

Introductory Exercises in South Indian *Solkattu*
with emphasis on *kanakku* ("calculation")

from many lessons with Fugan Dineen and David Paul Nelson

by Galen DeGraf

Key terms:

Solkattu - spoken rhythmic syllables coordinated with a *tala*

Tala - meter counted through cyclic hand gestures

Eka tala - tala type involving a clap and finger counts that begin with the pinky

Tisra - three

Khanda - five

Misra - seven

For more, see David Nelson, *Solkattu Manual* (Middletown, CT: Wesleyan University Press, 2008)

The *Mora*

a rhythmic "cadence" usually consisting of
 (statement)[gap](statement)[gap](statement)
 and ending on *sam*, the first beat of the *tala*

N.B. - practice long syllables first by articulating the space in between,
 e.g. for [tam₄] say [tam₂ m₂], for [tam₆] say [tam₂ m₂ m₂], etc.

Moras with a simple statement and various sizes of gap

(na) [tam₂] (na) [tam₂] (na) tam

(na) [tam₄] (na) [tam₄] (na) tam

(na) [tam₆] (na) [tam₆] (na) tam

(na) [tam₈] (na) [tam₈] (na) tam

(na) [tam₁₀] (na) [tam₁₀] (na) tam

Moras involving expansion and contraction

(ta ka di na)[tam₂]
 (ka di na)[tam₂]
 (di na)[tam₂]
 (na) tam

(na)[tam₂]
 (di na)[tam₂]
 (ka di na)[tam₂]
 (ta ka di na) tam

Four Speeds in *Tisra Jati Eka Tala*
 Three-beat cycle and four pulses per beat

Trikala ("three speeds")

Ta₄ ki₄ ta₄

Ta₂ ki₂ ta₂ Ta₂ ki₂ ta₂

Ta ki ta Ta ki ta Ta ki ta Ta ki ta

Mixed speeds

Ta₂ ki₂ ta₂ Ta ki ta Ta ki ta

Ta ki ta Ta ki ta Ta₂ ki₂ ta₂

Ta ki ta Ta₂ ki₂ ta₂ Ta ki ta

Ta₃ ki₃ ta₃ Ta ki ta

Ta ki ta Ta₃ ki₃ ta₃

Alternate syllables

Ta ka ·

Ta · ka

· Ta ka

Gopucca Exercise Mora in Tisra Jati Eka Tala
 Three-beat cycle and four pulses per beat

$$\left(\begin{array}{ccc} \text{Ta}_4 & \text{ki}_4 & \text{ta}_4 \\ \text{Ta}_3 & \text{ki}_3 & \text{ta}_3 \\ \text{Ta}_2 & \text{ki}_2 & \text{ta}_2 \\ \text{Ta} & \text{ki} & \text{ta} \end{array} \right) [\text{tam}_3]$$

With alternate syllables

$$\left(\begin{array}{ccc} \text{Ta}_4 & \text{ka}_4 & \cdot_4 \\ \text{Ta}_3 & \text{ka}_3 & \cdot_3 \\ \text{Ta}_2 & \text{ka}_2 & \cdot_2 \\ \text{Ta} & \text{ka} & \cdot \end{array} \right) [\text{tam}_3]$$

$$\left(\begin{array}{ccc} \text{Ta}_4 & \cdot_4 & \text{ka}_4 \\ \text{Ta}_3 & \cdot_3 & \text{ka}_3 \\ \text{Ta}_2 & \cdot_2 & \text{ka}_2 \\ \text{Ta} & \cdot & \text{ka} \end{array} \right) [\text{tam}_3]$$

$$\left(\begin{array}{ccc} \cdot_4 & \text{Ta}_4 & \text{ka}_4 \\ \cdot_3 & \text{Ta}_3 & \text{ka}_3 \\ \cdot_2 & \text{Ta}_2 & \text{ka}_2 \\ \cdot & \text{Ta} & \text{ka} \end{array} \right) [\text{tam}_3]$$

Four Speeds in *Khanda Jati Eka Tala* Five-beat cycle and four pulses per beat

Trikala ("three speeds")

Ta₄ ka₄ ta₄ ki₄ ta₄
 Ta₂ ka₂ ta₂ ki₂ ta₂ Ta₂ ka₂ ta₂ ki₂ ta₂ ta₂
 Ta ka ta ki ta Ta ka ta ki ta Ta ka ta ki ta Ta ka ta ki ta

Mixed speeds

Ta₂ ka₂ ta₂ ki₂ ta₂ Ta ka ta ki ta Ta ka ta ki ta
 Ta ka ta ki ta Ta ka ta ki ta Ta₂ ka₂ ta₂ ki₂ ta₂
 Ta ka ta ki ta Ta₂ ka₂ ta₂ ki₂ ta₂ Ta ka ta ki ta
 Ta₃ ka₃ ta₃ ki₃ ta₃ Ta ka ta ki ta
 Ta ka ta ki ta Ta₃ ka₃ ta₃ ki₃ ta₃

Alternate syllables

din · ta ki ta
 din · tan · gu

Gopucca Exercise Mora in Khanda Jati Eka Tala
Five-beat cycle and four pulses per beat

$$\left(\begin{array}{ccccc} \text{Ta}_4 & \text{ka}_4 & \text{ta}_4 & \text{ki}_4 & \text{ta}_4 \\ \text{Ta}_3 & \text{ka}_3 & \text{ta}_3 & \text{ki}_3 & \text{ta}_3 \\ \text{Ta}_2 & \text{ka}_2 & \text{ta}_2 & \text{ki}_2 & \text{ta}_2 \\ \text{Ta} & \text{ka} & \text{ta} & \text{ki} & \text{ta} \end{array} \right) [\text{tam}_5]$$

With alternate syllables

$$\left(\begin{array}{ccccc} \text{din}_4 & \cdot_4 & \text{ta}_4 & \text{ki}_4 & \text{ta}_4 \\ \text{din}_3 & \cdot_3 & \text{ta}_3 & \text{ki}_3 & \text{ta}_3 \\ \text{din}_2 & \cdot_2 & \text{ta}_2 & \text{ki}_2 & \text{ta}_2 \\ \text{din} & \cdot & \text{ta} & \text{ki} & \text{ta} \end{array} \right) [\text{tam}_5]$$

$$\left(\begin{array}{ccccc} \text{din}_4 & \cdot_4 & \text{tan}_4 & \cdot_4 & \text{gu}_4 \\ \text{din}_3 & \cdot_3 & \text{tan}_3 & \cdot_3 & \text{gu}_3 \\ \text{din}_2 & \cdot_2 & \text{tan}_2 & \cdot_2 & \text{gu}_2 \\ \text{din} & \cdot & \text{tan} & \cdot & \text{gu} \end{array} \right) [\text{tam}_5]$$

Four Speeds in *Misra Jati Eka Tala* Seven-beat cycle and four pulses per beat

Trikala ("three speeds")

Ta₄ ka₄ di₄ mi₄ ta₄ ki₄ ta₄
 Ta₂ ka₂ di₂ mi₂ ta₂ ki₂ ta₂ Ta₂ ka₂ di₂ mi₂ ta₂ ki₂ ta₂
 Ta ka di mi ta ki ta Ta ka di mi ta ki ta Ta ka di mi ta ki ta Ta ka di mi ta ki ta

Mixed speeds

Ta₂ ka₂ di₂ mi₂ ta₂ ki₂ ta₂ Ta ka di mi ta ki ta Ta ka di mi ta ki ta
 Ta ka di mi ta ki ta Ta ka di mi ta ki ta Ta₂ ka₂ di₂ mi₂ ta₂ ki₂ ta₂
 Ta ka di mi ta ki ta Ta₂ ka₂ di₂ mi₂ ta₂ ki₂ ta₂ Ta ka di mi ta ki ta
 Ta₃ ka₃ di₃ mi₃ ta₃ ki₃ ta₃ Ta ka di mi ta ki ta
 Ta ka di mi ta ki ta Ta₃ ka₃ di₃ mi₃ ta₃ ki₃ ta₃

Alternate syllables

din · ta ka ta ki ta
 din · ta · tan · gu

Gopucca Exercise Mora in Misra Jati Eka Tala
Seven-beat cycle and four pulses per beat

$$\left(\begin{array}{cccccc} \text{Ta}_4 & \text{ka}_4 & \text{di}_4 & \text{mi}_4 & \text{ta}_4 & \text{ki}_4 & \text{ta}_4 \\ \text{Ta}_3 & \text{ka}_3 & \text{di}_3 & \text{mi}_3 & \text{ta}_3 & \text{ki}_3 & \text{ta}_3 \\ \text{Ta}_2 & \text{ka}_2 & \text{di}_2 & \text{mi}_2 & \text{ta}_2 & \text{ki}_2 & \text{ta}_2 \\ \text{Ta} & \text{ka} & \text{di} & \text{mi} & \text{ta} & \text{ki} & \text{ta} \end{array} \right) [\text{tam}_7]$$

With alternate syllables

$$\left(\begin{array}{cccccc} \text{din}_4 & \cdot_4 & \text{ta}_4 & \text{ka}_4 & \text{ta}_4 & \text{ki}_4 & \text{ta}_4 \\ \text{din}_3 & \cdot_3 & \text{ta}_3 & \text{ka}_3 & \text{ta}_3 & \text{ki}_3 & \text{ta}_3 \\ \text{din}_2 & \cdot_2 & \text{ta}_2 & \text{ka}_2 & \text{ta}_2 & \text{ki}_2 & \text{ta}_2 \\ \text{din} & \cdot & \text{ta} & \text{ka} & \text{ta} & \text{ki} & \text{ta} \end{array} \right) [\text{tam}_7]$$

$$\left(\begin{array}{cccccc} \text{din}_4 & \cdot_4 & \text{ta}_4 & \cdot_4 & \text{tan}_4 & \cdot_4 & \text{gu}_4 \\ \text{din}_3 & \cdot_3 & \text{ta}_3 & \cdot_4 & \text{tan}_3 & \cdot_4 & \text{gu}_3 \\ \text{din}_2 & \cdot_2 & \text{ta}_2 & \cdot_4 & \text{tan}_2 & \cdot_4 & \text{gu}_2 \\ \text{din} & \cdot & \text{ta} & \cdot_4 & \text{tan} & \cdot_4 & \text{gu} \end{array} \right) [\text{tam}_7]$$