 1998: 29ff.

formation to spread as a convenient denominative adverbializer - viz. ὄμιλος: ὑμιληδόν:: ἀγέλη: x,  $x \Rightarrow$  ἀγεληδόν, etc. The second denominative type is made with the suffix -αδόν. This rare type got its start with iladóv or builadóv, where it was generated analogically after the seemingly denominative pattern found in pairs like ἀμοιβή 'exchange': ἀμοιβαδόν Parm.1.19 + 'alternately' – viz. ἀμοιβή: ἀμοιβαδόν:: ἴλη, ὅμιλος:  $x, x \Rightarrow$ ίλαδόν, ὑμιλαδόν. From here it spread to the semantically similar compound formation καταφυλαδόν and, once interpreted as a convenient mechanism for adverbializing phrases, further to  $\kappa \alpha \tau \omega \mu \alpha \delta \delta v$  and  $\pi \alpha v \vartheta \upsilon \mu \alpha \delta \delta v$ . These last three forms are attested in epic only one or two times each and always before the bucolic diaeresis, a well-known spot for irregular and meter-made morphology. They obviously have their origins in the Homeric Kunstsprache.

3.) - $\delta\alpha$  also divides into deverbative and denominative formations:

A. Deverbative

### B. Denominative

ἀμφαδά τ391 'visibly'
ἀναφανδά γ221 λ455 'id.'
ἀποσταδά ζ143 'standing apart'
αὐτοσχεδά Π319 'near at hand'
κρύβδα Σ168 + 'without the knowledge of'
μίγδα Θ437 ω77 hCer.426
'promiscuously' καναχηδά Hes. Th. 367 'with a noise': καναχή, καναχέω

This is the rarest of the three types, both within epic and in the later language. It agrees closely in derivational and distributional behavior with the adverbs in  $-\delta \delta v$ , and is most simply

<sup>&</sup>lt;sup>10</sup> Note that ' $\rightarrow$ ' is used to indicate derivational relationships, while ' $\Rightarrow$ ' denotes analogical relationships.

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interpreted as a pluralization of it of the sort that is familiar from adverbial pairs like μακρόν 'at great length' : μακρά 'id.' or πρῶτον 'first(ly)' : πρῶτα, etc. The recessive accentuation found in μίγδα, κρύβδα and later formations like κύβδα Archil.32 'with the head forwards' or φύγδα A.Eu.256 (lyr.) 'in flight,' which have obviously been modeled on these, is most easily explained as analogical to the accentuation of μίγα/μίγδην and κρύβδην.<sup>11</sup>

# Derivational History

These three adverbial formations have exactly the same functions, are – with minor variations – formed in exactly the same way, and are even made to many of the same stems, cf., e.g.,  $\dot{\alpha}\mu\phi\dot{\alpha}\delta\eta\nu$  Archil. +:  $\dot{\alpha}\mu\phi\alpha\delta\dot{\alpha}$  Hom. +:  $\dot{\alpha}\mu\phi\alpha\delta\dot{\alpha}$  Hom. +,  $(\pi\rho\sigma)\beta\dot{\alpha}\delta\eta\nu$  Hom. +:  $\dot{\epsilon}\mu\beta\alpha\delta\dot{\alpha}\nu$  Hom. +, etc.<sup>12</sup> This close agreement suggests that they share a common origin and should be given a unitary morphological explanation.<sup>13</sup> The simplest

<sup>&</sup>lt;sup>11</sup> For reasons of economy it is preferable to argue – so long as it can be done without unreasonable assumptions – that the adverbs in  $-\delta\alpha$  are simply variants of those in  $-\delta\alpha$  rather than to assume two different types of  $-\delta\alpha$ adverbs or to trace the whole type to a third, independent formation.

<sup>&</sup>lt;sup>12</sup> Note further that the distribution of the types in epic is largely governed by metrical considerations:  $-\delta\eta\nu$  is used after heavy and in the shape  $-\alpha\delta\eta\nu$ after light syllables, while  $-\delta\sigma\nu/\delta\alpha$  is regular after light – at least among deverbative formations.

<sup>&</sup>lt;sup>13</sup> Most other approaches found in the literature have sought to explain these adverbs as the result of a confluence of two or three different formations. Brugmann 1913: 294 suggested that the three types are accusatives of verbal nouns in  $-\delta$ -,  $-\delta\eta$ - and  $-\delta\sigma$ -. However, as Haas 1956: 131-132 convincingly showed, there are no such verbal noun types attested in Greek that can reasonably be taken as having provided the source of these adverbs. Following Brugmann, Schwyzer 1938: 626f. explained  $-\delta\alpha$  and  $-\delta\eta\nu$  as desubstantival, but suggested, elaborating on Fraenkel 1911: 225, that  $-\delta\sigma\nu$  is an

way to do this is to assume that the three subtypes are adverbializations of a single thematic adjective formation –  $-\delta\eta\nu$ being the feminine acc. sg.,  $-\delta\sigma\nu$  and  $-\delta\alpha$  the neuter acc. sg. and pl., respectively<sup>14</sup> – of the sort that is perhaps still found in  $\dot{\alpha}\mu\varphi\alpha\delta\dot{\alpha}\zeta$ ,  $-\dot{\eta}$ ,  $-\dot{\alpha}\nu$  Hom. + 'visible; public.'<sup>15</sup> This thematic adjective formation can be explained as the result of a prehistoric "adjectivization" of verbal nouns in  $-\dot{\alpha}\delta$ - by means of the thematic vowel, viz.  $\pi\alpha\rho\alpha\sigma\tau\dot{\alpha}\zeta$ ,  $-\dot{\alpha}\delta\circ\zeta$  'that which stands beside' (> Cratin.+ 'doorposts; space between doorposts')  $\rightarrow$ \* $\pi\alpha\rho\alpha\sigma\tau\alpha\delta\dot{\alpha}\zeta$  'standing beside'<sup>16</sup> or  $\dot{\epsilon}\mu\beta\dot{\alpha}\zeta$ ,  $-\dot{\alpha}\delta\circ\zeta$  \*'that which treads' (> 'felt-shoe')  $\rightarrow$  (\*) $\dot{\epsilon}\mu\beta\alpha\delta\dot{\alpha}\zeta$  'treading'<sup>17</sup> like  $\mu\alpha\kappa\epsilon\delta\dot{\omega}\nu$ \*'the tall one' (> 'Macedonian')  $\rightarrow \mu\alpha\kappa\epsilon\delta\nu\dot{\alpha}\zeta$  Hom.+ 'tall' (Hdt.

<sup>14</sup> Cf. e.g. μακρός, -ή, -όν 'long' → fem. μακρήν 'at great length,' neut. sg. μακρόν 'id.' and pl. μακρά 'id. The recessive accent of the adverbs in -δην will under this account have its origins either in contrastive adverbial accent of the type that is found in λάθρηι Hom.+ 'secretly, by stealth' ( $\leftarrow$ \*λαθρός, -ή, -όν 'secret') or in the adverbial use of the substantivized feminine adjective, cf. e.g. κακός, -ή, -όν 'evil, bad' → ἡ κάκη A. + 'baseness, wickedness.'

<sup>15</sup> See Buck-Petersen 1948: 436. These adjectives appear to have been replaced by ιo-adjectives derived from the adverbs, cf. ἀμφάδιος 'visible; public' ( $\rightarrow$  adv. ἀμφαδίην Hom. + 'publicly'), σχέδιος Hom. + 'near' ( $\rightarrow$  adv. σχεδίην Hom. + 'near by'), etc.

<sup>16</sup> Prefixed verbal nouns in -στάδ- have been common in Greek. For a survey of all attested forms, see Fraenkel 1909: 241ff.

<sup>17</sup> This adjective likely survives in substantivized form in τὸ ἐμβαδόν Plb. + 'surface.'

adverbialization in -ov from  $\delta$ -stem verbal nouns and adjectives; Haas 1956: 131ff. similarly explained the type in - $\delta ov$  as an adverbialization of  $\delta$ -stems, but attempted to identify the suffixes - $\delta \alpha$  and - $\delta \eta v$  with the Indic absolutive in - $y\dot{a}$ . Both approaches are unsupportable: there is no evidence for a self-standing adverbializing suffix -ov in Greek (or the other Indo-European languages), and the attempt to link these adverbs with the Indic absolutive is morphologically and phonologically impossible. Dunkel 1987: 30 has recently suggested that - $\delta ov$  was extracted from the adverb  $\dot{e}v\delta ov$  'inside' < PIE \**en dom (sic)* 'in the house.' How the type would have developed from this starting point is unclear to me.

'Macedonian').<sup>18</sup> The adverbs derived from these adjectives will have been ambiguous between denominative and deverbative formations, and the further development of the type can be traced to this ambiguity: the denominative relationship between stems like \* $\pi po\beta \dot{\alpha}\zeta$ , - $\dot{\alpha}\delta o\zeta$  and  $\pi po\beta \dot{\alpha}\delta \eta v$  or  $\pi \alpha p \alpha \sigma \tau \alpha \dot{\zeta}\zeta$ , - $\dot{\alpha}\delta o\zeta$ and  $\pi \alpha p \alpha \sigma \tau \alpha \dot{\delta} o\chi$  will have suggested the creation of adverbs to other  $\dot{\alpha}\delta$ -stems like  $\dot{\alpha}\mu\beta o\lambda\dot{\alpha}\delta\eta v$  to  $\dot{\alpha}\mu\beta o\lambda\dot{\alpha}\zeta$  or  $\dot{\alpha}\mu o\mu\beta\alpha \dot{\delta} \dot{\nu}$  to  $\dot{\alpha}\mu o\mu\beta \dot{\alpha}\zeta$  (Hom.+), while the clearly verbal meaning of these forms will also have suggested the derivation of these adverbs directly from the verbal root, viz.  $\dot{\epsilon}\mu\beta\alpha\dot{\omega}(v\omega)$  (via  $\dot{\epsilon}\mu\beta\alpha \tau \dot{\sigma}\zeta$ ,  $\ddot{\epsilon}\mu\beta\alpha\sigma \varsigma$ ):  $\dot{\epsilon}\mu\beta\alpha\dot{\delta}\dot{\nu}$  ::  $\dot{\epsilon}\gamma\kappa\lambda\iota\dot{\omega}$  (via  $\dot{\epsilon}\gamma\kappa\lambda\iota\sigma \varsigma$ ,  $\ddot{\epsilon}\gamma\kappa\lambda\iota\sigma \varsigma$ ):  $x, x \Rightarrow$  $\dot{\epsilon}\gamma\kappa\lambda\iota\delta\dot{\nu}$ , etc. The further sub-developments of these types will have proceeded as outlined above.

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<sup>&</sup>lt;sup>18</sup> For this form, see Solmsen 1909: 44f. For the type, note further Ved. *kanína-* 'young' < *kanyàn-* 'young woman.'

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