

Selection of Teeth

Professor A.D. Walmsley

- Age
- Sex
- Personality

AGE

Teeth wear with age
Young people have intact teeth
Stained teeth

SEX

Females
have rounded teeth
Males
blunted, square
shaped

so it is said!
but even so leads to a
good appearance

PERSONALITY

Bold and large
teeth match an
outgoing
person

Smiles



Smiles



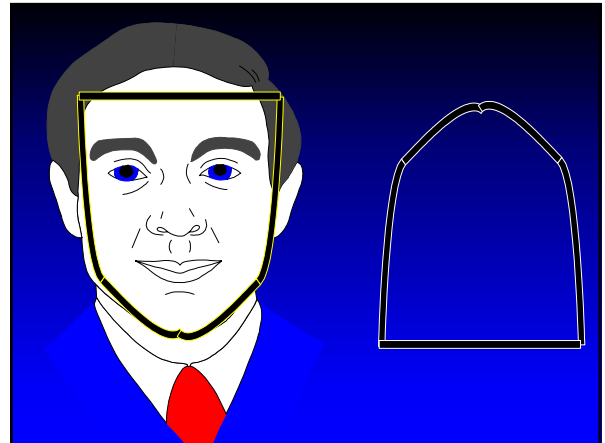
Selecting Teeth

- Shape
- Size
length
width

Shape

Classification of Leon Williams (1914)

Upper central incisor is model tooth. If tooth enlarged, inverted and incisal edge placed on the brow, neck of tooth on patient's chin then outline of tooth will coincide with that of face.



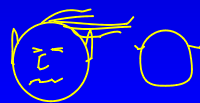
(1) Square



(2) Tapering



(3) Rounded



Length

No hard and fast rules but consider

- Length of upper lip
- Mobility of lip when smiling
- Vertical height of occlusion
- Overbite
- Cervical step in premolar teeth
- Age
- Previous dentures



Width

Relative to canine width

1. Position of canines relative to facial structures

WIDTH

2. Biometric guidelines (Watt, 1967)

1 mm
Canines

In general teeth vary in size and are larger than generally realised. Common error is to place small anterior teeth which makes them look false

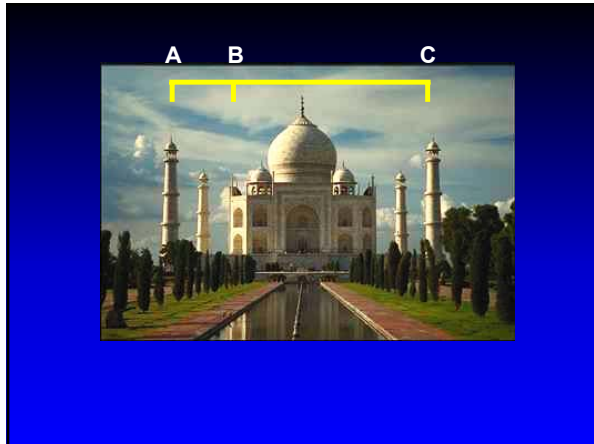
Golden Proportion

A B C

0.168 1

$$\frac{AB}{BC} = \frac{0.168}{1} = 0.168$$

$$\frac{BC}{AC} = \frac{1}{1.168} = 0.168$$



Colour

Follow colour of skin / hair / eyes

Natural teeth remain constant in colour but darken with staining and wear of enamel with yellow dentine more prominent

- neck more colour than incisal edge
 - Incisal edge is translucent
 - Incisors lightest
 - Canines darker
- All this is appreciated by the manufacturer. Clinician selects anterior tooth.
- The rest follows

Three Dominant Colours

Yellow - Grey - Opal

Shorter Wavelength
(violet/blue/green)

further away than those of

Longer wavelength
(yellow/orange/red)

Intensity of Illumination
Purkinje's effect

With Time the Retina becomes

More sensitive to v/b/g

Less sensitive to y/o/r

Commercial Shade Guide

Acrotone

Shade Guide	01, 02, 03, 59, 61, 62 65, 66, 67, 69, 77, 81
Anterior tooth guide	2c (smallest) PW6 (largest) 23 sizes
Posterior tooth guide	Posteriors (13 sizes) Range of narrow, autoset and wide

(1) Posterior Tooth Selection

Anatomical	Non-anatomical
Aesthetic	Non-aesthetic
Cusps present	Flat
Working & Balancing sides maintained	Greater freedom of movement of mandible
More efficient food penetration	

Other types of tooth

- Hall's inverted teeth
- Cutter bars

(2) Posterior Tooth Selection

Porcelain	Acrylic
High wear resistance	Easily wear
Hard to modify	Easy to modify
Clatter/click in use	Absorb load better
Do not bond to acrylic base	Bonds to base

Choice of teeth

- posteriors narrow or wide
- reduce occlusal load on
ridge