

potencia acústica etc

$$W(I)(S) \quad dB_{SIL} = 10 \log \left(\frac{I_?}{1 \times 10^{-12}} \right) \rightarrow I_? = \left[10^{\left(\frac{dB_{SIL}}{10} \right)} \right] (1 \times 10^{-12})$$

$$I = W / m^2$$

$$S = 4 \pi r^2$$

$$I = P_{a^2}$$

$$dB_{SPL} = 20 \log \left(\frac{P_{a?}}{2 \times 10^{-5}} \right) \Rightarrow P_{a?} = \left[10^{\left(\frac{dB_{SPL}}{20} \right)} \right] (2 \times 10^{-5})$$

suma de dB

$$10 \log \left(10^{\left[\frac{N_1}{10} \right]} + 10^{\left[\frac{N_2}{10} \right]} + 10^{\left[\frac{N}{10} \right]} \dots \right)$$

ley Cuadrado Inverso

$$P_{perdida} = 20 \log \left(\frac{\text{distancia}_1}{\text{distancia}_2} \right) \begin{matrix} \text{Inicial} \\ \text{Final} \end{matrix}$$

dB - Perda

$$vel_{sonido} = Ref + 0.6 (C^{\circ})$$

$$\lambda = \frac{vel_{sonido}}{freq}$$

$$vel_{sonido} = (nC^{\circ}) (0.6) + Ref$$

$$Ref = 331.4 \frac{m}{s}$$

$$dB = 20 \log \left(\frac{x_{P_a}}{Ref_{P_a}} \right)$$

$$Ref = 2 \times 10^{-5}$$

$$= 0.00002$$

$$P_a = \frac{N}{m^2}$$

$$\lambda = \frac{Ref + 0.6 (C^{\circ})}{f}$$

$$V_s = 331.4 m/s + 0.6 (temp)$$

$$V_{ef} = Ref + 0.6 (temp)$$

$$= Ref - vel + 0.6 (temp)$$

$$temp (0.6) = Ref - vel$$

$$\cancel{temp = \frac{Ref - vel}{0.6}}$$

$$temp = \frac{vel - Ref}{0.6}$$

Ma² ^{hay Tono?}

menor
Melodica

menor
Armonica

escalas artificiales:

1 Janico
1 C^{maj7} *
(1,2,3,4,5,6,7)
9, 13

2 Dorico (C^{m7}) *
(1,2,3,4,5,6,7)
9 11 13

3 Frigio (C^{m7})
(1,2,3,4,5,6,7)
11

4 Lidio (C^{maj7})
(1,2,3,4,5,6,7)
9 #11 13

5 Mixolidio (C⁷) *
(1,2,3,4,5,6,7)
9 13

6 Eolico (C^{m7})
(1,2,3,4,5,6,7)
9 11

7 Locrio (C^{m7b5})
(1,2,3,4,5,6,7)
11

1 men. Mel (C^{maj7}) *
(1,2,3,4,5,6,7)
9 11 13

2 dorico b9 (friso b6) (C^{m7}) *
(1,2,3,4,5,6,7)
11 13

3 Lidio aug. (C^{maj7} #5)
(1,2,3,4,5,6,7)
9 #11

4 Lidio b7 (C⁷)
(1,2,3,4,5,6,7)
9 #11 13

5 mixo 9 b13 (C⁷) *
(1,2,3,4,5,6,7)
9 11 b13

6 Locrio b9 (C^{m7b5})
(1,2,3,4,5,6,7)
9 11 b13

7 Alt. dominante (C⁷ alt. b9 #9, b5, b13)
(1,2,3,4,5,6,7)
[todas dirp] b13

2 men Arm. (C^{maj7}) *
(1,2,3,4,5,6,7)
9 11

2 Locrio b9 (C^{m7b5}) *
(1,2,3,4,5,6,7)
11 13

3 Janico Aug. (C⁷ #5)
(1,2,3,4,5,6,7)
9

4 Dorico #11 [b4] (C^{m7})
(1,2,3,4,5,6,7)
9 #11 13

5 mixo b9 b13 (C⁷) *
(1,2,3,4,5,6,7)
b9 11 b13

6 Lidio #9 (C^{maj7})
(1,2,3,4,5,6,7)
#9 #11 13

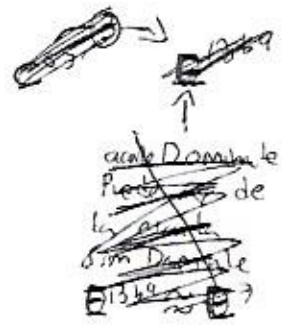
7 Alt bbb7 (C⁷)
(1,2,3,4,5,6,7)
b13

Sim disminuida
"Sim. dim."

T, ST
(1,2,3,4,5,6,7) (b8)
9 11 b13 7

Sim. Dominante
"Sim. Dom"

ST, T
b9, #9, #11, 13



2-5-1
Ma¹

2-5-1
men Mel.

2-5-1
men Arm.

D^{m7} G⁷ C^{maj7}
Dorico mixo Janico
(9,11,13) (9,13) (9,13)

D^{m7} G⁷ C^{maj7}
dorico mixo 9 b13 men mel.
(11,13) (9, b13) (9, 11, 13)

D^{m7b5} G⁷ C^{maj7}
locro b13 mixo 9 b13 men arm.
(11,13) (b9, b13) (9, 11)

Dominantes Secundarios

II⁷/II⁷ → II⁷/II⁷ → II⁷/IV⁷ → II⁷/V⁷ → II⁷/VI⁷
men mel. men Arm. Ma¹ ma¹ men Arm.
mixo 9 b13 mixo b9 b13 mixo 9,13 mixo 9,13 mixo b9 b13

Si un Dom. secund.
resuelve a un
acorde Ma¹

usa (9,13), s. resuelve
a menor usa (b9 b13)
y vice V/II usa (9 b13)
mixo 9 13 → Ma¹ (I/II, V/VI)
mixo b9 b13 → men (II/III, VI/VII)
mixo 9 b13 → II/II

①	②	③	④	⑤	⑥	⑦
6 eolico 9,11 ✓	3 Frgto 11 ✓	5 mixo 9,13 ✓	1 lonco 9,13 ✓	7 lonco 11 ✓	4 lido 9,11,13 ✓	2 donco 9,11,13 ✓
6 eolico 9,11 ✓	4 lido 9,11,13 ✓	1 lonco 9,13 ✓	7 lonco 11 ✓	2 donco 9,11,13 ✓	6 mixo 9,13 ✓	3 Frgto 11 ✓
2 donco 9,11,13 ✓	5 mixo 9,13 ✓	3 Frgto 11 ✓	4 lido 9,11,13 ✓	7 lonco 11 ✓	4 lonco 9,13 ✓	6 eolico 9,11 ✓

(lonco (9,13) 1MA)
(lonco Aug (9) 3mARMO)

(donco (9,11,13) 2MA)
(donco b9 (11,13) 2mMEL)
(donco #11 (9,11,13) 4mARMO)

(Frgto (11) 3MA)

(Lido (9,11,13) 4MA)
(Lido aug (9,11) 3mMEL)
(Lido b7 (9,11,13) 4mMEL [SUBS])
(Lido #9 (#9,11,13) 6mARMO)

(Mixo (9,13) 5MA)
(Mixo f9, b13 5mMEL)
(Mixo b9 b13 5mARMO)

(eolico (9,11) 6MA)

(lonco (11) 7MA)
(lonco b9 (9,11 b13) 7mMEL)
(lonco b6 (11,13) 2mARMO)

~~lonco (11) 7MA~~
~~lonco b9 (9,11 b13) 7mMEL~~
~~lonco b6 (11,13) 2mARMO~~

lonco lonco Aug	donco donco b9 donco #11	lido lido aug lido b7 lido #9
mixo 9,13 mixo 9 b13 mixo b9 b13	lonco lonco b9 lonco b6	