

Mehrstärken- Kontaktlinsen

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Situation on the market

			2004 			2005 
Kontaktlinsen-Träger ab 16 Jahren	3.4 Mio	2.5 Mio	745'000	4.0 Mio	0.8 Mio	
% aller CL Träger						
16-24	9%	6%	20%	10%	15%	22%
25-34	14%	8%	18%	13%	26%	21%
35-49	8%	6%	13%	6%	13%	11%
Total 16-49	10%	7%	16%	9%	17%	18%
50+	3%	3%	4%	2%	3%	6%

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Blind-Date

- Get in contact with your patients, you have to invest in those „relationships“
- A good patient history goes a long way and needs a complete anamnese

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Your expectations

- Living a realistic optimism
- Show all compromises of all forms of vision correction
- To cover 80% of the patients needs, leads in 100% success

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Patients needs and wishes

- Listen very carefully and active
- Every single „little something“ or habit is important
- Ask open questions
- Give your patient and yourself enough time

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Patients needs and wishes



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Additional objective Findings

- Lid, position and consistent
- Pupil diameter
- Depth of the anterior chamber
- Tear layer - quality and quantity

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Forms of corrections

- Monovision
- Aplanate Systems
- Simultaneous Systems
- Translating Systems

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Monovision Follow-up

- Near target with a plus trial lens in front of the non-dominant eye
- Target for distance with the same lens situation
- If the vision's not comfortable in one of these situations, consider other options

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Modifide Monovision

- Necessary if intermediate distance is missing
- The dominant eye still need to be corrected as good as possible for distance
- Adjust a bifocal solution in the non-dominant eye

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Aplanate Systems

- Using aspheric optic designs, leading in the correction of the optical aberrations, achieve a better depth perception
- Useful up to max. Addition of + 1.5dpt
- Not centered or dehydrated contact lenses will extremely decrease vision acuity

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Simultaneous Systems

- Concentric progressive / degressive correction changes from center to the periphery (aspheric / multifocal designs)

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Multifocal, Simultaneous

Korrektionsprinzip

Maßstab 1:4

physikalisch

Frontasphär. Fläche CD



optisch

multifokal

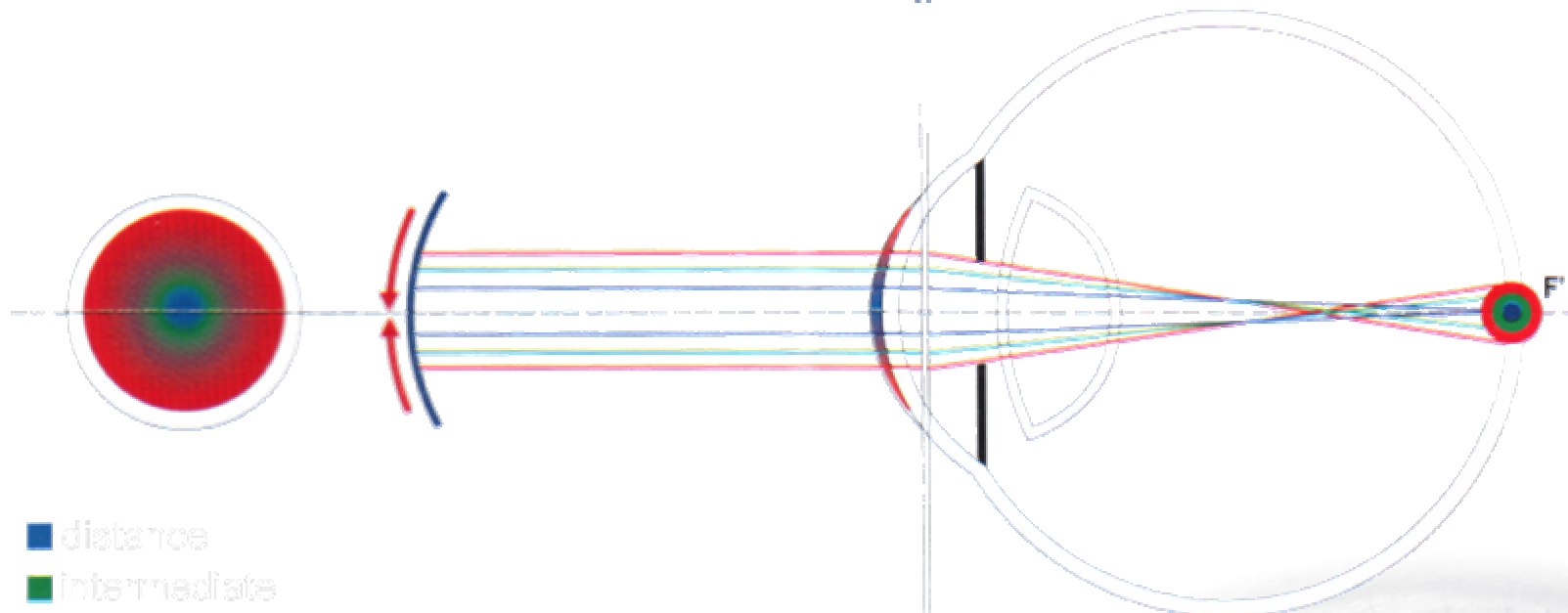


visuell

simultan-multivisuell



H



■ distance

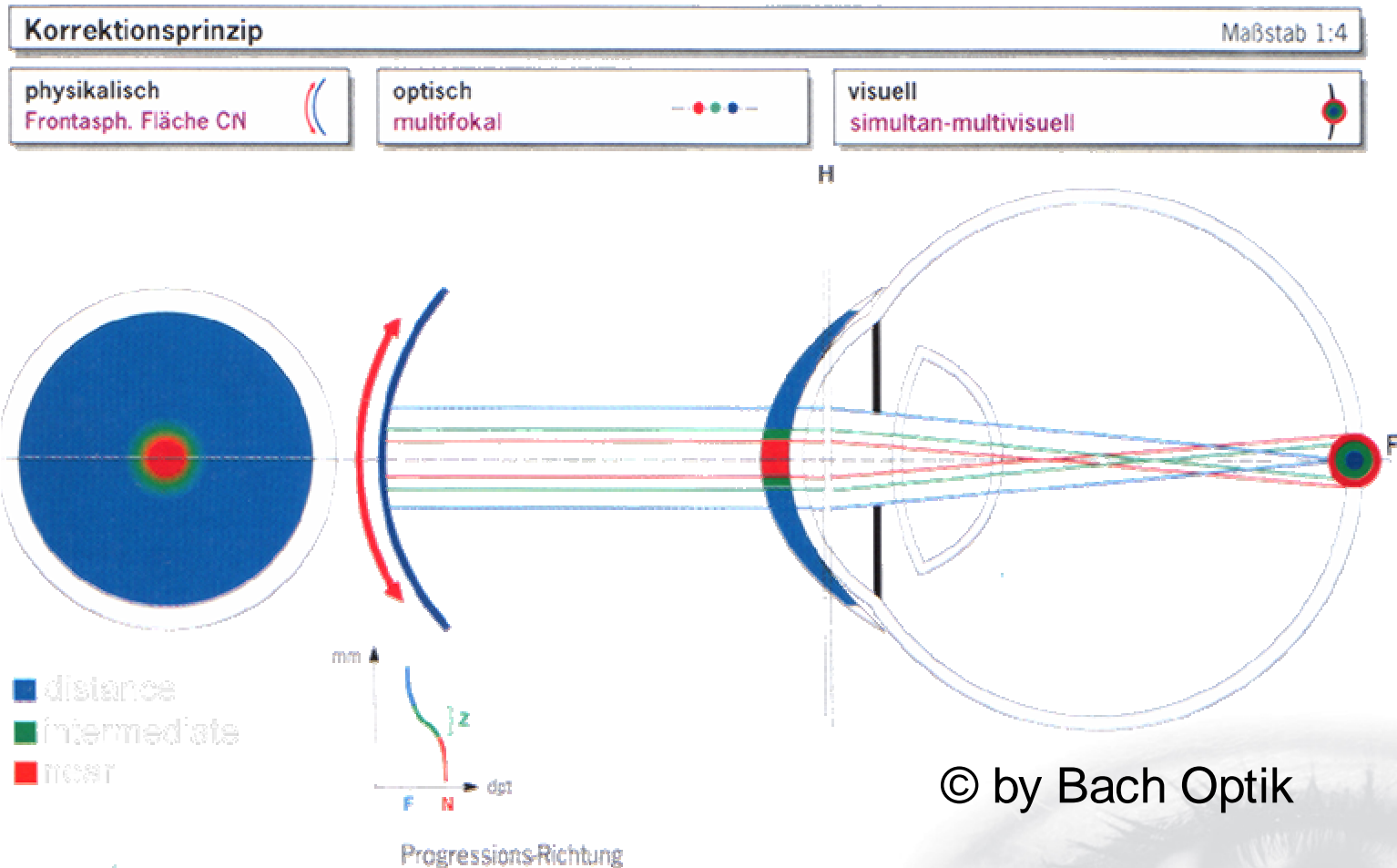
■ intermediate

■ near

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Multifocal, Simultaneous



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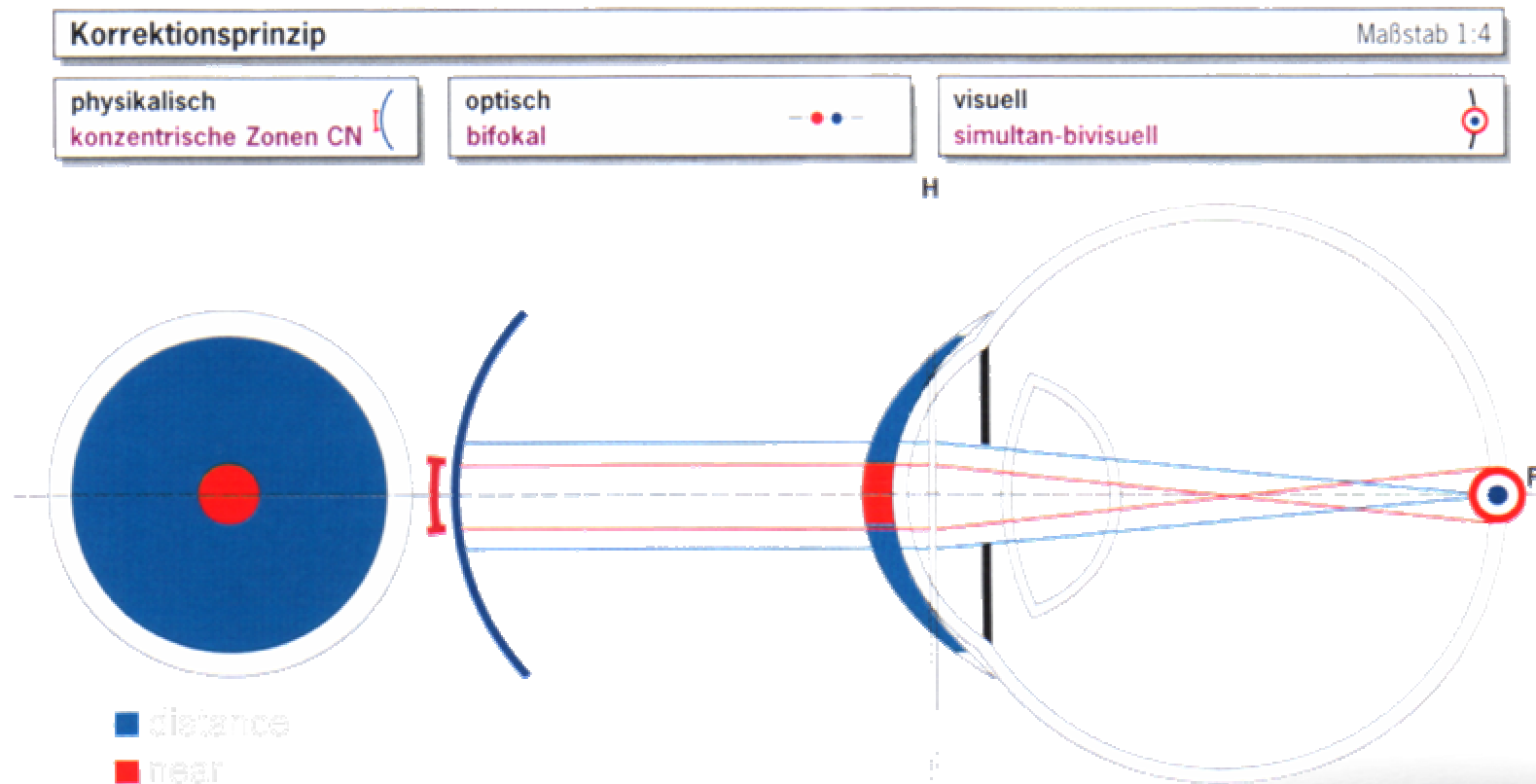
Simultaneous Systems

- Concentric rings of distance and near correction (bifocal)

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Bifocal, Simultaneous



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Indications for simultaneous CL

- Deep lower lid position / small lid opening
- Distance and intermediate vision tasks
- Requires near vision in other than 270°
- Big pupil diameter / flat anterior chamber

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Disadvantages of simultan. CL

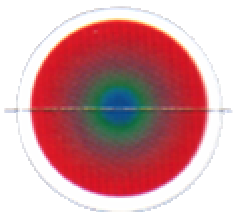
- Decreased contrast sensitivity, especially with uncorrected astigmatism
- Dehydration of Soft-CL decrease contrast sensitivity additionally
- All designs are more or less pupil size related

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Simultaneous, multifocal Design

- Low Addition up to +1.75dpt
- Hyperopia
- High night vision demand
- Low / moderate astigmatism



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Simultaneous, bifocal Design

- Higher Addition than +1.75dpt
- No intermediate vision demands
- Minimal night vision demands



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Simultaneous CL fitting pearls

- Golden Rule: Assess vision binocularly
- Excellent lens centration
- Gas permeable contact lenses (GP)
 - thin edge and big diameter (perilimbal / miniscleral GP Designs)
 - $DK > 100$, makes Continuous Wear possible (geriatric / pediatric solutions)

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Simultaneous CL fitting pearls

- Soft-CL only available with very low DK's, except Purevision Multifocal
- Chose the near optic zone smaller on the dominant eye (Small adjustments in optic zone diameters lead in dramatic visual changes for your patient)
- Better contrast sensitivity achieved with lower Addition on dominant eye

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Translating Systems

- Classical design as known from the bifocal spectacles

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Translating Systems

Korrektionsprinzip

Maßstab 1:4

physikalisch
Segment

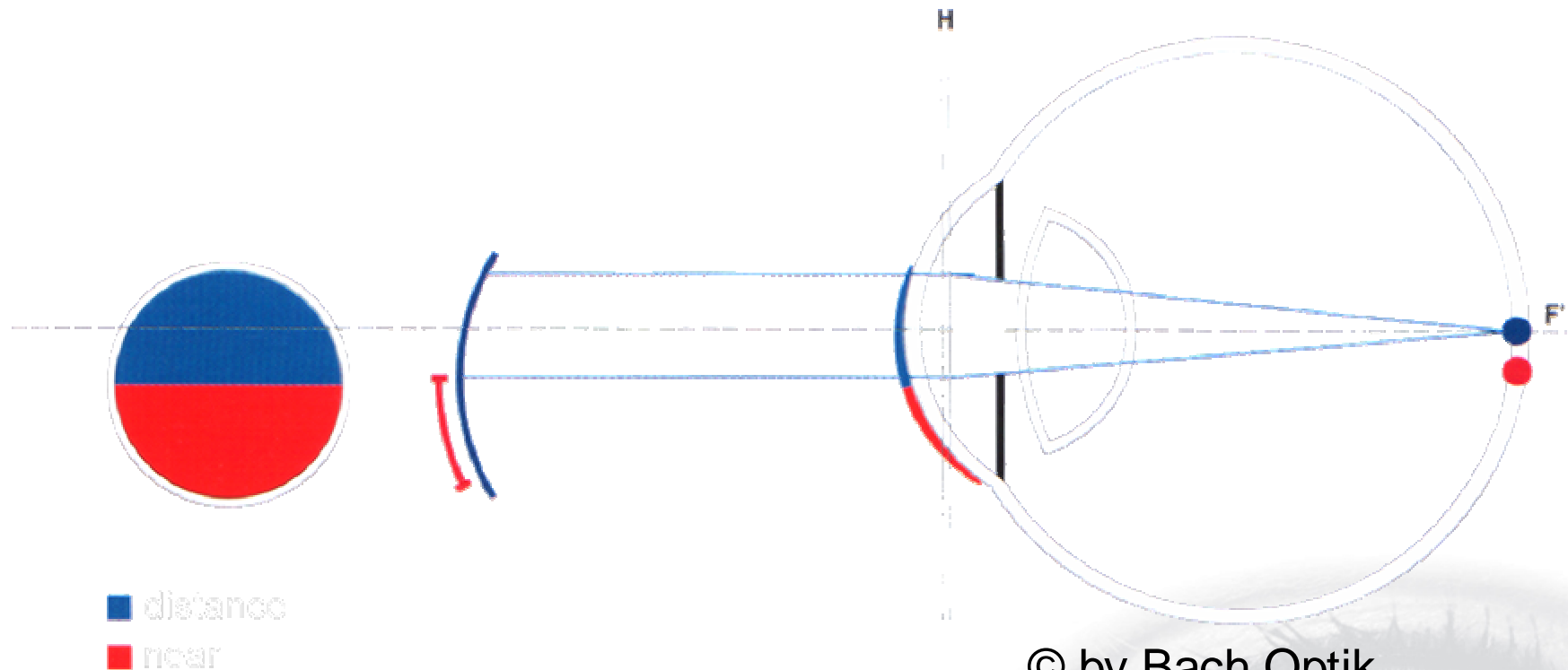


optisch
bifokal



visuell
alternierend

a) Situation Fernsicht



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Translating Systems

Korrektionsprinzip

Maßstab 1:4

physikalisch
Segment

optisch
bifokal

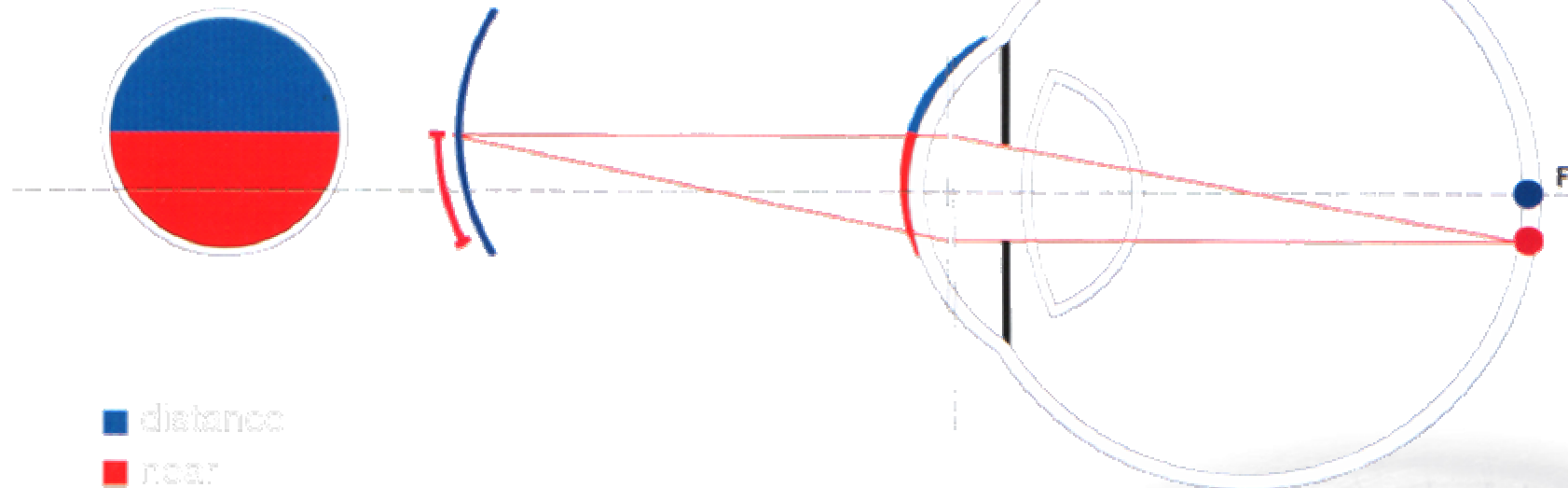
— • • —

visuell

alternierend b) Situation Nahsicht



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Indications for transl. Systems

- High contrast sensitivity demand
- High distance and near demand
- Moderate to high myopia and astigmatism
- Unrelated to pupil size and anterior chamber depth



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Disadvantages of translating CL

- Moderate vertical movement of CL necessary
- And so, foreign-body sensation will be increased
- Intermediate vision demands not included



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Disadvantages of translating CL

- Near target only visible in down gaze
- As a consequence distance vision not possible in down gaze
- Because of the amount of movement needed, normally impossible for soft contact lenses



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Translating Design: fitting pearls

- Perfect fitted back surface (3+9 o'clock staining) especially in cases with an astigmatic cornea topography
- Don't use a too big size of the vertical diameter of CL

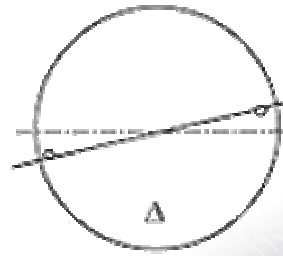
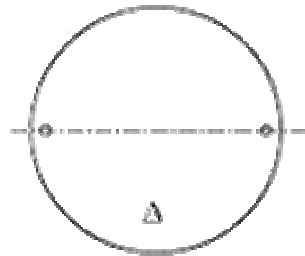


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Translating Design: fitting pearls

- Rapid drop of CL after blink, achieved by oval size of the CL in 90°
- The position of the lower lid in mind, pre-turn the Segment edge

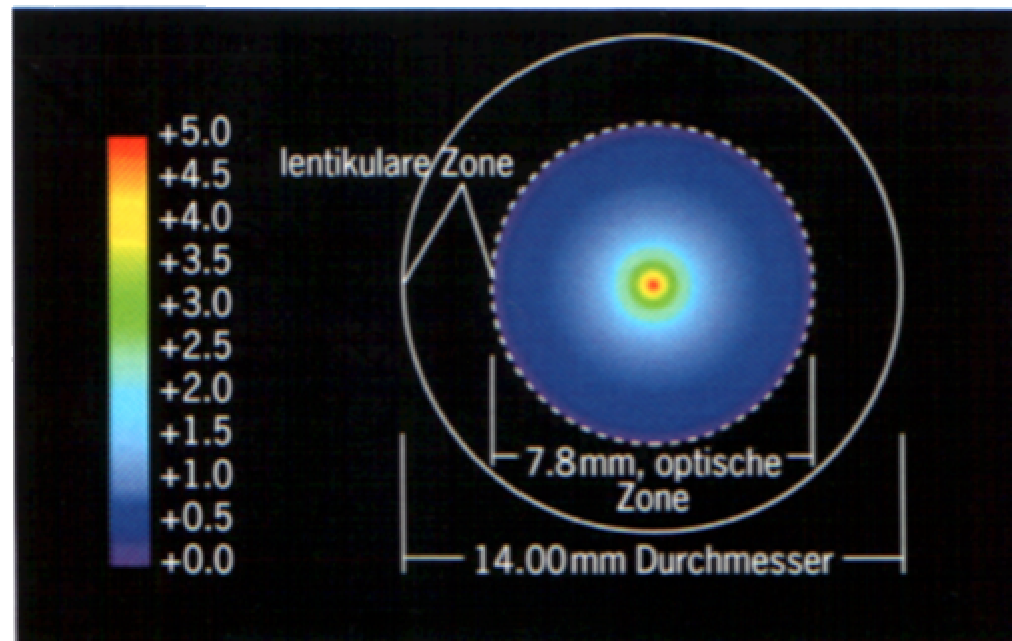


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Disposable contact lenses

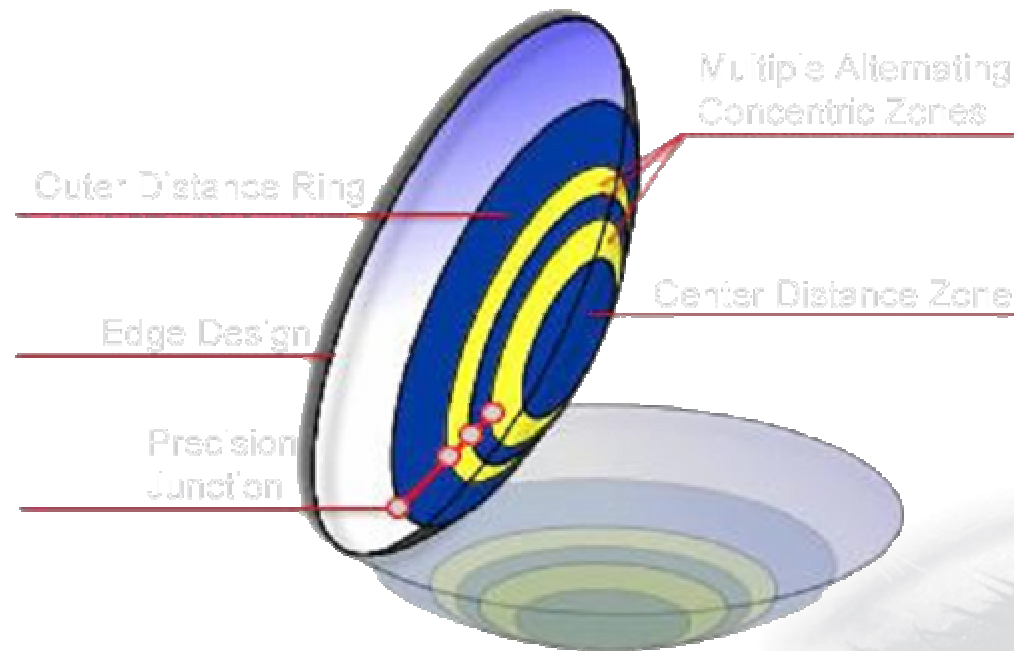
- Near central, with degressive power changes (Focus Progressiv™, Purevision Multifocal™, etc)



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Disposable contact lenses

- Distance central, multiple concentric rings (Acuvue Bifokal™)

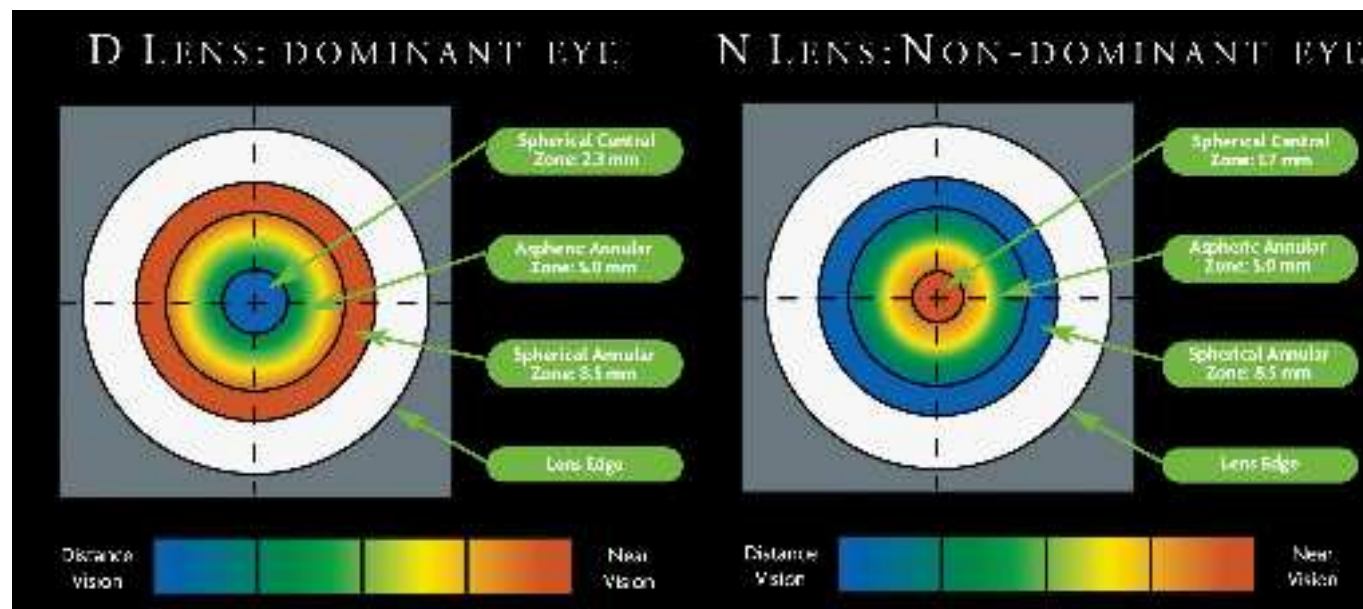


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Disposable contact lenses

- Combination of distance and near central, with degressive or progressive Design (Proclear Multifokal™ System)



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Disposable contact lenses

- You need to know the advantages and disadvantages of your used systems
- Play with the different available CL-designs on the market
- After all, still pay attention to the fitting recommendations of the manufacturer

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Disposable: Golden rule

- Excellent centration needed
- Assess vision binocularly, under normal light condition
- Now since 2008 Proclear in Astigmatic Design available
- DK mostly absolutely bad (HEMA!)
 - Exception Purevision Multifocal (Dk/t 120)

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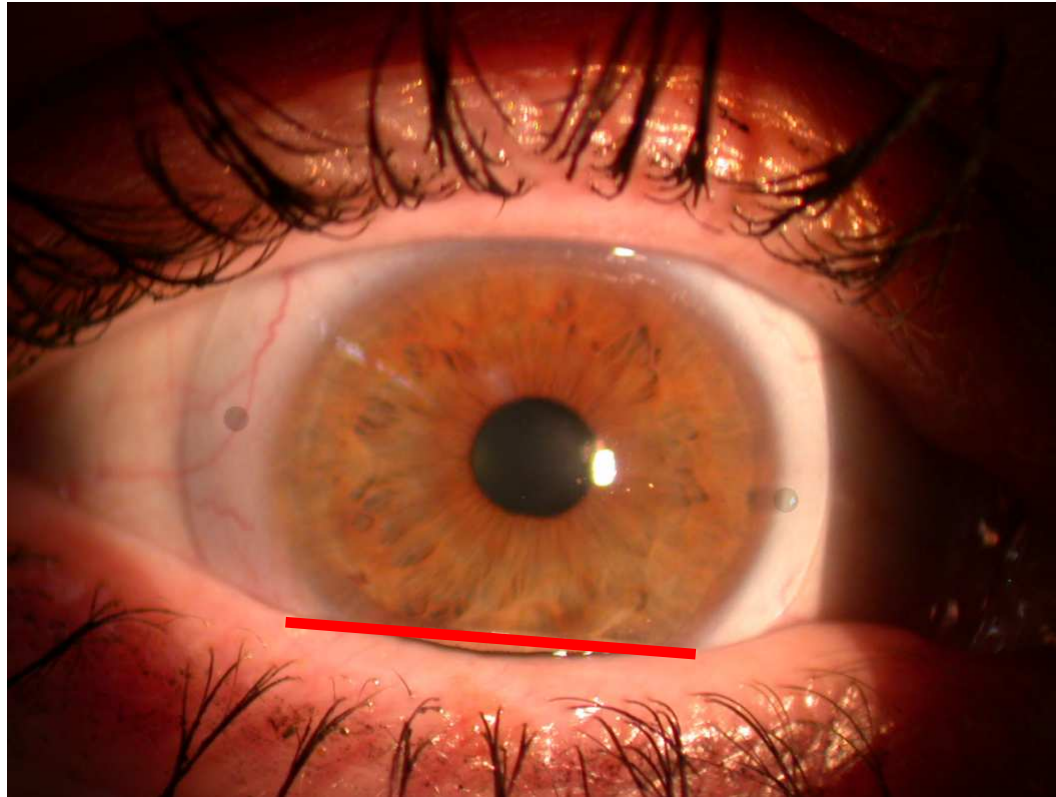
Disposable fitting cascade

- Full power Addition on each eye
- Modified Bifocal:
lower Add on dominant, full Add on non-dominant eye
- Using different Designs:
DC / multifocal on dominant eye
NC / bifocal on non-dominant eye

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Translating Soft-CL (Triton™)



- Manufacturer Gelflex, Australia

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Translating Soft-CL (Triton™)

- Horizontal Diameter 14.5 or 15.0
- Vertical Diameter 12.90 or 13.50
- Central radius with diameter 14.50:
flattest cornea radius plus 0.8mm
- All Parameters can be changed individually

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Translating Soft-CL (Triton™)

- Consistent, position, sensitivity and the angle of the lower lid margin are important
- If the vision gets worse after putting the Triton on the eye, the CL is too steep fitted
- Pay attention on good translation in down gaze

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Translating Soft-CL (Triton™)



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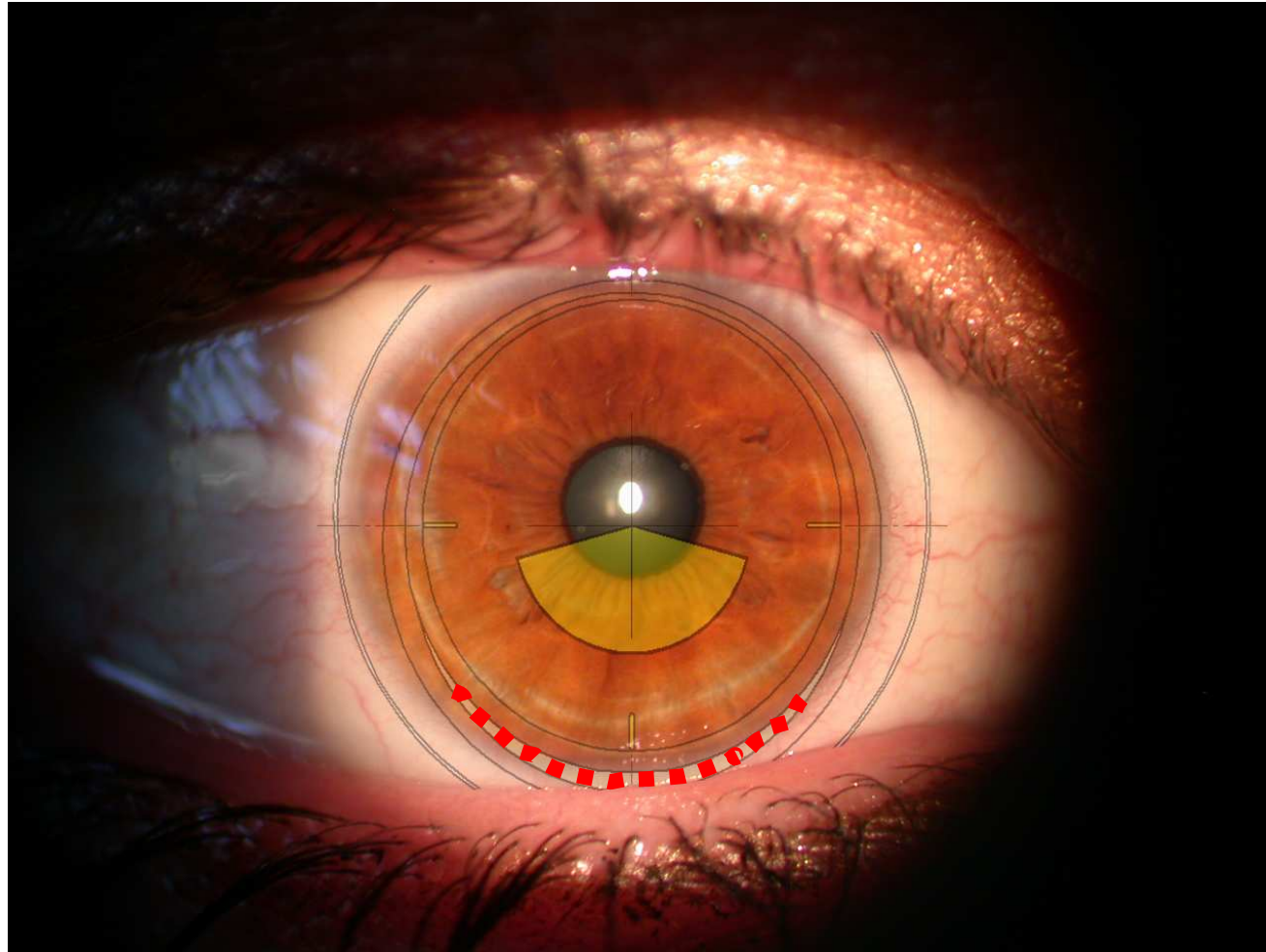
Transl. Soft (Viso Royal™)

- Translating Design like Presbylite™ GP
- Indication is given as by the Triton™, but is distinguished by a more comfortable Design in the area of the lower lid

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Transl. Soft (Presbylite™ soft)



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The Future

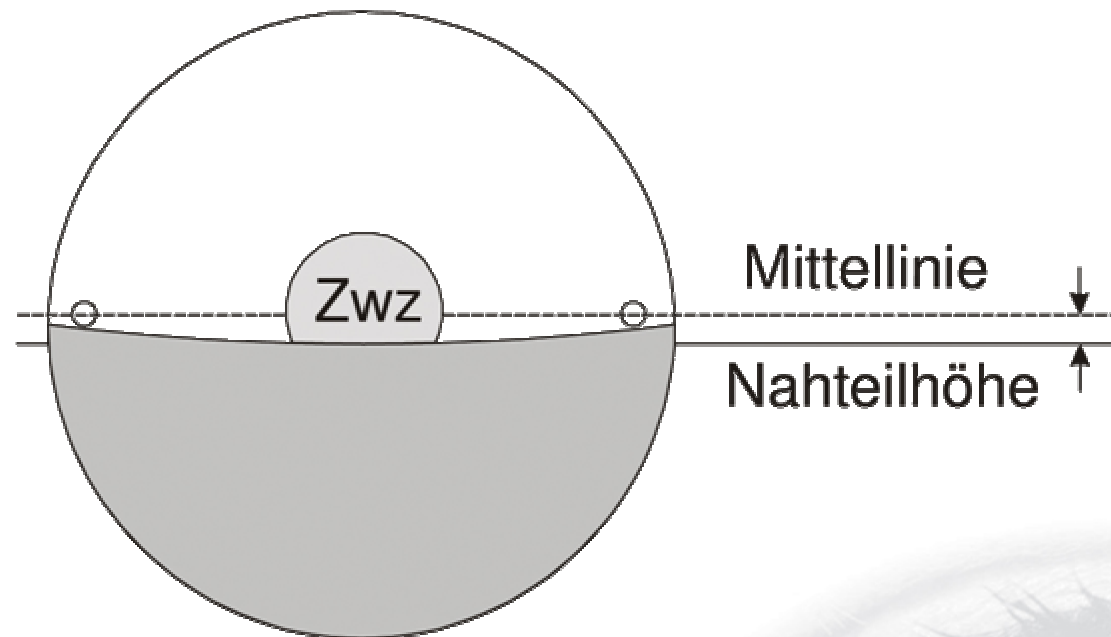
- Siliconhydrogel, individual contact lenses in 3month or 6month replacement schedule
- Orthokeratology
 - CRT Multifokal™ (Paragon)
 - Nypon Mulftifokal™

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The Future

- Translating-Simultaneous Design
 - (Falco Kontaktlinsen BA, Switzerland)



Zwz = Zwischenzone

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