

Dichotomy Table (Tencer-Minaev)

Classes of IM Dichotomies

	Positions Democratic Information	Does Not Position Democratic Information
Positions Aristocratic Information	Vector Dichotomy 1. Valid / Null 2. Static / Dynamic 3. Democratic / Aristocratic 4. Asking / Declaring	Aristocratic Dichotomy 1. 1stInternal / 1stExternal 2. 1stDelta / 1stBeta 3. 2ndExternal / 2ndInternal 4. 2ndBeta / 2ndDelta
Does Not Position Aristocratic Information	Democratic Dichotomy 1. 1stAbstract / 1stInvolved 2. 1stAlpha / 1stGamma 3. 2ndAbstract / 2ndInvolved 4. 2ndAlpha / 2ndGamma	Converse Dichotomy 1. Irrational / Rational 2. Extroverted / Introverted 3. Process / Result 4. Positivist / Negativist

Sets

Vector Set

$$V = \{V_1, V_2, V_3, V_4\}$$

Aristocratic Set

$$A = \{A_1, A_2, A_3, A_4\}$$

Democratic Set

$$D = \{D_1, D_2, D_3, D_4\}$$

Converse Set

$$C = \{C_1, C_2, C_3, C_4\}$$

General Set

$$G = \{V_1, V_2, C_1, C_2\}$$

Supralocal Set

$$U = \{V_3, V_4, C_3, C_4\}$$

Accepting Set

$$I = \{A_1, A_2, D_1, D_2\}$$

Producing Set

$$R = \{A_3, A_4, D_3, D_4\}$$

Faculty Set

$$F = \{A_1, A_3, D_1, D_3\}$$

Axis Set ($Q = \text{Quadra}$)

$$Q = \{A_2, A_4, D_2, D_4\}$$

Central Set

$$Z = \{V_1, V_3, C_1, C_3\}$$

Square / Dihedral Set

$$S = \{V_2, V_4, C_2, C_4\}$$

Orbital / Ordinal Set - $(V \cup C) \in \mathcal{O}$

$$\mathcal{O} = \{V_1, V_2, V_3, V_4, C_1, C_2, C_3, C_4\}$$

Non-Orbital / Cardinal / Wall Set - $(A \cup D) \in W_{14}$

$$W_{14} = \{A_1, A_2, A_3, A_4, D_1, D_2, D_3, D_4\}$$

Level One Set

$$X_1 = \{V_1, A_1, D_1, C_1\}$$

Level Two Set

$$X_2 = \{V_2, A_2, D_2, C_2\}$$

Level Three Set

$$X_3 = \{V_3, A_3, D_3, C_3\}$$

Level Four Set

$$X_4 = \{V_4, A_4, D_4, C_4\}$$

Universal Set

$$\mathbb{U} = \{V_i, A_i, D_i, C_i \mid i = 1, 2, 3, 4\}$$

Mathematical Correspondences

Alphabetic Correspondences

Let:

$$\begin{aligned}\mathcal{A} &:= \mathbb{U} \\ \mathcal{A} &= V \sqcup A \sqcup D \sqcup C\end{aligned}$$

We introduce a binary operation:

$$\star : \mathcal{A} \times \mathcal{A} \longrightarrow \mathcal{A}.$$

Complement map:

$$\kappa : \mathcal{A} \longrightarrow \mathcal{A}, \quad \kappa^2 = \text{identity},$$

such that:

$$\kappa(V_i) = C_i, \quad \kappa(C_i) = V_i, \quad \kappa(A_i) = D_i, \quad \kappa(D_i) = A_i.$$

This is an involution:

$$\kappa(\kappa(x)) = x$$

and it respects indices.

Axioms Written as an Operation

$$x \star y = \begin{cases} V_i & \text{if } x = y, \\ x & \text{if } y = V_i, \\ C_i & \text{if } x = \kappa(y), \\ \kappa(x) & \text{if } y = C_i. \end{cases}$$

Numeric Correspondences

Let:

$$\mathcal{N} := \mathbb{U}$$

$$\mathcal{N} = X_1 \sqcup X_2 \sqcup X_3 \sqcup X_4$$

The binary operation:

$$\star : \mathcal{N} \times \mathcal{N} \longrightarrow \mathcal{N}.$$

Axioms Written as an Operation

$$x \star y = \begin{cases} X_1 & \text{if } x = y, \\ X_2 & \text{if } x = X_1 \text{ and } y = X_4, \\ X_3 & \text{if } x = X_2 \text{ and } y = X_4, \\ X_4 & \text{if } x = X_2 \text{ and } y = X_3. \end{cases}$$

Cayley Table for \mathcal{D}_{14}

IM Octads Index

Disclaimer

Since V_1 is not a dichotomy (proper), the sets that are derived from it are not octadic, therefore containing no real octads of types. While a dichotomy (proper) entails equal partitioning, this set is tautologically defined by the criteria for TIM validity and thus does not constitute an even distribution of octadic sets.

Notation

A dichotomy is a partition:

$$\mathfrak{d} = \{\mathfrak{d}_0, \mathfrak{d}_1\}, \quad \mathfrak{d}_0 \sqcup \mathfrak{d}_1 = T$$

with the dichotomy function:

$$\mathfrak{d} : T \rightarrow \mathbb{Z}_2$$

by

$$\mathfrak{d}(t) := \begin{cases} 0 & \text{if } t \in \mathfrak{d}_0, \\ 1 & \text{if } t \in \mathfrak{d}_1. \end{cases}$$

We fix the sociotype ILE as the reference element and identify it with the zero vector. Accordingly, for every dichotomy \mathfrak{d} , the assignment of values for 0 and 1 is chosen so that $\mathfrak{d}(\text{ILE}) = 0$. All trait values and vector representations are therefore understood relative to this basepoint. Under this convention, every type $t \in T$ is represented by a binary vector encoding its deviation from the ILE across the fixed dichotomy system.

Orbital / Ordinal Octads (\mathcal{O})

 Octad v

Vector Octads (V)

Valid / Null (V_1)

$$T = \{ILE, SEI, ESE, LII, EIE, LSI, SLE, IEI, SEE, ILI, LIE, ESI, LSE, EII, IEE, SLI\}$$
$$\mathcal{E} = \{?Ne^+, !Si^-, !Fe^+, ?Ti^-, ?Fe^-, !Ti^+, !Se^-, ?Ni^+, ?Se^+, !Ni^-, !Te^+, ?Fi^-, ?Te^-, !Fi^+, !N$$

Static / Dynamic (V_2)

$$V_{2,0}^T = \{ILE, LII, LSI, SLE, SEE, ESI, EII, IEE\}$$
$$V_{2,0}^{\mathcal{E}} = \{?Ne^+, ?Ti^-, !Ti^+, !Se^-, ?Se^+, ?Fi^-, !Fi^+, !Ne^-\}$$

$$V_{2,1}^T = \{SEI, ESE, EIE, IEI, ILI, LIE, LSE, SLI\}$$
$$V_{2,1}^{\mathcal{E}} = \{!Si^-, !Fe^+, ?Fe^-, ?Ni^+, !Ni^-, !Te^-, ?Te^+, ?Si^+\}$$

Democratic / Aristocratic (V_3)

$$V_{3,0}^T = \{ILE, SEI, ESE, LII, SEE, ILI, LIE, ESI\}$$
$$V_{3,0}^{\mathcal{E}} = \{?Ne^+, !Si^-, !Fe^+, ?Ti^-, ?Se^+, !Ni^-, !Te^+, ?Fi^-\}$$

$$V_{3,1}^T = \{EIE, LSI, SLE, IEI, LSE, EII, IEE, SLI\}$$
$$V_{3,1}^{\mathcal{E}} = \{?Fe^-, !Ti^+, !Se^-, ?Ni^+, ?Te^-, !Fi^+, !Ne^-, ?Si^+\}$$

Asking / Declaring (V_4)

$$V_{4,0}^T = \{ILE, LII, EIE, IEI, SEE, ESI, LSE, SLI\}$$
$$V_{4,0}^{\mathcal{E}} = \{?Ne^+, ?Ti^-, ?Fe^-, ?Ni^+, ?Se^+, ?Fi^-, ?Te^-, ?Si^+\}$$

$$V_{4,1}^T = \{SEI, ESE, LSI, SLE, ILI, LIE, EII, IEE\}$$
$$V_{4,1}^{\mathcal{E}} = \{!Si^-, !Fe^+, !Ti^+, !Se^-, !Ni^-, !Te^+, !Fi^+, !Ne^-\}$$

Octad c

Converse Octads (C)

Irrational / Rational (C_1)

$$C_{1,0}^T = \{ILE, SEI, SLE, IEI, SEE, ILI, IEE, SLI\}$$
$$C_{1,0}^{\mathcal{E}} = \{?Ne^+, !Si^-, !Se^-, ?Ni^+, ?Se^+, !Ni^-, !Ne^-, ?Si^+\}$$

$$C_{1,1}^T = \{ESE, LII, EIE, LSI, LIE, ESI, LSE, EII\}$$

$$C_{1,1}^{\mathcal{E}} = \{!Fe^+, ?Ti^-, ?Fe^-, !Ti^+, !Te^+, ?Fi^-, ?Te^-, !Fi^+\}$$

Extroversion / Introversion (C_2)

$$C_{2,0}^T = \{ILE, ESE, EIE, SLE, SEE, LIE, LSE, IEE\}$$

$$C_{2,0}^{\mathcal{E}} = \{?Ne^+, !Fe^+, ?Fe^-, !Se^-, ?Se^+, !Te^+, ?Te^-, !Ne^-\}$$

$$C_{2,1}^T = \{SEI, LII, LSI, IEI, ILI, ESI, EII, SLI\}$$

$$C_{2,1}^{\mathcal{E}} = \{!Si^-, ?Ti^-, !Ti^+, ?Ni^+, !Ni^-, ?Fi^-, !Fi^+, ?Si^+\}$$

Process / Result (C_3)

$$C_{3,0}^T = \{ILE, SEI, EIE, LSI, SEE, ILI, LSE, EII\}$$

$$C_{3,0}^{\mathcal{E}} = \{?Ne^+, !Si^-, ?Fe^-, !Ti^+, ?Se^+, !Ni^-, ?Te^-, !Fi^+\}$$

$$C_{3,1}^T = \{ESE, LII, SLE, IEI, LIE, ESI, IEE, SLI\}$$

$$C_{3,1}^{\mathcal{E}} = \{!Fe^+, ?Ti^-, !Se^-, ?Ni^+, !Te^+, ?Fi^-, !Ne^-, ?Si^+\}$$

Positivist / Negativist (C_4)

$$C_{4,0}^T = \{ILE, ESE, LSI, IEI, SEE, LIE, EII, SLI\}$$

$$C_{4,0}^{\mathcal{E}} = \{?Ne^+, !Fe^+, !Ti^+, ?Ni^+, ?Se^+, !Te^+, !Fi^+, ?Si^+\}$$

$$V_{4,1}^T = \{SEI, LII, EIE, SLE, ILI, ESI, LSE, IEE\}$$

$$V_{4,1}^{\mathcal{E}} = \{!Si^-, ?Ti^-, ?Fe^-, !Se^-, !Ni^-, ?Fi^-, ?Te^-, !Ne^-\}$$

Wall / Cardinal / Non-Orbital Octads (W_{14})

Octad a

Aristocratic Octads (A)

1stInternal / 1stExternal (A_1)

$$A_{1,0}^T = \{ILE, ESE, EIE, IEI, ILI, ESI, EII, IEE\}$$

$$A_{1,0}^{\mathcal{E}} = \{?Ne^+, !Fe^+, ?Fe^+, ?Ni^+, !Ni^-, ?Fi^-, !Fi^+, !Ne^-\}$$

$$A_{1,1}^T = \{\text{SEI, ESE, EIE, SLE, SEE, ESI, EII, SLI}\}$$

$$A_{1,1}^{\mathcal{E}} = \{\text{!Si}^-, \text{?Ti}^-, \text{!Ti}^+, \text{!Se}^-, \text{?Se}^+, \text{!Te}^+, \text{?Te}^-, \text{?Si}^+\}$$

1stDelta / 1stBeta (A_2)

$$A_{2,0}^T = \{\text{ILE, SEI, LIE, ESI, LSE, EII, IEE, SLI}\}$$

$$A_{2,0}^{\mathcal{E}} = \{\text{?Ne}^+, \text{!Si}^-, \text{!Te}^+, \text{?Fi}^-, \text{?Te}^-, \text{!Fi}^+, \text{−Ne}^-, \text{?Si}^+\}$$

$$A_{2,1}^T = \{\text{ESE, LII, EIE, LSI, SLE, IEI, SEE, ILI}\}$$

$$A_{2,1}^{\mathcal{E}} = \{\text{!Fe}^+, \text{?Ti}^-, \text{?Fe}^-, \text{!Ti}^+, \text{!Se}^-, \text{?Ni}^+, \text{?Se}^+, \text{!Ni}^-\}$$

2ndExternal / 2ndInternal (A_3)

$$A_{3,0}^T = \{\text{ILE, ESE, LSI, SLE, ILI, ESI, LSE, SLI}\}$$

$$A_{3,0}^{\mathcal{E}} = \{\text{?Ne}^+, \text{!Fe}^+, \text{!Ti}^+, \text{!Se}^-, \text{!Ni}^-, \text{?Fi}^-, \text{?Te}^-, \text{?Si}^+\}$$

$$A_{3,1}^T = \{\text{SEI, LII, EIE, IEI, SEE, LIE, EII, IEE}\}$$

$$A_{3,1}^{\mathcal{E}} = \{\text{?Si}^-, \text{?Ti}^-, \text{?Fe}^-, \text{?Ni}^+, \text{?Se}^+, \text{!Te}^+, \text{!Fi}^+, \text{!Ne}^-\}$$

2ndBeta / 2ndDelta (A_4)

$$A_{4,0}^T = \{\text{ILE, SEI, EIE, LSI, SLE, IEI, LIE, ESI}\}$$

$$A_{4,0}^{\mathcal{E}} = \{\text{?Ne}^+, \text{!Si}^-, \text{?Fe}^-, \text{!Ti}^+, \text{!Se}^-, \text{?Ni}^+, \text{!Te}^+, \text{?Fi}^-\}$$

$$A_{4,1}^T = \{\text{ESE, LII, SEE, ILI, LSE, EII, IEE, SLI}\}$$

$$A_{4,1}^{\mathcal{E}} = \{\text{!Fe}^+, \text{?Ti}^-, \text{?Se}^+, \text{!Ni}^-, \text{?Te}^-, \text{!Fi}^+, \text{!Ne}^-, \text{?Si}^+\}$$

 Octad d

Democratic Octads (D)

1stAbstract / 1stInvolved (D_1)

$$D_{1,0}^T = \{\text{ILE, LII, LSI, IEI, ILI, LIE, LSE, IEE}\}$$

$$D_{1,0}^{\mathcal{E}} = \{\text{?Ne}^+, \text{?Ti}^-, \text{!Ti}^+, \text{?Ni}^+, \text{!Ni}^-, \text{!Te}^+, \text{?Te}^-, \text{!Ne}^-\}$$

$$D_{1,1}^T = \{\text{SEI, ESE, EIE, SLE, SEE, ESI, EII, SLI}\}$$

$$D_{1,1}^{\mathcal{E}} = \{\text{!Si}^-, \text{!Fe}^+, \text{?Fe}^-, \text{!Se}^-, \text{?Se}^+, \text{?Fi}^-, \text{!Fi}^+, \text{?Si}^+\}$$

1stAlpha / 1stGamma (D_2)

$$D_{2,0}^T = \{\text{ILE, SEI, ESE, LII, EIE, LSI, IEE, SLI}\}$$

$$D_{2,0}^E = \{?Ne^+, !Si^-, !Fe^+, ?Ti^-, ?Fe^-, !Ti^+, -Ne^-, ?Si^+\}$$

$$D_{2,1}^T = \{\text{SLE, IEI, SEE, ILI, LIE, ESI, LSE, EII}\}$$

$$D_{2,1}^E = \{!Se^-, ?Ni^+, ?Se^+, !Ni^-, !Te^+, ?Fi^-, ?Te^-, !Fi^+\}$$

2ndAbstract / 2ndInvolved (D_3)

$$D_{3,0}^T = \{\text{ILE, LII, EIE, SLE, ILI, LIE, EII, SLI}\}$$

$$D_{3,0}^E = \{?Ne^+, ?Ti^-, ?Fe^-, !Se^-, !Ni^-, !Te^+, !Fi^+, ?Si^+\}$$

$$D_{3,1}^T = \{\text{SEI, ESE, EIE, IEI, SEE, LIE, EII, IEE}\}$$

$$D_{3,1}^E = \{?Si^-, !Fe^+, !Ti^+, ?Ni^+, ?Se^+, ?Fi^-, ?Te^-, !Ne^-\}$$

2ndAlpha / 2ndGamma (D_4)

$$D_{4,0}^T = \{\text{ILE, SEI, ESE, LII, SLE, IEI, LSE, EII}\}$$

$$D_{4,0}^E = \{?Ne^+, !Si^-, !Fe^+, ?Ti^-, !Se^-, ?Ni^+, ?Te^-, !Fi^+\}$$

$$D_{4,1}^T = \{\text{EIE, LSI, SEE, ILI, LIE, ESI, IEE, SLI}\}$$

$$D_{4,1}^E = \{?Fe^-, !Ti^+, ?Se^+, !Ni^-, !Te^+, ?Fi^-, !Ne^-, ?Si^+\}$$

Additional Note

- Also check out the dichotomy table for the Reinin space Kimani White and Andrew Joynton have mapped out: <https://docs.google.com/document/d/1Qn8X3vOp2TJAo-RSwtYsFhsKsE6ATPJrnHYHft3ZZ6o/edit?tab=t.0>.
- And for an alternate arrangement of the Tencer-Minaev (TM) Table, check out Kimani White's iteration of the table, accessible here: <https://docs.google.com/document/d/1YTDf0oXVmxGEDrOLUyqZZz2lOIdw76yuWAA3ppjHMH0/edit?tab=t.0#heading=h.100owmjgo0e>.