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## AN ETYMOLOGICAL DOOR TO SYNERGETIC STRUCTURES

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This contribution has two purposes: (I) To set forth the evidence for a hitherto unobserved Indo-European etymon, and (II) to present a new structural mode of analysis of interest for not only the study of linguistic change, but also e.g. mythopoeic and poetic processes. In keeping with this volume's dedication to Prof. Murray B. Emeneau (under whom I had the good fortune to first study Sanskrit) my emphasis here will be Indological.

I. As background, I must first present my non-Indological data. I propose a Proto-Indo-European  $\sqrt{\text{dhwer}}(\text{H})$  'to go apart bilaterally and form a gap' from the following evidence:

1. Anc. Greek:  $\sqrt{\text{sar}}$  'to go apart bilaterally and form a gap' appears in sésēra (stative perf.) 'to have the lips withdrawn so as to show the clenched teeth, to have the mouth agape; to gape (e.g. of wounds)'; sēranx 'cave'; sárma 'chasm'; and (with \*-on-/-n-) sárōn 'gaping (vulva)'; sarōnís 'hollow oak'; sarápous 'gap-footed' i.e. 'pigeon-toed'; sárabos 'vulva' (\*-g<sup>w</sup>(o)- suffixed to \*-r/n- stems, marking natural objects; cf. OInd. ásr-g, Lat. sanguis 'blood'; OInd. śr̥ṅga- 'horn'; Gr. ptērux 'wing' etc.; not \*-g-!)

This etymology results from my discovery, based on symmetry of phonological correspondences, that the regular Gr. reflex of PIE \*dhw- is s-, not th-. [See Note 1.]

2. Lithuanian: dverti 'to go apart, go asunder, to gape, develop holes' etc.

3. Hittite: duwarnai- 'to break' < \*to make go asunder'. Here -nai- goes back to \*-na- (factitive), as also tarnai- 'to let' and hurnai- 'to moisten'. These words conform to the transfer of -hi conj. thematic stems to -mi stems discussed in Watkins and Jasanoff.

4. Pan-IE: The etymon of door, \*dhwor- \*dhur- etc. need no longer be described as a "terme inanalysable par lui-même, qu'on ne peut pas rattacher a une racine verbale et dont la signification nous échappe" (Benveniste 1969 I:312), since this word may now be explained from our etymon  $\sqrt{\text{dhwer}}(\text{H})$ . The oldest forms refer to doors or gates with two leaves. Thus in Vedic a door or gate is designated by the dual, dvārā. Similarly in Homer 'door' is usually thúrai; Lat. fores is a great door with two leaves, and Gothic daurons is a two-leaved gate; here pl. forms have replaced the old du. The bivalvous door cut in half the weight on the hinges, allowing larger, more secure structures, and had the psychologically poignant appeal of symmetry, with all its important architectural possibilities. Named from

its special feature of bilateral opening, this door became the door par excellence. Thus the various late forms referring to a univalvous door are from \*dhwor- \*dhur-, often retaining the plural form (substituted for the still earlier dual; hence 'door' was not a PIE plurale tantum).

Three curious facts will be addressed later: The irregular d- for \*dh- in OInd. dvār- dur-; the Old Iranian (singular) form dvara- as against OInd. dvār- ā dual, and the circumstance that thurai in Homer always refers to the concrete apparatus of a bivalvous door (and not merely a passageway), except when it refers, as frequently, to the entrance of a cave.

The oldest kind of door consisted of a single plank covering an opening, eventually mounted on a pivot. This is shown by Skt. vāra- 'gateway, door' (lex.), Prasin (Kafir) wārek 'house', Oscan veru 'portam', Umbrian verofe 'in portam (and prob. here Pol. wierzeja < \*vereja- 'leaf of door'), OChSlav. vrata, OPruss. warto 'door, gate' etc., whose etymon is PIE √(H)wer 'to shut up, (en)close, obstructs, shield, protect', whence OInd. vṛṇóti '(en)closes, obstructs', vṛtrá- 'obstruction', Old Iranian wrōra- 'resistance, defense' > Ossetic wart 'shield'; Old Irish fern 'shield' etc. From this base one may reconstruct the IE term for 'to close, to shut', OInd. (ápi) vṛṇóti, Lat. operio (\*opi-wer-), cf. Lith. užvérti, as well as 'to open', OInd. ápa vṛṇóti, = Lat. aperio (\*apo 'away'), also OInd. ví vṛṇóti (ví 'apart'), Lith. atvérti. This accords with the priority of √(H)wer in the IE terms for 'door'.

II. I now come to the Indological part of this paper, which illustrates the approach I shall henceforth be advocating. This is a mode of analysis arising from phenomena I call synergetic structures. This approach treats change as a "vector resultant" of patternings of features simultaneously interacting in various parameters of form, meaning, cultural context, psychological factors, etc. These interactions take place through dynamics of associable similarity of features as well as dynamics of differentiation, which often result in simultaneous alignments and polarities in various levels of function. I believe that these synergetic phenomena reflect an aspect of the operations of the mind, which in this regard may be viewed as a multidimensional associative network with a complementary mechanism whereby distinctions are maintained.

Synergetic structures may often be conveniently schematized. I shall here present a few model schemata for synergetic interactions in the realm of language. I note in passing that synergetic schemata take account of (and help account for) a range of linguistic phenomena including what is commonly called analogy (paradigmatic leveling, etc.), contamination and blending, phonesthemes, popular etymology, malapropisms, slips of the tongue, puns, consonances (rhyme, alliteration, etc.) and varieties of word association, including those that remain unconscious and those that are manifested artistically (or humorously).

This is not the place to discuss the application of the approach e.g. to literary criticism and the study of folklore, or its relationship to currently more familiar theories and methods of "structuralism" and trends in psychology: these issues are beyond the scope of this paper. I will limit my illustration of synergetic structures to problems in Old Indic which are related to the material discussed in I.

Vedic  $\sqrt{\text{dhvar}}(\mu)$   $\text{dhv\acute{a}rati}$ ,  $\text{dh\ddot{u}rvati}$ ) 'deceive, injure' requires an etymology, especially since the Hitt. form with which it had earlier been grouped is a special development of 'go apart'. The fact that  $\sqrt{\text{dhvar}}(\mu)$  is phonologically suited by PIE  $\sqrt{\text{dhwer}}(\text{H})$  necessitates that the latter be considered as etymon. The semantic difference 'to go apart and form a gap': 'deceive, injure' needs of course to be reconciled. Rather than rush to an arbitrary, *ad hoc* judgment of how to relate these meanings, it is methodologically necessary to see what the station of  $\sqrt{\text{dhvar}}$  was in the Old Indic lexical network.

Phonologically  $\sqrt{\text{dhvar}}$  would be similar to two verbs. The first,  $\sqrt{\text{dhrav}}$  ( $\sqrt{\text{dhru}}$ ), is attested only in rare forms, all zero grade nominalizations: the abstract  $\text{dhr\acute{u}ti}$ - 'seduction, deception' and the root stems  $\text{dhrut-}$  and  $\text{-dhru-}$ , but as I showed in 1966, the corresponding verb is well attested in Iranian. Relevant forms include Avestan  $\text{dr\acute{a}uuaiia-}$  'to lead astray, wreak mayhem', ppp.  $\text{dr\acute{u}ta-}$ ;  $\text{draoman-}$  'deception, mayhem'; Parth.  $\text{dr\acute{a}w-}$  'to seduce, deceive'; Sogd.  $\text{\u0305r\delta\acute{e}w-}$  (sic;  $\text{\u0305a-}$  established by N. Sims-Williams) 'to seduce'; Khwarezmian  $\text{\u0305r\delta\acute{a}w}$  (sic) 'seductive demon leading its victims far away', and  $\text{ar\delta\acute{u}c}$  'remotum, \*seductum'. The antiquity of the form and the meaning is guaranteed by its connection with Lat.  $\text{fraus}$  furnishing the PIE base  $\sqrt{\text{dhrew}}$  whose extended form,  $\sqrt{\text{dhreugh}}$ , yielded OInd.  $\text{druh-}$ , Av.  $\text{drug-}$  'lie, deception,

demonic force, demoness'. The details are given in Schwartz (1966). From the Avestan (and Parthian) passages cited there is clear that  $\sqrt{\text{drav}}$  was particularly associated with  $\text{aēšma-}$  'Fury, Disorderly Behavior', and thereby with Disintegration ( $\text{vīdātu-}$ ) and indeed with  $\text{drug-}$ ; the notion of  $\sqrt{\text{drav}}$  is best defined as 'making things go wrong' e.g. the stopping of the ordained motion of the heavenly bodies and leading astray the mind of man.

The other verb which phonologically resembles  $\sqrt{\text{dhvar}}$  is  $\sqrt{\text{hvar}}$ ;  $\text{hvāratī}$  'is crooked, goes off course, vacillates',  $\text{hvāras-}$  'crookedness, perversity', for which I reconstruct  $*\text{ǵhuH-el-}$  'go off course' (cf. Lith.  $\text{žūti}$  'to perish', Latv.  $\text{zūst}$  'go lost'):  $*\text{ǵhuHl-}$  (OIr.  $\text{zūrah-}$  'perversity, evil'; OInd.  $\text{hūrchatī}$  'is crooked'; Lith.  $\text{atžūlas}$  'unmerciful, disinclined'),  $*\text{ǵhweHl-}$  (prob. Gr.  $\text{phēlos}$  'deceitful'). A close phonological association between  $\sqrt{\text{dhvar}}$  and  $\sqrt{\text{hvar}}$  would result from the fact that in OInd. dialects  $\text{dh}$  became  $\text{h}$ , even within the same paradigm, e.g.  $\sqrt{\text{dhā}}$  'to place', ppp. Vedic  $\text{dhitā-}$  (rare) >  $\text{hitā-}$  (usual).

Not only would  $\sqrt{\text{dhvar}}$  if it originally had the sense of PIE  $\sqrt{\text{dhwer}}$  'to go apart', be phonologically similar to both  $\sqrt{\text{dhvar}}$  and  $\sqrt{\text{hvar}}$ , it would also be semantically comparable to both, sharing with them a reference to motion away from a center or focus (point/line).

The mg. 'more apart bilaterally' would also make  $\sqrt{\text{dhvar}}$  =  $\sqrt{\text{dhwer}}$  opposed to the idea of joinedness and fitting together. As it happens, in Indo-European the concrete 'fitting (being joined)' furnished in the abstract realm the idea of fittingness i.e. suitability, propriety, excellence, the good. (The proof of this follows in accordance with the following axiom of historical semantics: in a language or language group a semantic association or shift not motivated by specific systematic pressures may be verified by the reoccurrence of that association or shift in a number of phonologically unrelated instances.)

Note these examples: (1) OInd.  $\text{āgadhita-}$  'clasped', MDutch  $\text{gaden}$  'to fit, to match', OChSlav.  $\text{ugoditi}$  'to suit',  $\text{godu}$  '(proper) time', Eng.  $\text{good}$ ; (2) Arm.  $\text{darbin}$ , Lat.  $\text{faber}$  ( $*\text{dhA/Ebh-ro-}$ ) 'joiner, craftsman', Goth.  $\text{gadōf}$  'fitting, proper',  $\text{gadōb}$  'is appropriate', OChSl.  $\text{doba}$  'suitability, occasion',  $\text{dobrī}$  'good',  $\text{dobli}$  'best, most seemly'; (3) Gr.  $\text{péssō}$  'fasten', Germ.  $\text{fügen}$  'to join together',  $\text{fangen}$  'to grasp', Goth.  $\text{fagrs}$  'fitting, fit', OEng.  $\text{fæger}$  'fair, excellent, suitable, beautiful' (4) Gr.  $\text{ārare}$  'joined, fitted together',  $\text{arthrós}$  'joint',  $\text{árti}$  'exactly', Lat.  $\text{ars}$  'craft',  $\text{artus}$  'joint', Gr.  $\text{hómēros}$  'companion', Hitt. n.  $\text{āra-}$  'companion' and c. 'that which is fitting, right suitable', Gr.  $\text{aréskei}$  'fits, is suitable',  $\text{areté}$  'excellence',  $\text{aréion}$  'better',  $\text{áriston}$  'best'.

In Indo-Iranian the latter group is represented by  $\sqrt{\text{ar}} / \text{r}$ : OInd. ṛnóti 'joins together, fits' trans./intrans.), ppp. ṛtá- 'joined'; ará- 'spoke of a wheel'; Av. arānte 'are joined', aipi-ərəta- 'fixed, regular', Av. aša-, -ərəta- 'Rightness, (Cosmic) Truth, righteousness', ara-, ra- 'proper(ly)', in accord', ratu (proper) time, Sogd. rtu- 'moment', OInd. (Ved.) ara-, arām 'proper(ly)', in accord', rtú- '(proper) time', rtá- 'The Right, order(ed), (Cosmic) Truth'; 'the state of things being in, or going to, their proper place'; 'the state of being solidly held together', 'the Law which is firmly established' (= rtá- 'joined').

Already in Proto-Indo-Iranian the  $\sqrt{\text{ta}}$ -concept was opposed by  $\sqrt{\text{d(h)rug}}$ - (> OInd., drúh-, Av. drug-) and  $\sqrt{\text{dhraw}}$ . In Vedic the association of  $\sqrt{\text{ta}}$ - with 'join' was kept alive by its having merged with the past passive participle.

(It must be noted that the older verbal noun  $\sqrt{\text{ta}}$ - is shown by Av. aša-;  $\sqrt{\text{ta}}$ - may therefore be a thematized root stem. Cf. Av. aš-, Pashto  $\sqrt{\text{r}}$ - 'very' <  $\sqrt{\text{rt}}$ - 'truly, verē' ? Further to Gr. árti (loc.) 'just, exactly', ártios 'fitting (the facts, etc.)', The latter suggests the mg. 'Truth' of  $\sqrt{\text{rtá}}$ -, unique among derivatives of bases meaning 'fit together, join' may be from 'closely corresponding'; this could interact synergetically in Indo-Iranian with 'fitting, proper' and produce 'Truth' (as a cosmic potency); for 'truth' as 'epistemologically correct' Indo-Iranian had satya- 'pertaining to the way something is', from sant- 'being'.)

As a value concept  $\sqrt{\text{rtá}}$ - stood against  $\sqrt{\text{dhraw}}$  ( $\sqrt{\text{dhru}}$ ) as expressing deception, making things go wrong, etc., and also against  $\sqrt{\text{hvar}}$ , which also expressed abstractions like crookedness, deviousness, deviation, instability, etc.

It must also be observed that ṛnóti also means 'more (trans./intrans.) to the right place', synergetically related on one hand to the idea of '(fitting) reward', cf. Gr. ánumai, Av. ərənaoiti, aši- etc. (and OInd. artha- 'goal'), perhaps reflecting a PIE form of  $\sqrt{\text{Aer}}$  'to fit', and on the other to the homophonous ṛnóti 'to move, to rise', etc. from PIE  $\sqrt{\text{Ee/or}}$ , so that both  $\sqrt{\text{dhru}}$  ( $\sqrt{\text{dhraw}}$ ) 'to lead astray' and  $\sqrt{\text{hvar}}$  'to go off course, bend sideways' would be opposed to this sense of  $\sqrt{\text{r}}$  in rtá-.

The dynamics of the synergetic interactions affecting  $\sqrt{\text{dhvar}}$  may now be schematized. First the words may be arranged so as to reflect their relationships:

$\sqrt{\text{dhvar}}(\text{H}) / \sqrt{\text{dhur}}$ *'go apart etc.'	$\sqrt{\text{dhraw}} / \sqrt{\text{dhru}}$ 'lead astray, make go wrong'
	$\sqrt{\text{hvar}} / \sqrt{\text{hūr}}$ 'be crooked, go off course, vacillate'.

Phonologically  $\sqrt{\text{dhvar}}(\text{H}) / \text{dhur}$  is similar to both  $\sqrt{\text{dhrav}} / \sqrt{\text{dhru}}$  and  $\sqrt{\text{hvar}} / \text{hur}$ , and is associatively attracted to both; since it is an intermediary or bridge between the latter two bases, its phonological "vector resultant" may be shown as follows:

$$\longrightarrow \begin{array}{l} \sqrt{\text{dhrav}} (/ \text{dhru}) \\ \sqrt{\text{dhvar}}(\text{H}) (/ \text{dhur}) \\ \sqrt{\text{hvar}} (/ \text{hur}) \end{array}$$

Semantically  $\sqrt{\text{dhvar}}(\text{H})$  stands to both  $\sqrt{\text{dhrav}}$  and  $\sqrt{\text{hvar}}$  in a complex manner. 'Go apart etc.' stands against both 'lead astray' etc. and 'go off course', etc., which latter meanings are very similar. But  $\sqrt{\text{dhvar}}(\text{H})$  shares with both  $\sqrt{\text{dhrav}}$  and  $\sqrt{\text{hvar}}$  the signification of diverse or divergent motion with reference to a point or line, and may therefore be associatively "attracted" to them. But while  $\sqrt{\text{dhvar}}(\text{H})$  signifies bilateral divergence, the divergence indicated by both  $\sqrt{\text{dhrav}}$  and  $\sqrt{\text{hvar}}$  is unilateral. However  $\sqrt{\text{dhvar}}(\text{H})$ , like both  $\sqrt{\text{dhrav}}$  and  $\sqrt{\text{hvar}}$ , is opposed to the  $\sqrt{\text{r}}$ ; in the case of  $\sqrt{\text{dhvar}}(\text{H})$  the opposition is to  $\sqrt{\text{r}}$  in the meaning of 'join together', whereas  $\sqrt{\text{dhrav}}$  and  $\sqrt{\text{hvar}}$  are opposed to  $\sqrt{\text{r}}$  as 'to move toward a goal'. Thus the semantic relationship, as concerns motion with reference to a point or line, would be as follows (  $\leftarrow$  A away;  $\rightarrow$  T toward):

	BILATERAL	UNILATERAL		VECTOR RESULTANT
$\leftarrow$ A	$\sqrt{\text{dhvar}}(\text{H})$	$\sqrt{\text{dhrav}}$ $\sqrt{\text{hvar}}$	$\longrightarrow$	$\sqrt{\text{dhrav}}$ $\sqrt{\text{dhvar}}$ $\sqrt{\text{hvar}}$
$\rightarrow$ T	$\sqrt{\text{r}}$	$\sqrt{\text{r}}$		

The potential for attraction of  $\sqrt{\text{dhvar}}(\text{H})$  to  $\sqrt{\text{dhrav}}$  and  $\sqrt{\text{hvar}}$  is realized by the analogical proportions  $\sqrt{\text{dhvar}}(\text{H}) : \sqrt{\text{dhrav}}, \sqrt{\text{hvar}} :: \sqrt{\text{r}} : \sqrt{\text{r}}$ . The semantic "vector resultant" is thus the same as has been observed for the phonology.

Finally we may again consider interactions of the three bases in the semantic sphere, taking into account tensions and results of the last synergy in their vertical opposition (movement away/toward), but confronting this opposition in the plane of concrete signification with the negative/positive polarity in the area of philosophical conceptualization. As was seen,  $\sqrt{\text{dhvar}}(\text{H})$ , like  $\sqrt{\text{dhrav}}$  and  $\sqrt{\text{hvar}}$ , figured elementarily in the description of physical reality, as also the antithetical  $\sqrt{\text{r}}$

(past passive participle of  $\sqrt{r}$ ,  $rnóti$ ), but in the plane of ethical value concepts  $\sqrt{dhvar(H)}$  had no role, whereas  $\sqrt{dhrav}$  (and  $\sqrt{hvar}$ ) and derivatives (cf.  $dhrúti-$ ,  $hvarás-$ ) were antipodal to the notion of the noun  $rtá-$ . As indicated, Vedic  $dhru-$  was a synonymous counterpart of  $druh-$ , which was diametrically opposed to  $rtá-$ , just as Av.  $\sqrt{drav}$  and its derivatives patterned with  $drug-$ , systematically antipodal to  $aša-$  in the Zoroastrian dualism. [For  $\sqrt{hvar}$  as loosely patterning with  $\sqrt{dhrav}$  against the  $rtá-$  concept, cf. Av.  $zbar-$  (\* $zvar-$ ) as a technical term for the motion of evil beings. —The history of its synonym  $duar-$  ( $dvar-$ ) I take to result from complex Iranian synergies of  $\sqrt{zvar}$  'go crookedly',  $\sqrt{dvar}$  'go apart',  $\sqrt{drav}$  'to run', and  $\sqrt{drav}$  'to lead astray', which led to the elimination of  $\sqrt{dvar}$  'go apart'.] Nevertheless in the metaphysical plane (inseparable from the ethical for the Indo-Iranians),  $\sqrt{dhvar(H)}$  would have been associated with dissolution (cf. Av.  $vidātu-$  as subject of  $\sqrt{drav}$ ) and thus opposed, together with  $\sqrt{dhrav}$  and  $\sqrt{hvar}$ , to the  $rtá$  concept, which included cohesion and solidity. The schema for the synergy would be:

PHYSICAL: MOTION RE  
REFERENCE PT./L.

METAPHYSICAL AND ETHICAL

$\sqrt{dhrav}$	$\sqrt{dhrav}$ 'mayhem', 'deception', 'wrongness'	-
$\sqrt{dhvar(H)}$	$\sqrt{dhvar(H)}$ 'dissolution'	Ø
$\sqrt{hvar}$	$\sqrt{hvar}$ 'instability' 'crookedness'	-
$\sqrt{r}$ : $rtá-$	{ 'joined' 'gone to goal'	{ 'Order', 'Truth', 'Right(eous)ness', 'Stability'

The result would be identical to that seen for the other two schemata. It must be remembered that the operations of all three were all simultaneous and interconnected in the minds of the speakers of pre-Vedic; a multi-dimensional model would be required to illustrate the unified synergetic process. Suffice it to say that a multiplicity of factors, in many hierarchies of language and thought, made for a close associative alignment of the three bases, both in form and meaning.

Through this rapprochement,  $\sqrt{dhvar(H)}$  took on the meanings of  $\sqrt{dhrav}$  ( $\sqrt{dhru}$ ), because of their similarities and shared systematic opposition to the meanings of  $r(tá)-$ , in the various parameters schematized above. Thus prob. the pres. stem  $dhúrva-$  was modeled after  $dhvára-$ . A clear instance is RV  $satya-dhvr̥t-$  ' (seeking to be) deceiving (perverting) truth' alongside  $Varuna-dhrút-$  'seeking to deceive Varuna (the god presiding over  $Rtá$ )'. More interestingly, we find  $dhvarás-$  f. and  $drúh-$  f. coordinated

in opposition to rtá- in RV 4.23.7-8; it is now possible to identify dhvarás- as an alternative expression for drúh- as the feminine hypostasis of Lie (etc.); this is confirmed by the pl. dhvarásas, described as dvayāvínas 'duplicitous ones' 2.23.5, the equivalent of the pl. is from \*dhvaras- n., modeled (as shall be seen below) after hvaras 'crookedness'.

Remodeling of √hvar (itself a cross of \*hu(v)ar- < \*huHar- and hvār- < hvaHr/l-) after √dhvar(H) / dhru is shown by the alternation of hur (hūrā-, hūrchatī), the sole expected outcome of \*huHr/l (Ir. zūr/l, Lith žūl), with hur in hurás '(going) off course', remodeled after dhūr (dhūrtī etc.) alternating with dhur (dhurā 'violently'), where we have conditioned variants, resp. preconsonantal and prevocalic, of \*/dhurH/. With √dhvar(H) having become semantically identical to √dhrav / dhru, √hvar developed forms like -hurut-, hūrīti- after forms like -dhurut-, dhūrīti-. Thus ends the supposition of dhru as a metathesis of dhvṛ and hru of hvr; the other alleged evidence in Indic for such a metathesis in śvaśura-: śvaśru and catvāras: catu (!), Av. caθru-, merely reflect a PIE dissimilatory metathesis of two labial sonants (\*swekuro-, \*kwetw(o)r-).

The confusing diversity and mental "clutter" caused by the multiplicity of similar forms with identical/similar meanings had two results. √dhvar, which had the phonological support of the rhyming √hvar (whose meaning was sufficiently distinct from √dhvar / dhru, as Karl Hoffmann has shown), and whose opposition to the rtá- concept was complete in more dimensions than that of √dhrav, ousted the latter as a living verb; even the nominal survivals are limited to the zero grade, dhru, supported by the semantically and phonologically similar druh, thus also the greater frequency of the verb dhurvati as against dhravati tendency among sufficient speakers to avoid verbal forms of both bases (this is another solution to the confusion), so that the later language maintains only dhūrta- 'rogue' (and note the Sanskrit use of hvalate as against Vedic hvārtati?).

Not only was the semantic shift of √dhvar(H) a virtually inevitable regulatory response to combined tensions within the Old Indic lexical network, but it was this which in turn motivated the change of the word for 'bivalvous door' from the original form \*dhvār- to the attested dvār-. The only attractive earlier explanation of this change was "analogical influence of dvā 'two'". It is moot whether such an association would have sufficed against the phonemic distinction dh- : d-. But it certainly would not have taken place as long as there was a verb dhvārtati 'goes apart bilaterally', of which dhvār- is the cognate noun illustrating the verb. But once dhvārtati came to mean 'deceives, injures', the designation for the gates or doors of every major dwelling or fortification would

no longer be the appropriate 'that which goes apart on two sides' but would ascribe treachery and harm to those devices of security, hospitality, and transition. It would also entail sacrilege (for doors, dvār-, as goddesses, see e.g. the 5th and 6th stanzas of the Apra/Apri Hymns of the Rg-Veda). The station of \*dhvār- in the lexical network provided a way around this impasse: 'two-leaf door' entered the phonosemantic field of dvā '2'; the phonemic difference now became a secure barrier closing off association with the inadmissible.

To demonstrate this connection I would note that the variant pronunciation of '2' as duā brought about duār- a variant of dvār-; this is reflected in the RgVedic scansion duārā 4.51.2, a reflection of whose reality in the spoken language I would also claim in Prakrit du(v)āra-, duāria, Panjabi duār, Nepali duwār, Eur. Romany vudar, and (in Kafiric) Waigeli dōr. etc.

The two-leaf door would be the clearest and most tangible illustration, constantly experienced in everyday life, of the original meaning of PIE  $\sqrt{\text{dhwer}}$  (H), 'part bilaterally and form a gap'. In OInd. the shift of meaning resulted not only in the new formal approach of 'two-leaf door' to 'two', but in the alignment with 'door' of words for 'gap, chasm, cave' from the old base of 'door'. Note that Greek has from the same PIE base not only sárma 'chasm' and séranx 'cave', but, as remarked earlier, thúrai (\*dual) as both 'two-leaf door' and 'cave entrance' (see esp. Odyssey IX 243; 415-418), the result of a synergy of two forms related phonologically as well as semantically (and, in this case, etymologically).

Now Kashmiri has bar m. 'door'; bor<sup>u</sup> m. 'hole permitting entrance, crack or fissure in wall'; f. būrū 'spy-hole, crack in wood or stone or in a door' (Grierson; Turner). These should go back to resp. dvara- (Turner), and (following Morgenstierne's notes on the Kashmiri mātrā vowels), \*dvara-ka-, \*dvari-kā-.

I account for these forms as follows: In pre-Indic \*dhvara- m. 'gap, large aperture' and \*dhvari- f. 'aperture, hole', became, through alignment with \*dhvār-ā > dvār-ā 'door', dvara- and dvari-. By synergy with dvār(-ā), the thematic form dvara- then took on the convenient meaning '(any kind of) door(way)', cf. also the OIr. and Kafiric words for 'door' < \*dwara-. In pre-Kashmiri the words for 'gap' and 'aperture' etc. were then distinguished from dvara- ('door') (> bar; cf. also Kashmiri brānt 'threshold' < \*dvarānta-, Turner) by the addition of diminutive suffixes (hence 'door' = 'large opening'; 'fissure, crack' = 'small opening'. (Note also \*dvāras- in Vīkadvaras-, the name of a demon, hence 'he who lives in a den of wolves' since this is from \*dhvāras-, the Vedic dhvarás- 'Lie' must be a new creation.)

The above is confirmed by a hitherto impenetrable RgVedic passage which occurs in one of the Savya hymns to Indra. Before analyzing the passage, it is necessary to summarize the Vedic myth to which it and a great many other hymns refer.

In the beginning there was an undifferentiated state which the Veda describes as stagnant waters. Within this primordial matrix there developed a speck of solid substance which became a mountain (párvata-), or rock, in which was concentrated a force of resistance to a more differentiated cosmos. Flowing waters and a sun (establishing motion and regularity) existed latently within the enclosing, obstructing rock. This force, called Vrtra- 'Obstruction, Resistance', was mythologized in a more active conception as a serpent lying inertly upon the mountain, or encircling it, or engulfing it. Against this doubly-represented force of blockage there arises the god Indra, who pierces Vrtra, smashes open the mountain, lets the pent up waters flow, and releases the sun. The base of the mountain, dharúṇa-, he extends horizontally to be the earth, and on the locus of the opened source he raises the heavens with a prop, the axis mundi down which the sun returns at night.

As against Vrtra, who is the (En)closer (as plays on the root vr constantly remind us), Indra functions as the Opener. In a hymn of the Savya cycle, we read 'You, Indra, have unclosed the enclosure of waters...in the mountain (párvate)'. In other hymns we read 'the cave (bílám) of the waters which was shut up, having smitten Vrtra, that did he open'. Moreover, Indra thereby opens the doors (dvār-) of the waters: 'You let the waters through the doors on all sides, Indra; you broke the mountain's fastness'; again, 'he opened the doors of the stream shut up in the rock'. Finally, in the Yajur-Vedic mantra, 'he has smitten Vrtra; he has opened the doors'.

We may now come to our passage with dvará- and dvarí-,  
RV 1.52.2-3:

sá párvato na dharúnesv ácyutaḥ...  
Indro vad vrtrám avadhīn nadvītam...

sá hí dvaró dvaríṣu vavrá údhani

'He (is/was) like a mountain

unshakeable on its foundations...

(i.e. Indra, since he smote Vrtra, the (en)closer of

streams...

for he (Indra) is

dvaró dvaríṣu vavrá údhani.  
(nom.) (loc.) (nom.) (loc.)

The second of the two nominatives, vavrá- 'cave' would consist of well-attested words, and means 'a cave at the udder'; since there should be a relationship in the signification of the two nominatives, vavrá- 'cave' would confirm the meaning 'gap, opening, chasm, cave' which was posited above on etymological grounds. In the cattle-centered imagery of the Veda, the udder, údhār/n-, was a term for the mountain or rock breached by Indrā, whence flowed forth the streams; I shall show elsewhere that the Savya poet had in mind an image of four streams set flowing toward the four directions by Indra. The four teats of the udder completes the parallelism in our verse, where údhāni loc. sg. corresponds to dvarīṣu loc. pl. The interpretation of 'udder' in our verse as the outlet(s) of liquid made by Indras piercing the mountain is confirmed in an earlier hymn, RV 5.32.2: āramha údhāh párvatasya vajrin 'You have let the mountain's udder flow, o Club-wielder!' In verse 8 of the same hymn RV 5.32, Vrtra is called the great insatiable abyss (engulfment, chasm, cave), asinvaṁ vavrām māhi, where vavrá- is an etymological variant of vr̥ṇōti, whose participle vavrivams- and similar forms, cf. nadyó vavri- and nadivṛt- 'stream encloser' occur in the Savya hymns. In 5.32 vavra- refers to Vrtra as a greedy gulf sucking up the liquid. (I leave for elsewhere a discussion of the relationships of water and soma in these hymns.)

It may be asked, why in 1.52.3 is Indra called (dvará-)/ vavrá-, when the latter should refer to Vrtra? This is explained by a complex of factors:

1) As a masculine noun with stressed thematic syllable, dvará- would be 'opener' (as well as 'opening'), and hence describe Indra. But since dvará- is also 'opening, chasm, cave', it is synonymous with vavrá (which is both 'engulfer' and 'gulf'). This suggests an equation Indra = Vrtra.

2) Indra is associated with closing in one instance in the older hymn RV 3.43.3. Here is a statement linguistically unusual and stylistically striking: indro vr̥trām avṛṇot i.e. 'Indra enclosed the Encloser (engulfed the Engulfer, closed down the Closer)'. This would have made an impression on later Vedic bards, whose profession it was to remember such things. The passage is no less memorable than the Greek Orthodox Epitaphios Hymn for Good Friday: 'Down in the tomb you established life, O Christ, and by your death, death did you destroy' (cf. also John Donne's 'Death thou shalt die'.)

3) By breaking into the mountain Indra literally supplants, i.e. takes the place, of Vrtra. The reversal of roles is introduced in our passage by the artful use of what at first passes for a cliché, Indra described as a mountain (párvata-) unshakeable on its foundations (dharúnesv ácyutah). The condition previous to Indra's feat is described by the same poet in 1.54.10: dharúnahvaram támo 'ntar vr̥trásya játhareṣu párvatah 'darkness shaking the foundation; the mountain was in Vrtra's maw'. In 1.56.5 the poet praises Indra for setting matters aright, ví yat tiró dharúnam ácyutam rájo 'tiṣṭhipo

'when you extended the foundation (as something) unshakable across space.'

4) The paradoxical equation of Indra and Vrtra reflects the fact that 'cave' is both an opening (dvará-) and an enclosure (vavrá-), and may thus be seen as releasing or retaining liquid; similarly an udder. Doors too may be regarded as opening (dvar- and cf. Old Dardic (>Kashmiri) \*dvará-) and closing (√vr). Furthermore the ordinary word for 'to open' has the same verb (plus preverb) as 'to close', √vr, whence vrtrá-, etc.

The "equation" of Indra with Vrtra is a rhetorical device which shows the professional excellence of the poet as well as his profundity of mystical insight (at the conclusion of the figure he calls attention to his 'art and vision' addressing his god's generosity); it serves to embellish the message of the poem as vehicle of the myth, Indra's cosmogonical act. Here it is Indra's opposition to Vrtra which is really thrown into relief.

The following chart synoptically shows the synergetic factors serving as the unconscious elements whereby the elaborate figure was motivated, and also serves to diagram the figure as an artistic exposition in parvo of the myth:

HYMN TO INDRA		THEME:	Cosmogony:	Differentiation
Motion / flux		vs.	Stasis: resistance/blockage	
MODEL (1) (Primordial) water in mountain				
MYTH: Indra (hero-god):		vs.	<u>Vrtra</u> (monster/dragon serpent)	
The Opener			'(En)closer, Obstruction'	
<u>dvará-</u> (m.) 'that which			<u>vavrá-</u> (m.) 'that which (he	
(he who) opens up'			who) shuts up, (en)closes	
<u>dvará-</u> 'chasm'		=	<u>vavrá-</u> 'cavern' (engulfment	
('opening, gap')			enclosure')	
<u>dvari-</u> 'opening of cave,			<u>(vavri-</u> 'envelopment')	
cave-mouth'				
MODEL (2) Opening doors		vs.	closing doors	
(dvar-a; and dvara-?)			√vr: <u>vrnóti</u> etc.)	
PIE √ <u>dhwer</u> (H)			PIE √(H) <u>wer</u>	

Indra's act, as Kuiper (1960) has indicated, was thought by the Vedic poets to be daily recapitulated by the goddess Dawn's rising from the cavern of darkness (the locus of the breached mountain); thus she too is often said to open doors. This act was in turn thought to be paralleled microcosmically in the individual by the activation of his inner creative illumination.

It may be fitting, in view of the insights into the amazing complexity of the mind revealed by our poet, to close this paper's door with an allusion by another hymnist to the inspired vatic arousal of this deep-lying luminosity (RV 9.10.6):

āpa dvāro matīnam pratnāḥ rṇuvānti kāravaḥ [See Note 2.]

'The poet-heralds of yore open the doors of thoughts'.

#### NOTE

As correctives to etymologies with \*dhw- > th- I offer:  
 (a) thairós 'door pivot' and also 'pole upon which the side of a chariot is built' < PIE \*dhryo- 'shaft, rod', cf. Norw. darre 'long pin, spigot, peg, threshing stick', dial. also 'door pivot' and 'small post in the corner of a sleigh'; ONor. darr 'javelin', darraðr 'spear, lance, long peg', Hitt. tarma- 'nail, peg', OEng. derian 'to injure', daru 'harm'; Lith. dūr̃ti 'to jab, stab, pierce', dūr̃klis 'spear', all of which I assign to a previously unnoted PIE base √dher 'to shaft, to jab'.

(b) theeion 'sulphur' < \*dhew(H)es-yo-, cf. Gr. thúos 'burnt offering, aromatic', OInd. dhaviṣyati 'will puff', dhavitra- 'a fan', etc. PIE √dhew 'to (be like) smoke, steam'.

(c) theós 'god' < \*dhEsó-, cf. Arm. di-k' 'gods' \*dheEs-, Lat. fanum, fēstus, etc.

(d) thís, gen. thínós 'pile', PIE \*dheEVn- > \*dhēyVn-, gen. (anal.) \*dhīn-ōs, √dheE 'to put, deposit', cf. Gr. themón, thōmos, etc. 'pile, heap'.

(e) thnāskō 'die', thánatos 'death' etc.: PIE \*g<sup>w</sup>hnA-, √g<sup>w</sup>hen(A) 'to smite', which must await full discussion elsewhere.

(f) tholós 'murk, mire, cuttlefish ink' < PIE \*dhwolo-, dhw-el- 'be smoky, obfuscating, turbulent'; the traditional etymology may here be left unchanged, since \*t(h)wo is attested in Mycenaean, and, as was shown in Wyatt (1963), wo merges with o betw. the Myc. and Hom. periods.

(g) In confirmation of \*dhw > Gr. s-, note sēpia 'cuttlefish (ink)' PIE √dhw-eE-p 'be like smoke, obfuscate, swirl', from whose zero grade OHGerm. tūvar 'foolish' etc.

(g) Perhaps Gr. -s-th- of the 2nd p. mid. pl. (etc.) is to be explained by \*-dhw-.

For \*dhw- > ϵ-, cf. \*tw- > ϵ-, \*dhv- > ϵ-, \*dw- > ϛf, (δ)δ, \*ghw-, \*g<sup>w</sup>h- > φ-, θ-.

## NOTE 2

vi r̥nóti orig. 'moves apart' (vi āra 'fell apart'; Av. vīdārayeiti 'disperses'; Pashto wīr 'expanded, spread' < \*vi-r̥ta- !) replaced dhvāratī \*'parts bilaterally'; inevitably > 'is disjoined'; sum of mgs. \* 'opens'; rhymes: vi r̥nóti † vi v̥r̥nóti, āpa v̥r̥nóti : āpa r̥nóti. NB vi r̥nóti freq. w. obj. in v-r (vara-, vraja-, dvar-, vrtā-; thus quasi-haplogy functional variant of vi v̥r̥nóti).

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