

TRANSPOSING RATES

JEFF GRANT

Hastings, New Zealand

A set of three different letters can be transposed in six ways. There are a number of these groups where all possible combinations are legitimate terms; for example the letters AER yield the following six words, all of which are listed in Web 2.

AER an obsolete spelling of air, ear, ere and oar

ARE a unit of superficial area, 100 square metres

EAR the fruiting spike of any cereal

ERA one of the major divisions of geological time

RAE a sail yard (local, Scottish)

REA another name for the East Indian herb turmeric

Moving up to the next level, it is possible to transpose a group of four different letters in 24 ways. Finding a complete set of 24 transposals may at first glance seem impossible, but this feat has now been achieved using the letters AEST. Although some of the terms and references are rather obscure, it is an accomplishment unlikely to be equalled with any other set of four letters. Following are the 24 transpositions of AEST, with their definitions and sources.

AEST obsolete form of 'east' (OED)

AETS Shetland Islands dialectic form of 'eats' (EDD)

ASET an old word meaning 'to set up, place' (OED)

ASTE a populated place listed in the OSNG, USSR

ATES the sweetsop tree (Web 2)

A-TSE a populated place listed in the OSNG, People's Republic of China

EAST to veer from north or south toward east, to orient (Web 2)

EATS food, things to eat (Web 2)

ESAT a surname: there are two listed in the 1983 Melbourne, Australia TD, and Isac ESAT appears in the January 1982 Paris, France TD

ESTA a feminine given name, meaning 'I am' in Latin (WNB)

ETAS plural of 'eta', the seventh letter of the Greek alphabet (Web 2)

ETSA variant of 'ltsa', a large village in the Faiyum Province, Upper Egypt (CL)

SAET dialectic form of 'saith', the mature coal-fish (EDD)

SATE to satisfy or gratify to the full (Web 2)

SEAT a kind of chisel used to cut hot iron (Web 2)

SETA one of the spinelike feathers at the base of the bill of certain birds (Web 2)

STAE a populated place listed in the OSNG, Sweden

STEA a dialectic variant of 'sty', a ladder or stair (EDD)
 TAES plural of 'tae', Scottish variant of 'toe' (Web 2)
 TASE variant of 'teise', to stretch or bend a bow (OED)
 TEAS evening meals (Web 2)
 TESA variant of 'teesa', an Indian buzzard (FW)
 TSAE the name of a mysterious marquis who apparently invented
 the manufacture of paper from the inner bark of trees,
 ends of hemp, old rags, and fishing nets; Marquis TSAE
 is mentioned in EB, 11th Edition, 1911, Volume V,
 662, in the article on China
 TSE-A variant spelling of Sia, a New Mexico Keresan tribe (HALNM)

There are 120 ways to transpose a set of five different letters. While researching at this level, all efforts have been concentrated on the groups AELST and AERST which seem to be the most productive. Achieving a full solution of 120 transposals is likely to remain just a dream; however it is possible to get halfway, even with the restrictions on acceptability which have been imposed.

Allowable are hyphenated, apostrophized and two-word terms, as well as pluralized first names and surnames. Not permitted are purely foreign words, such as 'slaet' which appears in 'Slaet op den trommele', the title of a weekly political journal published in Utrecht, Netherlands (NUC). Also disallowed are initialisms such as ATESL (Association of Teachers of English as a Second Language) and the use of surname and initials, for example S.L. TAE or EAST R. All contrived terms of any nature are similarly unacceptable.

My thanks to Philip Cohen and Murray Pearce for their contributions to this project. Without their assistance some of the transposals would not have been recorded in the survey. If anybody comes across one that has been missed, such as TALSE, EALTS, ESTAR or SEART, no matter how obscure the reference, please write to the Editor with your information.

AELST Transposals

AELST variant of Aalst, a town in northwest Belgium (NCCN)
 AELTS Nicholas van AELTS was a Flemish painter born in 1529
 (DBR)
 ALEST superlative form of 'ale', early spelling of 'hale'; healthy
 (OED)
 ALETS lets go, an obsolete term (OED)
 ALSET although, a conjunction (DOST)
 ALSTE surname of J. ALSTE, who is listed in the 1983 Melbourne,
 Australia TD
 ALTES surname of Ernest Eugene ALTES, a French violinist and
 conductor, 1830-99 (DUB)
 ASELT surname of Jos A ASELT, who is listed in the 1975/76
 Brooklyn, New York TD
 ASLET obsolete adverbial phrase meaning 'oblique' (OED)
 ASTEL a board or plank (OED)
 ASTLE a small community in Cheshire, England (CODEP)
 ATELS variant of 'atells'; counts up (OED, 1297 quotation)
 ATLES variant of 'ettles'; intends (OED)
 ATSEL surname of Tamash ATSEL, a Hungarian writer better

- known as Tamás Aczél (NUC)
- ELAST variant of 'elest', a fault or defect (DOST)
- ELATS places named ELAT, such as the one in Israel (TAW), and a small community on Great Kei Island in the Banda Sea, off the southwest coast of Papua-New Guinea (EB, 10th Edition, 1903)
- ELSTA surname of Fanny ELSTA, a Norwegian writer born in 1899 (NUC)
- ELTAS plural of 'elta', anger (EDD, Addenda)
- ESTAL a place, post (OED)
- ETALS places named ETAL, such as a village in Northumberland, England (EB, 10th Edition, 1903), and an atoll in the central Caroline Islands (EB, 9th Edition, 1876)
- ETLAS small towns such as ETLA in southern Mexico (EB, 10th Edition, 1903)
- LAEST a very early form of 'last' and 'least' (OED)
- LAETS plural of 'laet', a person of status between a freeman and a slave in Old English (OED)
- LASET variant of 'lasset', the ermine or miniver (OED)
- LASTE 14-18th century spelling of 'last', a wooden model of the foot on which shoe-makers shape boots and shoes (OED)
- LATES looks, manners, behaviour (OED)
- LEAST smallest, slightest (OED)
- LEATS open watercourses (OED)
- LESTA variant of the feminine given name 'Esther' (WNB)
- LETAS females named LETA, diminutive of 'Letitia' (WNB)
- LETSA surname of George LETSA, who is listed in the January 1982 North Virginia TD; also, a stream called LETSA Va given in the OSNG, Burma
- SAELT 2nd person singular form of the archaic verb 'shulen', to shovel (MED)
- SALET variant of 'sallet' and 'salad' (Web 2)
- SALTE 14-16th century spelling of 'salt' (OED)
- SATEL variant of 'sadel', Middle English form of 'saddle' (MED)
- SATLE an obsolete form of 'settle' (OED)
- SEALT the earliest known spelling of 'salt' (OED)
- SEATL an archaic spelling of 'settle' (OED)
- SELAT variant of 'sallet', a salad (SND)
- SELTA a village in northern Russia (NVAH)
- SETAL pertaining to setae, stiff hairs or bristles (OED)
- SETLA variant of 'westen-setla', a dweller in the wilderness (ASD)
- SLATE to assail with reproof or abuse (OED)
- SLEAT to incite, set on (OED)
- STAEL variant of 'stale', a handle (EDD)
- STALE that has lost its freshness (OED)
- STEAL the stalk or stem of a plant (OED)
- STELA an upright slab bearing sculptured designs (OED)
- TAELS plural of 'tael', the Chinese ounce (OED)
- TAESL an archaic form of 'teasel' (OED)
- TALES things told so as to violate secrecy (OED)
- TASEL an obsolete form of 'teasel' (OED)
- TASLE another obsolete form of 'teasel' (OED)
- TEALS small fresh-water fowl (OED)

TELAS plural of 'tela', a tissue (Web 2)
 TELSAsurname of Chas TELSAs, who is listed in the 1981/82 West
 Suburban Boston TD
 TESAL a populated place in Mexico listed in the OSNG, Mexico
 TESLA the SI unit of magnetic flux density (OED, Se-Z Supplement)
 TSALE variant of Tsa-Lieh, a populated place in China listed
 in the OSNG, Mainland China
 TSE-LA a place in Tibet (TAW)

AERST Transposals

AERST a very early form of 'erst', first (OED)
 AERTS surname of Egidius AERTS, a Belgian musician and
 composer, 1822-53 (DUB)
 AREST an obsolete form of 'arrest' and 'erst' (OED)
 ARETS reckons, ascribes, imputes (Web 2)
 ARSET a Scottish term meaning 'backwards' (EDD, Addenda)
 ARSTE a surname which appears six times in the 1978/79
 Hamburg, West Germany TD
 ARTES plural of 'arte', a 14-17th century spelling of 'art' (OED)
 ASTER in sponges, a star-shaped spicule (Web 2)
 ASTRE a hearth, a home (OED)
 ATERS plural of 'ater', an early form of 'atter'; poison, venom,
 gall (OED)
 ATRES genitive singular form of 'ator'; poison, venom (CASD)
 ATSER son of Thured, a Somerset landowner in Anglo-Saxon times
 (OAS)
 EARST an obsolete variant of 'erst' (OED)
 EARTS plural of 'eart', Scottish form of 'earth' (SND)
 ERAST a 15th century form of 'erst' (OED)
 ERATS persons with the surname ERAT, such as the two listed in
 the 1975/76 Detroit TD
 ERSTA a populated place in Sweden listed in the OSNG, Sweden
 ERTAS the surname of B. ERTAS, who appears in the August 1986
 Sydney, Australia TD, and also Cengiz ERTAS in the
 January 1982 Paris, France TD
 ESART a name appearing in the listing ESART J.L.Co. in the 1983
 Boston TD
 ESTRAsvariant of the feminine given name 'Esther' (WNB)
 ETARS plural of 'etar', a 15th century spelling of 'eater' (OED)
 ETRAS persons with the surname ETRA, such as William and
 Isidor ETRA (NYTOI)
 ETSRA a small town in northern Saudi Arabia (EB, 10th Edition,
 1903)
 RAEST a very early form of the noun 'rest' (OED)
 RAETS surname of Willem RAETS, a 16th century Flemish
 mathematician (DUB)
 RASET a surname appearing twice in the January 1982 Paris,
 France TD
 RASTE a surname appearing four times in the 1981 Oslo, Norway TD
 RATES amount of assessment on property for local purposes (OED)
 REAST variant of 'reest', to become rancid (OED)
 REATS plural of 'reat', an obsolete form of 'rate' (OED)

- RESAT past tense of 'resit', to sit (an examination) again (OED, O-Scz Supplement)
- RESTA a surname appearing four times in the 1983 Melbourne, Australia TD
- RETAS females named RETA, a variant of 'Rita' (WNB)
- SA'ERT a former subdivision of the province of Kurdistan in Turkey (EB, 9th Edition, 1876)
- SAETR the name of a farm in Norway, recorded in NG, Volume 19; SAETR is an old Norse word meaning 'mountain pasture' (see etymology of 'saeter' in OED, O-Scz Supplement)
- SARET a small desert town in Algeria (EB, 10th Edition, 1903)
- SARTE a variant of 'sarts', a term applied indiscriminately to the settled, as opposed to the nomad element, and especially to the urban populations, of whatever race, in Central Asia (EB, 9th Edition, 1888, Vol. 23, p. 25)
- SATER variant of 'saeter', a meadow associated with a dwelling in the Shetland and Orkney Islands (OED, O-Scz Supplement)
- SATRE a surname appearing four times in the May, 1984 Denver TD
- SERAT a region in Yemen (TIG)
- SERTA the modern Syriac cursive script (Web 2)
- SETAR variant of 'sitar'; a long-necked, guitar-like Indian musical instrument (OED, Se-Z Supplement)
- SETRA a place in Egypt (IG)
- STAER the earliest known form of 'stare' (OED)
- STARE a fixed gaze with the eyes wide open (OED)
- STEAR one of the weasel tribe (EDD)
- STERA surname of Ron STERA who is listed in the June 1981 and September 1986 Calgary, Canada TD
- STRAE 16-19th century Scottish form of 'straw' (OED)
- STREA 17-19th century dialectic form of 'straw' (OED)
- TAERS a Shetland Islands and Cornish form of 'tears' (EDD)
- TARES the cultivated vetch, grown as fodder (OED)
- TARSE (the tarsus, first part of the foot (OED)
- TASER a weapon which fires barbs attached by wires to batteries, and causes temporary paralysis (OED, Se-Z Supplement)
- TEARS drops of any liquid (OED)
- TERAS a monster (Web 2)
- TERSA a river in the USSR (TIG)
- TESAR a surname which appears four times in the 1983 Melbourne, Australia TD
- TRAES variant of 'thraes', suffers from a serious illness (SND)
- TRASE an obsolete form of 'trace' (OED)
- TREAS a 16th century form of the noun 'trace' (OED)
- TRESA a river in Italy and Switzerland (TAW)
- TSEAR surname of S.Y. TSEAR, who is listed in the 1983 and 1986 Metropolitan Toronto, Canada TD
- TSERA a populated place in Burma, listed in the OSNG, Burma

There are a total of 60 AELST and 63 AERST transposals.

REFERENCES

- ASD An Anglo-Saxon Dictionary, Bosworth & Toller, 1964
 CASD A Concise Anglo-Saxon Dictionary, J.R. Clark Hall, 1960
 CL The Columbia-Lippincott Gazetteer of the World, 1952
 CODEP The Concise Oxford Dictionary of English Place-names, Eilert Ekwall, 1960
 DBR Dictionary of Biographical Reference, L.B. Phillips, 1871
 DOST Dictionary of the Older Scottish Tongue
 DUB Dictionary of Universal Biography, Albert Hyamson, 1951
 EB The Encyclopedia Britannica
 EDD The English Dialect Dictionary
 FW Funk & Wagnalls New Standard Dictionary of the English Language, Unabridged
 HA1MN Handbook of American Indians North of Mexico, edited by F.W. Hodge, 1907
 IG Index Geographicus, London, 1864
 MED Middle English Dictionary, edited by Hans Kurath, 1956
 NCCN New Century Cyclopedia of Names, 1954
 NG Norske Gaardnavne (A Register of Norwegian Farm-Names), Oluf Rygh, 1936
 NUC The National Union Catalogue, pre-1956 Imprints, a cumulative author list representing Library of Congress printed cards and titles reported by other American libraries, Mansell, 1969
 NVAH Namen-Verzeichnis zu Andrees Handatlas, 1924
 NYTOI New York Times Obituaries Index, 1858-1968
 OAS Onomasticon Anglo-Saxonicum, W.G. Searle, 1897
 OED The Oxford English Dictionary
 OSNG Official Standard Names Gazetteer (a series of references published by the US Board on Geographic Names)
 SND The Scottish National Dictionary
 TAW The Times Atlas of the World
 TD Telephone Directory
 TIG The Times Index-Gazetteer, 1965
 Web 2 Webster's New International Dictionary, 2nd Edition, 1934
 WNB What to Name the Baby, Evelyn Wells, 1953