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I.51 Relation between spinal nerve root level and movements (Cole)
I.52 Fetal thumb sucking
I.53 Fetal position (infant)
I.54 Balasana: Child’s Pose
I.55 Somites and embryo segmentation, 2 and 5 weeks, (Dart³)
I.56 Spiral muscles, embryo and adult (Dart³)
I.57 The whispered ah and ramifications of the cranial nerves (Murray)
I.58 Head and neck anatomy

Book I introduces a wide variety of topics further examined throughout the following volumes, including the brain, the twelve cranial nerves, and the neuro-muscular-skeletal anatomy of the human body. Also presented in Book I are Raymond Dart’s anatomical studies, human ontogeny and evolution, movement, and emotion, which includes an examination of the Whispered ‘ah’, the startle pattern, and the limbic system. These connections illustrate the concept of the “head leading”, and the psycho-physical unity of the human organism.

Book II
II.1 Introductory notes (Murray)
II.2 Fetal thumb sucking
II.3 Fetal position (infant)
II.4 Fetal position (adult)
II.5 Fetal position (adult)
II.6 Infant, extension, 3.5 months
II.7 Infant, extension, aided
II.8 Infant, underwater
II.9 Birth spiral
II.10 Developmental Profile, from Institute for the Advancement of Human Potential (IAHP)
II.11 Infant walking, aided
II.12 Infant walking, aided by F.M. Alexander
II.13 Child crawling, standing, walking
II.14 Walking development, 11-37 weeks (McGraw)
II.15 Walking development, 58-107 weeks (McGraw)
II.16 Walking development, 58 weeks (McGraw)
II.17 Walking development, 82 weeks (McGraw)
II.18 Walking development, 107 weeks (McGraw)
II.19 Prone locomotion development
II.20 IAHP Sensory Development, from IAHP Developmental Profile (Institute for the Advancement of Human Potential)
II.21 Johnny, on boxes (McGraw)
II.22 Johnny - on steep slide (McGraw)
II.23 Walking development, 11-107 weeks (McGraw)
II.24 Baby looking (Goldberg, Ahern, Murray)
II.25 Vertebrate pattern of evolution (Halstead)
II.26 The Attainment of Poise (excerpt) and evolution (Dart³)
II.27 Dart-Alexander Procedure (Murray, 1967)
II.28 Dart Procedure, fetal upwards (Johnston)
II.29 Dart Procedure, fetal upwards, mobility vs security (Murray: to accompany Johnston photos, p. II.28)
II.30 Skeleton of head, neck, and back: posterior view
II.31 Back musculature, interspinal (layer 1, deepest layer)
II.32 Back musculature, longissimus (layer 2)
II.33 Back musculature: layers 3 and 4 (Dimon)
II.34 Back musculature, trapezius and latissimus: layer 5 (Dimon)
II.35 Dermatomes (quadrupedal), with CNS and skeleton (bone, nerve, skin)
II.36 Embryo segmentation, 5 weeks (Dart³)
II.37 Superficial muscles of trunk and shoulder girdle: front view (RAF)
II.38 Superficial muscles of trunk and shoulder girdle: back view (RAF)
II.39 Arm and forearm muscles: side view (RAF)
II.40 Dermatomes, upper limb (Netter)
II.41 Dermatomes and movements of lower limbs (Netter)
II.42 Thigh and leg muscles: side view (RAF)
II.43 Thigh and leg muscles: front view (RAF)
II.44 Thigh and leg muscles: back view (RAF)
II.45 Central nervous system: spinal nerves plexuses
II.46 Back musculature: layers 3, 4, and 5 (Dimon)
II.47 Lungs: front view
II.48 Lungs: back view
II.49 CNS and nerve plexuses (Netter)
II.50 Suboccipital muscles (Netter)
II.51 Muscles of the neck (superficial)
II.52 Muscles of the neck (deep)
II.53 Neck, external features in relation to underlying structures
II.54 Suboccipital muscles
II.55 Atlas and axis (Dimon)
II.56 Cervical spinal column
II.57 Muscles attaching front of spine
II.58 Hip and torso muscular system
II.59 Spinal movement, pulley mechanism (Grundy)
II.60 Muscles attaching front of spine (Dimon)
II.61 Skeleton of head, neck, and back: posterior view
II.62 Skeleton: semi-supine
II.63 Spinal curves
II.64 Hip and knee joint structure
II.65 Joints
II.66 Autonomic nervous system (Netter)
II.67 Nerves: spinal nerve roots and relation to vertebrae (Netter)
II.68 Types of spinal movement
II.69 Back: F.M. Alexander photo, from Man's Supreme Inheritance
II.70 Release of psoas
II.71 Release of psoas
II.72 Leg musculature
II.73 Torso and leg musculature
II.74 Hip musculature: external rotators
II.75 Abdominal wall: posterior view (Netter)
II.76 Lumbar nerve plexus (Netter)
II.77 Sacral and coccygeal nerve plexuses (Netter)
II.78 Muscles attaching front of spine (Dimon)
II.79 Frog saltation
II.80 Amphibian skeletal evolution
II.81 Dermatomes, full body, anterior and posterior (Netter)
II.82 Femur angles
II.83 Pelvis: angles and weight bearing
II.84 Hip, seated (Dimon)
II.85 Knees forward and away, excerpt (Rugg-Gunn)
II.86 Relation between spinal nerve root and movement (Cole)

Book II presents child development, from birth to age 3, relying heavily on Myrtle McGraw's studies of Johnny and Jimmy. This process, which Raymond Dart argues is usually lost in the adult's "bespectacled decrepitude," is revisited with the Alexander Technique. Also presented is the neuro-muscular-skeletal system,
particularly the spinal and cranial nerves, as they are the underpinnings of this developmental process, and attempts later in life to relearn it.

**Book III**

III.1 Cranial nerves, overview  
III.2 Ramifications of the cranial nerves (Murray)  
III.3 How the head leads (Dart)  
III.4 Whispered ah - cranial and spinal nerve involvement (Murray)  
III.5 Spinal Engine Theory (Gracovetsky)  
III.6 Spinal Engine Theory: counter rotation of pelvis and shoulders (Gracovetsky)  
III.7 Spinal Engine Theory: pelvis (Gracovetsky)  
III.8 Cervical spinal column  
III.9 Atlanto-occipital joints p1 (Douglas)  
III.10 Atlanto-occipital joints p2 (Douglas)  
III.11 Nerves: skin sensory receptors of tongue, finger, nose, hand, neck  
III.12 Dermatomes: cutaneous nerve patterns of head and neck  
III.13 Neck - external features in relation to underlying structures  
III.14 Atlas and axis, situated in head  
III.15 Vertebral column  
III.16 Lumbosacral and coccygeal nerve plexuses (Netter)  
III.17 Brachial nerve plexus  
III.18 Myofascial and organ planes  
III.19 Fascia (Myers)  
III.20 Bandhas: yoga  
III.21 Sciatic and posterior femoral cutaneous nerves (Netter)  
III.22 Lower limb bones  
III.23 Pelvis  
III.24 Diaphragm  
III.25 Psoas major and lumbar region  
III.26 Spinal membranes and nerve roots (Netter)  
III.27 Central nervous system  
III.28 Cell division, elongation, and segmentation (Dart³)  
III.29 Vertebrate developmental sequence (Dart³)  
III.30 Somites and embryo segmentation, 2 and 5 weeks, (Dart³)  
III.31 Embryo segmentation, 5 weeks (Dart³)  
III.32 Embryo muscle development, 8 weeks (Dart³)  
III.33 Embryo (8 weeks) and Spiral Lines of Force (Dart³)  
III.34 Dermatomes (quadrupedal), with CNS and skeleton (bone, nerve, skin)  
III.35 Alex Murray notes  
III.36 Relation between spinal nerve root and movements (Cole)  
III.37 Dermatomes, full body, anterior and posterior (Netter)  
III.38 Dermatomes and relation between spinal nerve root and movements (Cole)  
III.39 Cynodont, fetal position (Broom)  
III.40 Spinal Engine Theory, hip extensors (Gracovetsky)  
III.41 Spinal Engine Theory: lateral view of subject - thalidomide baby (Gracovetsky)  
III.42 Spinal Engine Theory: counter rotation of pelvis and shoulders (Gracovetsky)  
III.43 Back musculature, horseback rider (Scientific American)  
III.44 Cranial nerves, supply to head and neck muscles  
III.45 Superficial muscles of trunk and shoulder girdle: back view (RAF)  
III.46 Superficial muscles of trunk and shoulder girdle: front view (RAF)  
III.47 Pelvis, bones and ligaments (Netter)  
III.48 Lower limb - bones  
III.49 Knees forward and away (Rugg-Gunn)
Within the context of neuromusculoskeletal anatomy, Book III explores the growth of life, from cell division and segmentation through the complete nervous system which enables movement. Finally, it examines the interrelation of the trunk, shoulder girdle, pelvis, and lower limb before culminating in the fetal spiral and upright posture.

**Book IV: The Trunk**

IV.1 Cranial nerves: overview
IV.2 Fetal thumb sucking
IV.3 Spiral lines (Myers)
IV.4 Abdominal muscles: spiral direction of muscle fibers
IV.5 Abdominal muscles: layers
IV.6 Abdominal muscle layers
IV.7 Back musculature widening: layers 3, 4, 5 (Dimon)
IV.8 Back musculature: deep layers
IV.9 Nerves: skin sensory receptors of tongue, finger, nose, hand, neck
IV.10 Spinal Engine Theory (Gracovetsky)
IV.11 Spinal movement: baseball pitcher (Gracovetsky)
IV.12 Dermatomes, full body (Netter)
IV.13 Spinal curves and the vertebral column
IV.14 Cranial nerves: overview
IV.15 Nerve supply of muscles
IV.16 Lumbar nerve plexus (Netter)
IV.17 Nervous system organization
IV.18 Types of spinal movement
IV.19 Spine: shortening and lengthening
IV.20 Spinal movement: pulley mechanism (Grundy)
IV.21 Abdominal and pelvic muscles: recti abdominus and coccygeal connection (McConnel)
Book IV focuses primarily on the trunk. It presents the musculature both as separate abdominal and back musculature, as well as a combined spiral musculature. The organization of the nervous system is covered, including dermatomes and the nerve plexuses. This is set in the context of movement, physical development, and respiration.

**Book V - Phylogeny and Ontogeny (Temple Fay, Dart, Gutman)**

V.1 Human Walking Patterns (Fay)
V.2 Lateral flexion and flexion extension
V.3 Primate evolution (Zihlman)
V.4 Reptiles and mammals: body temperature and reproduction (Zihlman)
V.5 Reptiles and mammals: skull and dentition (Zihlman)
V.6 Comparative embryology (Zihlman)
V.7 Ear bones: mammalian evolution (Zihlman)
V.8 Brain: vertebrate evolution - fish to mammal (Zihlman)
V.9 Mammalian forelimb evolution (Zihlman)
V.10 Mammalian evolution: dentition (Zihlman)
V.11 Swimming niche (Zihlman)
V.12 Frog breathing
V.13 Amphibian appendicular skeleton and frog saltation
V.14 Respiratory and digestive system evolution
V.15 Larynx evolution
V.16 Lungs: frog/reptile/bird
V.17 Respiratory system
V.18 Embryology (Dart³)
V.19 Embryology (Drews)
V.20 Embryology 0-21 days (Drews)
V.21 Embryology 1-8 weeks (Drews)
V.22 Vertebrate embryology: Ontogenesis and phylogenesis (Drews)
V.23 Vertebrate embryology: CNS organization/germ layers (Drews)
V.24 Embryology: nervous system (Drews)
V.25 Introduction to the nervous system (Drews)
V.26 Locomotor skeleton: reptiles and mammals (Zihlman)
V.27 Locomotor skeleton: reptiles and mammals (Zihlman)
V.28 Cranial somites and vertebrate evolution (Halstead)
V.29 Cranial somites and heterostaci (Dawkins; Dart; Halstead)
Book V examines the link between the development of the human race through evolution (phylogeny) and development of the individual human through a single life cycle (ontogeny). This is elaborated using comparative evolution of embryology, skeletal systems, respiratory systems, dentition, ear bones, locomotion, cranial somites, and cranial nerves. The book also investigates the connection of dermatomes to the rest of the body, as well as the idea that the study of optimal functioning requires a look at the integration and balance of all the body’s systems (neuro-muscular-skeletal anatomy).

**Book VI**

VI.1 Spinal cord and nerve roots (Cole)
VI.2 Nervous system
VI.3 Cranial nerves: motor and sensory distribution (Netter)
VI.4 Cranial nerves: overview (Dart)
VI.5 Ramifications of the cranial nerves (Murray)
VI.6 How the head leads (Dart)
VI.7 Whispered Ah: cranial and spinal nerve involvement (Murray)
VI.8 Atlanto-occipital Joints, page 1 (Douglas)
VI.9 Atlanto-occipital Joints, page 2 (Douglas)
VI.10 Dermatomes: head and neck
VI.11 Neck: external features in relation to underlying structures
VI.12 Cervical spinal column
VI.13 Suboccipital muscles
VI.14 Suboccipital muscles (Netter)
VI.15 Embryo segmentation, 5 weeks (Dart³)
VI.16 Cell division, elongation, and segmentation (Dart³)
VI.17 Cranial somites (Halstead)
VI.18 Cranial somites: with cranial nerves and functions (Dart¹)
    VI.19 Cranial somites: with cranial nerves (Dart¹)
VI.20 Cranial somites and heterostaci (Dawkins; Dart; Halstead)
VI.21 Cranial somites and heterostaci (Dawkins; Dart; Halstead)
VI.22 Embryo muscle development: 8 weeks (Dart³)
    VI.23 Division to dermatomes
VI.24 Dermatomes: full body, anterior and posterior (Netter)
VI.25 Dermatomes in quadrupedal position
VI.26 Postural variations (RAF)
VI.27 Skeleton: semi-supine
VI.28 Skeleton: upper body (Neil Pamphlet/Cole)
VI.29 Spinal nerve root level related to movement, with skeleton (Cole)
VI.30 Dermatomes in quadrupedal position
VI.31 Skeleton: full body (Neil Pamphlet/Cole)
VI.32 Muscles: upper limb (Dimon³)
VI.33 Muscles: shoulder girdle (Dimon³)
VI.34 Muscles: pectoralis minor (Dimon³)
VI.35 Antagonistic action (Dimon⁴)
VI.36 Somites: 14 days (Dart³)
VI.37 Embryo segmentation 5 weeks: with text (Dart³)
VI.38 Embryo muscle development: 8 weeks (Dart³)
VI.39 Double spiral (Dart³)
VI.40 Deep back musculature (RAF)
VI.41 Superficial muscles of trunk and shoulder girdle: front view (RAF)
VI.42 Anatomist’s Tribute excerpt: Segments and twisting (Dart¹)
VI.43 Anatomist’s Tribute: conclusion (Dart¹, with Murray notes)
VI.44 Feldenkrais physics: Erect Posture and Action (Feldenkrais)
VI.45 Head-Neck Anthropology: ape to human
VI.46 Bates’ Long Swing (Bates)
VI.47 Bates’ Long Swing (Bates)
VI.48 Frog: lengthening to jump
VI.49 Squatting
VI.50 Knees forward and away (Rugg-Gunn) and the hip joint
VI.51 Skeleton, seated: hip joint (Dimon³)
VI.52 Lower limb bones
VI.53 Pelvis
VI.54 Skeleton walking

Book VI details the development and integration of the nervous, muscular, and skeletal systems. It begins with the cranial nerves and proceeds down the nervous system, including anatomical drawings of the upper and lower limbs, cell division/segmentation, and repeated reference to the dermatomes. The book concludes with looks at the double spiral, erect posture, twisting, sitting, squatting, and walking.

Book VII - Dart IAHP
VII.1 Means-whereby of grooming a pony (Evans)
VII.2 Cell division, elongation, and segmentation (Dart³)
VII.3 Cell division, elongation, and segmentation (Dart³)
VII.4 Manual competence development: holding an object with the index finger
VII.5 Manual competence development: grasp reflex (Le Winn)
VII.6 Manual competence development: vital release and prehensile grasp (Le Winn)
VII.7 Manual competence development: cortical opposition (Le Winn)
VII.8 Manual competence development: illustrations (Le Winn)
VII.9 Fertilization: 0-15 days
VII.10 Muscular development: 14 days (Dart³)
VII.11 Embryo: 18-22 days
VII.12 Embryo segmentation: 5 weeks, with text (Dart³)
VII.13 Embryo: 4-9 weeks
VII.14 Embryo muscle development, 8 weeks (Dart³)
VII.15 Fetus: 7 months
VII.16 Childbirth: second stage of labor
VII.17 Childbirth: first stage, dilation
VII.18 Childbirth: second stage, delivery
VII.19 Childbirth: rotation of head, crowning
VII.20 Childbirth: delivery of head
VII.21 Childbirth: delivery of shoulders
VII.22 Childbirth: development of primary and secondary curves
VII.23 Cortical development: the mouth leads
VII.24 Rooting reflex
VII.25 Fetal thumb sucking
VII.26 Fetal position (infant)
VII.27 Spiraling: 3.5 months
VII.28 Spinal organization: 11 months
VII.29 Patterning (IAHP)
VII.30 Cross-pattern creeping and walking (Delacato)
VII.31 Mobility development: rolling over and creeping
VII.32 Mobility development: creeping and standing
VII.33 Sleep position (right and left handed)
VII.34 Beginning from the Beginning (Goldberg, Ahern, Murray)
VII.35 Dart-Alexander Procedure (Murray, 1967)
VII.36 Dart Procedure, fetal upwards (Johnston)
VII.37 Dart Procedure, fetal upwards, mobility vs security (Murray: to accompany Johnston photos, p. VII.36)
VII.38 Developmental Profile (IAHP)

Book VII presents aspects of human development as background for Raymond Dart's work and the Murrays' Dart Procedures. More specifically, this volume emphasizes both the spiral nature of human anatomy and idea that the “head leads”: in, for example, embryological development, cortical development, childbirth, reflex development, development of primary and secondary curves, and locomotion.

Book VIII - Dart Double Spiral
VIII.1 Segmentation: Its significance (Murray)
VIII.2 Somites: 14 days (Dart³)
VIII.3 Embryo segmentation: 5 weeks, with text (Dart³)
VIII.4 Embryo muscle development: 8 weeks (Dart³)
VIII.5 Spiral lines of force (Dart³)
VIII.6 Vertebral column (Netter)
VIII.7 Spinal cord: CNS and nerve plexuses (Netter)
VIII.8 Dermatomes: C2-S4, head/neck/back (Netter)
VIII.9 Spinal cord and nerve roots (Cole)
VIII.10 Vertebrate developmental sequence (Dart³)
VIII.11 Segmentation: early maturity and dermatomes (bone, nerve, skin)
VIII.12 Pulley mechanism of spinal movement: two views (Grundy)
VIII.13 Skeleton of head, neck, and back: posterior view
VIII.14 Spinal Engine Theory: development of spinal curves (Gracovetsky)
VIII.15 Spinal Engine Theory: lateral view of subject (Gracovetsky)
VIII.16 Spinal Engine Theory: counter rotation of pelvis and shoulders (Gracovetsky)
VIII.17 Spinal Engine Theory: ligaments of lower back (Gracovetsky)
VIII.18 Back musculature: deep layers
VIII.19 Muscles of back: deep layers (Netter)
VIII.20 Muscles of back: intermediate layers (Netter)
VIII.21 Muscles of back: superficial layers
VIII.22 Mlle Lala at the Cirque Fernando (Degas)
VIII.23 Spiral lines (Myers)
VIII.24 Abdominal muscle layers: spiral 1
VIII.25 Abdominal muscle layers: spiral 2
VIII.26 Abdominal muscle layers: spiral 3
VIII.27 Abdominal muscle layers: spiral 4
VIII.28 Spiral: back view

Book VIII presents the spiral arrangement of the human body. It begins with Dart's discussion of the development of the spiral, including the differentiation of embryological somites and the development of layered musculature and the spinal curves. Also emphasized are the connections between the neuro-muscular-skeletal system and movement, especially the great variety and versatility of movement allowed by the body’s spiral arrangement.
Book IX - Arms
IX.1 Dermatomes of upper limbs (Netter)
IX.2 Cutaneous innervation: upper limbs (Netter)
IX.3 Cutaneous innervation: wrist and hand (Netter)
IX.4 Brachial plexus: situated in upper torso and arms
IX.5 Radial nerve: forearm (Netter)
IX.6 Median nerve (Netter)
IX.7 Ulnar nerve (Netter)
IX.8 Musculocutaneous nerve (Netter)
IX.9 Shoulder girdle and upper arms
IX.10 Superficial muscles of trunk and shoulder girdle: back view (RAF)
IX.11 Superficial muscles of trunk and shoulder girdle: front view (RAF)
IX.12 Arm and forearm muscles: side view
IX.13 Muscles of trunk and shoulder girdle (RAF) with photos of F.M. Alexander
IX.14 Muscles of trunk and shoulder girdle: side view (RAF)
IX.15 Second stage labor
IX.16 Arm lines (Myers)
IX.17 Back, shoulder, arm muscles
IX.18 Chest and arm muscles
IX.19 Spinal nerve root level related to movement, with skeleton (Cole)
IX.20 Dermatomes: full body (Netter)
IX.21 Relation between spinal nerve root and movements (Cole)
IX.22 Forearm and hand
IX.23 Forearm and hand
IX.24 Carrington: hands on back of chair
IX.25 Macdonald: hands on back of chair
IX.26 Manual competence development: illustrations (Le Winn)
IX.27 Manual competence development: grasp reflex (Le Winn)
IX.28 Manual competence development: vital release and prehensile grasp (Le Winn)
IX.29 Manual competence development: cortical opposition (Le Winn)
IX.30 Manual competence development: holding an object with the index finger

Book IX discusses the arm from a variety of perspectives. Arm musculature and innervation is detailed, demonstrating the arm's relation to the head, neck, and trunk. Also discussed is the movement of the head, shoulders, and trunk during childbirth, as well as early development of the hand's reflexes and movements. Direct application to teachers/students of the Alexander Technique is presented in Cole's relation of nerve root levels to movement and in Carrington and Macdonald's "hands on the back of a chair."

Book X - Legs
X.1 Dermatomes: full body (Netter)
X.2 Dermatomes: lower body (Netter)
X.3 Dermatomes and movements of lower limbs (Netter)
X.4 Lower limb movements
X.5 Musculature of lower leg and foot
X.6 Flexors of toes and foot
X.7 Femoral nerve (Netter)
X.8 Sciatic nerve (Netter)
X.9 Peroneal nerve (Netter)
X.10 Tibial nerve (Netter)
X.11 Obturator nerve (Netter)
X.12 Iliopsoas (Barlow)
X.13 Musculature of lower body
Book X presents the legs not only in terms of bones, musculature, nerves, and movement, but also the legs' interdependent relationship with other regions of the body, including the back, diaphragm, and pelvis. The effects of this relationship are also examined, such as the way in which chronic muscle tension and pelvic tilt can affect the lumbar curve and vice versa.

**Book XI - Torso**

XI.1 Skeleton: fundamental bones
XI.2 Back musculature: trapezius and latissimus, layer 5 (Dimon)
XI.3 Back musculature: layers 3 and 4 (Dimon)
XI.4 Back musculature: longissimus (layer 2)
XI.5 Back musculature: interspinal (layer 1, deepest layer)
XI.6 Skeleton of head, neck, and back: posterior view
XI.7 Superficial muscles of trunk and shoulder girdle: front view (RAF)
XI.8 Superficial muscles of trunk and shoulder girdle: back view (RAF)
XI.9 Relation between spinal nerve root and movements (Cole)
XI.10 Spinal ligaments
XI.11 Spine: lumbosacral region and deep muscle layer
XI.12 Seated yogi
XI.13 Dermatomes: C2-S4 head/neck/back (Netter)
XI.14 Lungs: front view
XI.15 Lungs: back view
XI.16 Cranial nerves: motor and sensory distribution (Netter)
XI.17 Cranial nerves (side view)
XI.18 Cranial and spinal nerves
XI.19 Suboccipital muscles
XI.20 Atlanto-occipital joints p1 (Douglas)
XI.21 Atlanto-occipital joints p2 (Douglas)
XI.22 Jaw and temporo-mandibular joint (Dimon²)
XI.23 Cervical spinal column
XI.24 CNS and nerve plexuses (Netter)
XI.25 Autonomic nervous system (Netter)
XI.26 Muscles attaching front of spine (Dimon²)
XI.27 Postural Muscles (Ackers)
XI.28 Postural Muscles (Ackers)
XI.29 Pelvic physiology (Garlick)
XI.30 Abdominal muscles
XI.31 Abdominal muscles: transversus abdominus origin insertion
XI.32 Hip joints: skeletal anatomy
XI.33 Hip joint: seated (Dimon
3)
XI.34 Knees forward and away (Rugg-Gunn)
XI.35 Lengthening and shortening of spine (lateral view)
XI.36 Skeleton: semi-supine
XI.37 Abdominal and pelvic muscles: recti abdominus and coccygeal connection (McConnel)
XI.38 Double spiral: abdominal muscles
XI.39 Abdominal muscle layers
XI.40 Psoas and iliacus (diaphragmatic connection)
XI.41 Trunk ligaments
XI.42 Trunk ligaments

Book XI integrates nerves, bones, muscles, and movement as they relate to the torso. Aspects of the muscular system include muscles connecting the front and back of the torso, muscles connecting the head and tail through the torso, and the anti-gravitational effect of postural muscles. Movements of the bones and muscles are presented in connection to the nerves. Also discussed are the effects of primary control and the equipoise of joints on overall use, as well as how angles of joints affect neighboring areas of the body. The role of F.M. Alexander’s work in developing optimal functioning of these areas, and the subsequent effects on all intrinsic functions, such as breathing and digestion are presented as well.

Book XII Head, Neck, and Jaw
XII.1 Changing Stereotyped Response Patterns (F.P. Jones)
XII.2 X-ray of head and neck (F.P. Jones)
XII.3 Balance (Goddard) and temporo-mandibular joint (Bridgman)
XII.4 Jaw and temporo-mandibular joint (Dimon²)
XII.5 Jaw open (Dimon2)
XII.6 Temporo-mandibular joint (Netter)
XII.7 Bony framework of head and neck (Netter)
XII.8 Pharynx: lateral view (Netter)
XII.9 Pharynx: sagittal view (Netter)
XII.10 Temporal muscle (Bridgman)
XII.11 Temporalis
XII.12 Temporalis
XII.13 Masseter
XII.14 Pterygoid (medial pterygoid)
XII.15 Pterygoid (lateral pterygoid)
XII.16 Mylohyoid
XII.17 Infrahyoid
XII.18 Stylohyoid, mylohyoid, sternohyoid (Dimon²)
XII.19 Mouth (sagittal view)
XII.20 Suboccipital muscles
XII.21 Suboccipital muscles (Dimon¹)
XII.22 Atlanto-Occipital Joints, page 1 (Douglas)
XII.23 Atlanto-Occipital Joints, page 2 (Douglas)
XII.24 Cervical spinal column
XII.25 Spinal cord and nerve roots (Cole)
XII.26 Dermatomes (quadrupedal), with CNS and skeleton (bone, nerve, skin)
XII.27 Intervertebral discs (RAF)
XII.28 Functional Significance of Mastoid Process (Krantz) p1
XII.29 Functional Significance of Mastoid Process (Krantz) p2
XII.30 Neck: external features in relation to underlying structures
XII.31 Dermatomes: quadrupedal position
XII.32 Vertebral column: three views (Netter)
XII.33 Head, neck, back (Westfeldt)
Book XII discusses the head, neck, and jaw, and the dynamic interrelationship of these parts to each other, the rest of the body, and overall balance. Examples are presented throughout the muscular-, skeletal-, and nervous systems, including breathing, emotion, and overall kinaesthetic awareness. These connections, combined with the dynamic nature of the head, neck, and jaw, further emphasize the inconstant nature of the entire psychophysical human organism. Book XII therefore makes clear the importance of learning to operate within what F.P. Jones calls an “expanded field of attention” and relearning our kinaesthetic appreciation.

**Book XIII Dart: Segmentation - Head Leads**

XIII.1 *Anatomist’s Tribute to F.M. Alexander*, Basic Facts, excerpt (Dart¹)
XIII.2 Heterostrachan internal anatomy (Dawkins; Dart; Halstead)
XIII.3 Chimpanzee and human: head, neck, back (Tobias)
XIII.4 Crania of 4 primates (Tobias)
XIII.5 Antagonistic action: head/neck/back (Dimon²)
XIII.6 Balance (Goddard) and the temporo-mandibular joint (Bridgman)
XIII.7 Cranial somites and embryo segmentation (Dart³)
XIII.8 Segmentation: Its significance
XIII.9 Facial cavities
XIII.10 Suboccipital muscles
XIII.11 Atlas and axis (Dimon¹)
XIII.12 Atlanto-Occipital Joints p1 (Douglas)
XIII.13 Atlanto-Occipital Joints p2 (Douglas)
XIII.14 Suboccipital Muscles (Dimon1)
XIII.15 Functional Significance of Mastoid Process (Krantz)
XIII.16 Functional Significance of Mastoid Process (Krantz)
XIII.17 Sternomastoid
XIII.18 Head-neck-back (Dimon¹)
XIII.19 Infrahyoid Muscles
XIII.20 Muscles supporting hyoid bone and larynx (Dimon¹)
XIII.21 Suprahyoid: muscles of deglutition
XIII.22 Head and neck: structures affecting height and angle (F.P. Jones)
XIII.23 X-ray of Head and Neck (F.P. Jones)
XIII.24 Jaw: position in speech (Dimon²)
XIII.25 Larynx suspended (Dimon²)
XIII.26  *Mlle Lala at the Cirque Fernando* (Degas) with *Anatomist’s Tribute* excerpt (Dart¹)
XIII.27  Seated yogi: with notes from Murray
XIII.28  Somites and embryo segmentation: 2 and 5 weeks (Dart²)
XIII.29  Embryo segmentation: 5 weeks (Dart³)
XIII.30  Dermatomes in quadrupedal position
XIII.31  Segmentation: early maturity and dermatomes (bone, nerve, skin)
XIII.32  Dermatomes (Kapit and Elson)
XIII.33  Spinal cord and nerve roots (Cole)
XIII.34  Cutaneous nerve patterns: head and neck
XIII.35  Neck: external features in relation to underlying structures
XIII.36  Cranial nerves: overview
XIII.37  Embryo, 8 weeks, and Spiral lines of force (Dart³)
XIII.38  Dermatomes: front view (Cole)
XIII.39  Dermatomes: back view (Cole)
XIII.40  Central nervous system: spinal cord segments (Cole)
XIII.41  Spinal cord and nerve roots (Still Lives, Cole)
XIII.42  Dermatomes front/back view, with text (Cole)
XIII.43  Pulley mechanism of spinal movement (Grundy)
XIII.44  Central nervous system: spinal nerve plexuses
XIII.45  Dermatomes: full body, anterior and posterior (Netter)
XIII.46  Nerves: skin sensory receptor densities
XIII.47  Cranial nerves: supply to head and neck muscles
XIII.48  How the head leads (Dart)
XIII.49  Ramifications of the cranial nerves (Murray)
XIII.50  The whispered ah: cranial and spinal nerve involvement (Murray)
XIII.51  Psycho-physical basic practice (Zahn)
XIII.52  Autonomic nervous system and functions
XIII.53  Polyvagal Theory (Porges)

Book XIII examines the significance of the segmental development of the human body, including the creation of an integrated neuro-muscular-skeletal system, which in turn has practical implications for the head-neck relationship. Covered here is the way in which ‘the head leads’: in movement (e.g., birth, Douglas’ “joint equipoise”) and in ontogenetic and phylogenetic development (e.g., as Dart writes, that the parts first developed are those for seeing, smelling, food-seeking and seizing, tasting, swallowing, and breathing.)

The mechanisms that allow the head to take the role of ‘leading’ are also examined. This includes how the head is stabilized and supported (e.g., spinal curves, accessory nerve innervating the sternomastoid and trapezius) and how its balance is affected (e.g., position of jaw, suspensory muscles of the larynx). In connection to all topics covered in this book, the cranial nerves and their ramifications are presented extensively. As is central to all Alexander Technique work, the book concludes with the psychophysical characterization of the human system, using Zahn’s discussion of learning to align the intellectual mind with the autonomic nervous system.