INDEX

Abduction, 44–45
Argumentation, 81–82, 104
  and factual knowledge, 112
  verbal, 80–81
Artefacts, 71–73
  praxis, 72
  in social systems, 75
Awareness
  focal, 13, 20–21, 30, 52–53
  subsidiary, 13, 20–21, 30, 52–53
  types of, 52–53

'Basic rules', 35–37, 90
  of tacit knowledge, 64
'Behavioural cloning', 69–70

Caring function, 39–40
Carpenter-hammer-nail system, 54
'Category error', 38–39
'Clinical gaze', 8–10, 40, 72
Collective processes, 97–98
Communication
  faces of, 102
  process, 100–103
  in tacit knowledge, 23
Communicative self-reference, 103
'Con-cepts', 16
Conceptual nuance, 46
Context marker learning, 48
Contextual familiarity, 22–23, 66, 68
Contextual learning, 48
'Contextual structure' of tacit knowledge, 6–7, 19
Cooperating system, 65
Cooperation, 64–65

Degrees of tacit, 50–51
Democratic approaches, 80–81
Democratic decision-making approaches, 80–81
Developing tacit knowledge
  and abduction, 44–45
  alternation between focal and subsidiary awareness, 55–57
  basis of, 41–42
  and conceptual nuance, 46
  degrees of tacit, 50–51
  dependent on tacit methods, 45–46
  and differences, 41
  elements in, 31–33
  experience-based systems, 54–55
  explicit knowledge, 50–51
  from focal awareness to subsidiary awareness, 35–36
  hierarchical organization of, 42–43
  and interaction in groups, 37–38
  'learning by doing', 32–33
  'learning by experimenting', 34–35
  'learning by interacting', 34
  'learning by using', 33–35
  learning rules, 36–37
  learning through processes, 46–47
  'learning to see' process, 40
  from performing, 58–59
  personal, 38–39
  processes, 31
  reflection, 47–48
  'repeats' and patterns, 43

and rules-based systems, 39–40
structure of tacit knowledge, 30–31
types of awareness, 52–53
understanding, 48–50
'Discussion' based on argumentation, 107–108, 113
'Double' interpretation process, 102
'Dwelling in them', 6, 17

Electron-beam techniques, 9
'Electronic noses', 69–70
'Electronic taste buds', 69–70
Expectations, 99–100
Experience-based systems, 54–55
Experiential knowledge, 58–59
'Explanatory principles', 85
Explicit knowledge, 2–3, 15–16
and degrees of tacit, 50–51
and tacit knowledge, 6, 21–22
External and internal relationships, 107–109

Facial expression, 14
Familiarity knowledge and skills, 97–98
Feedback control system, 31
Focal awareness, 13, 20–21, 30, 52–53
alternation between subsidiary awareness and, 55–57
to subsidiary awareness, 35–36
Former approach, 65
'Functional structure' of tacit knowledge, 6–7, 19

Genuine relationship, 108
'Global tacit knowledge', 10–11
Goal structure, 69–71
'Good argument', 81–82, 113
Good judgement, 93–95

Hidden knowledge, 114–116
Hierarchical organization of tacit knowledge, 42–43
Hierarchical system, 109
Holistic causal understanding, 12–14

Imitation, 87, 91, 93
Implicit learning, 45
Individual processes, 97–98
Integration of tacit knowledge, 97, 99
collective knowledge processes, 98–99
communication, 100–103
constituent elements of dialogue, 109–111
dialogue develops interaction competence, 103–105
expectations, 99–100
external and internal relationships, 107–109
goal achievement, 119–120
hidden knowledge, 114–115
metaphors, analogies, images and examples, 106–107
trust as prerequisite for dialogue, 120
types of communication, 111–114
typologization of knowledge, 98
ways of thinking, 115, 117–118
from win-lose to win-win processes, 120–122
Interaction
activity, 18
dialogue develops Interaction competence, 103–105
in groups, 37–38
Interpretation, 88–89
Intuition, 14

'Knowledge in action', 1
Knowledge management
Polanyi's theory of tacit integration, 2
tacit knowledge, 1–3
theoretical and practical knowledge, 1

'Learning before doing' process, 79–81
'Learning by doing' process, 14, 30, 32–33
'Learning by experimenting' process, 34–35
'Learning by interacting' process, 34, 64
'Learning by using' process, 12, 33, 35
Learning process, 5–6, 22, 32, 46–47, 99–100
  learning rules, 36–37
  levels of, 49
'Learning to see' process, 40
'Local tacit knowledge', 10–11

Master–apprentice relationship, 64–66
Master–novice relationship, 64
Mentefacts, 71–73
  praxis, 72
  in social systems, 75
'Metaphorical error', 38–39
Motor skills, 7–8, 33
Muscular system, 31

Non-conscious cognitive activity, 82
Non-objective knowledge, 1–2
Non-verbal communication systems, 102
Nurse–patient relationship, 38–39

Objective knowledge, 1–2
Observation, 87–88
One-to-one relationship, 101
Organizational knowledge, 97–98
Ostensive definition, 5, 21–22

'Pattern repeats', 43
'Per-cepts', 16, 18
Perception, 67–68
Performance system, 31
Personal Knowledge, 63
Perspective learning, 48
'Phenomenal structure' of tacit knowledge, 6–7, 19
Phenomenological closeness, 52–53
'Photographing', 21
Physical activities, 7–8, 33
Polanyi's theory of tacit integration, 2
Practical knowledge, 1
'Practised gaze', 40
Pre-understanding as necessary basis for knowledge processes, 73–74
Problem-defining knowledge, 2–3
Problem-solving knowledge, 2–3
'Pull-back' technique, 68–69

Reflection activity, 18, 67–68
'Repeats' and patterns, 43
Routines, 68–69
Rules of thumb, 11–12
Rules-based systems, 39–40

Scientific knowledge, 1–2
Self-reference problem, 103
Sender-message-channel-receiver model (SMCR model), 101
Sensory system, 31
Social mechanisms, 109
Social systems, artefacts and mentefacts in, 75
Specific tacit knowledge, 10
'Step-back' technique, 68–69
Strategic tacit knowledge, 10
Structure of tacit knowledge, 30–31
Subsidiary awareness, 13, 20–21, 30, 52–53, 55, 57
  alternation between focal awareness and, 55–57
  from focal awareness to, 35–36
Subsidiary focus of attention, 50
'Sudden shift', 36
Syringes, 75
System dynamics, 10–11

Tacit knowing, 8–9, 16–17, 57
Tacit knowledge, 1–3

building blocks of, 17–18
communication in, 23
contextual familiarity, 22–23
development, transfer and integration of, 19
development of, 8–11
explicit knowledge and, 6, 21–22
focal awareness, 20–21
holistic causal understanding, 12–14
intuition, 14
objective in, 15–17
personal, 38–39
'phenomenal structure', 6–7
Polanyi's concept of, 5
processes, 8–9
rules of thumb, 11–12
subsidiary awareness, 20–21
tacit space, 24–25
types of, 11–15
typology of, 11
understanding patterns, 14–15
Tacit methods, 45–46
Tacit space, 24–25
'Tertiary awareness', 52–53
Transfer of tacit knowledge, 63
artefacts and mentefacts, 71, 73, 75
basic rules, 90
conserving and stabilizing elements of, 75–78
contextual familiarity, 66–68
democratic approaches, 80–81
discipline, imitation and improvements, 91
explanation of situation, 83–85
genuine cooperation in, 66
goal structure, 69–71
'good argument', 81–82
good judgement, 93–95
imitation, 91–93
influence actions, 78–79
learning before doing, 79–80
master–apprentice relationship, 64–66
mechanisms, 87–89
non-conscious cognitive activity, 82
pre-understanding, 73–74
routines, 68–69
transferring or 'translating' tacit knowledge, 86
Trust, 120
as prerequisite for dialogue, 121

Verbal argumentation, 80–81
Vivaldi's 'The Four Seasons', 36–37

Win-lose to win-win processes, 120–122
Win-win processes, 114, 120, 122