

Index

- Aarseth, E., 37, 667, 687n1
- Abelson, H., 753
- abstractions
- in communication, 315
 - and game spaces, 687n9
 - in Go, 204
 - models as, 53–55
 - of real-life, 502
- accelerators, 451
- achievement, 145, 757, 825
- achievers
- vs. achievers, 770
 - description, 6, 757, 761
 - and levels, 767
 - vs. other player types, 770–783
 - proportion of, 760, 777
 - in social MUDs, 768
- action(s)
- in adventure games, 697
 - discrete vs. continuous, 418, 688n20
 - extraneous, 654, 657, 765
 - feedback, 214, 373
 - in games, 421, 654, 657
 - opportunities, 648, 652–655, 657, 660
- active learning, 238, 254–263
- Adams, E., 644, 667, 671, 678
- Adams, M. J., 265
- adaptations, 677
- added features, 723, 742, 744–746
- addiction
- to Breakout, 570–577
 - and marketing, 868
 - vs. meeting goals, 340
 - to virtual worlds, 821, 823
- Adelman, L., 753
- Adkison, P., 540
- administrators
- documentation, 804
 - future role, 812
 - MUD stability, 763–767, 777–784
 - and player rights, 796, 798, 800–809
 - responsibilities, 805, 810
- adults
- and Magic, 555
 - and video games, 342, 344
 - and virtual worlds, 830t, 832
- Adventure
- catacomb, 711–713
 - creatures, 699–703
 - description, 693–697
 - game spaces, 66, 68, 703–713
 - hierarchical model, 55
 - and interactive fiction, 646
 - objects, 699, 713
 - precursor, 691, 694–697
 - prototype, 694
 - screens, 713
 - sequel, 713
- adventure, 338–346, 349, 352–357
- adventure games
- action types, 697
 - and consequence, 375
 - and information, 201
 - vs. MUDs, 769
 - and narrative, 654, 664
 - and plot, 195
 - text adventures, 644, 646, 691

Figures are indicated by “f”; tables are indicated by “t,” and footnotes by “n”.

- advice
 to admins, 808–809
 on Summoner, 269–295
 vs. tips, 257
- aesthetics
 and change, 649, 657–659
 definition, 441
 and dynamics, 4, 55, 441
 and masks, 118
 and play, 102, 105
- affinity groups, 242, 247–250, 253, 257–259
See also game communities
- affordances, 652–655, 657, 660
- African Americans, 74, 623
- agency
 vs. immersion, 29, 649
 in Jedi Knights II, 30
 model, 654–656, 661
 reconstructed, 869
 vs. transformation, 658
- agôn*, 5, 131–133, 148t
 and *ludus*, 143, 144
 and slot machines, 153
See also competition
- airplane models, 143
- Alber, Antone F., 752
- alea*, 5, 133–135, 137, 148t
 and *ludus*, 143
 and *paidia*, 144
 and slot machines, 153
See also chance
- Alexander, C., 54, 436
- algorithms, 272
- Alice in Wonderland*, 677
- alliances, 202, 406
- Alpha World, 824
- always_black, xviii, 30, 39, 74, 602–608
- ambiguity
 and frame analysis, 596–599
 in on-line interactions, 74
 and play, 85, 297–311
 and Rooie Rules, 16
 and RPGs, 72, 596–599
See also uncertainty
- American Gladiators, 451, 452
- America Online, 208
- America's Army, 629
- Amerika, M., 645
- amusement parks, 127, 140, 676
- anachronism, 585
- Anachronox, 272, 625
- anagrams, 143, 144
- anarchism, 356
- Anarchy Online, 819
- Animal Crossing, 163
- animals
 and *agôn*, 132
 birds, 136, 139, 318
 communication, 84
 dolphins, 482
 and games, 134, 496
 and girl culture, 349–352
 insects, 135, 149n5
 and mimicry, 135, 149n5
 monkeys, 84, 142, 152n12, 316, 318
 play, 99, 101, 297, 316–320
 race horses, 484
 and religion, 118
 and vertigo, 139
- anticlimax, 209
- antisemitism, 623
- antisocial behavior, 768
- appetites, 104
- Apple II, 715

- Arabs, 619–621
- arcade games, 261, 462–473
 - See also* Battlezone; Defender; Sinistar; Tempest
- Arcanum, 272
- archaic man, 108–118
- Aristotle, 101, 236, 655
 - See also* agency
- Arneson, D., 205
- art
 - interactivity, 645
 - trompe l'oeil*, 319
- artificial intelligence
 - in Eastern Front, 718–722
 - and neo-Aristotelian model, 659, 662
 - Summoner, 282, 286–288
 - and virtual worlds, 741
- artwork, 542
- Asheron's Call, 819
- Aspnes, J., 785
- assembly language, 721
- Asteroids, 432, 463
- Atari, 692, 712, 715
 - See also* Adventure; Breakout
- atmosphere
 - and amusement parks, 676
 - in Magic, 542, 549, 550
 - in Monopoly, 203
 - in MUDs, 766, 782
 - in Pikman, 256
 - and role-play, 207
- attitude
 - of adults, toward video games, 342
 - in games of chance vs. games of skill, 129, 133, 137
 - in games of chance vs. mimicry, 137
 - for learning, 259
 - of mothers, toward video games, 343
 - and player types, 769–777
 - toward repetition, 249
 - toward women, 341, 343
 - of Western societies, 302, 304–306
 - See also* lusory attitude; seriousness
- auctions
 - bidding games, 131
 - and Everquest, 827, 834, 836, 848, 857, 862n32
 - and Magic, 61
- audience. *See* spectators
- Audobon, J., 139
- authority
 - and game change, 500, 531
 - in MUDs, 790, 794, 808
 - in schools, 868
 - See also* administrators
- avatars
 - definitions, 859n3
 - as game element, 421
 - guilds, 846
 - in Habitat, 731, 740
 - and immersion, 657
 - infractions, 806
 - research on, 844
 - and resources, 430, 836
 - rights, 42, 791–805
 - and servers, 858, 861n22
 - in virtual worlds, 816, 819, 821–823, 836
 - transactions, 833, 836
 - worker metaphor, 822, 835, 838, 852
- Avedon, E. M., 81, 516, 667
- awareness
 - of enemy (Summoner), 282
 - of fantasy, 28
 - of game, 484–486, 495, 584–596
 - of make-believe, 103
 - at metalevel, 256
 - of play, 35, 85, 99, 114–116, 127, 128, 320–323

- vs. seriousness, 112, 116
 - of signals, 315–318
- Axis & Allies, 202, 203
- Aylett, R., 667
- baccara, 127, 133
- backend, 734, 744–747, 749
- backgammon, 134, 581, 582
- backyards, 332–335, 675
- Bakhtin, M., 301
- Baldur's Gate II, 625
- bandwidth, 734–736
- Banja, 859n2
- Barker, C., 682
- Bartle, R., 6, 25, 41, 43, 61, 754–784
- Barwood, H., 53, 57, 413
- baseball
 - cashing out, 452
 - and game theory, 403
 - mechanics, 440
 - Strat-o-matic™, 540, 542
 - umpire disputes, 498
- basketball
 - game state, 447
 - hidden energy, 450
 - hoop height, 489
 - mechanical bias, 448
 - NBA Live, 375
 - semiotic domain, 230, 232, 236
 - time limits, 479
 - unwritten rules, 483
- Bates, B., 265
- Bateson, Geoffrey, 297
- Bateson, Gregory, 28, 35, 84, 314–327, 516
- Battlefield 1942, 71
 - battles, 71, 73, 272, 717, 719
- Battleship Potempkin*, 679
- Battlezone, 465
- Beck, U., 265
- behavior, 18, 39, 300
 - See also etiquette
- belief systems, 45–49, 72
- Bereiter, C., 265
- Berg, Richard, 206
- Bernstein, 664
- Besen, S. M., 862
- Best Buy, 157–161
- bias, 448
- Big Mitch, 359
- billiards, 131
- biots, 819, 833, 859n4
- Bioware, 812
- Birdwell, K., xviii, 22, 212–225
- Bit, 548
- Björk, S., 10–11, 54, 57, 79, 80, 410–436
- Black and White, 75, 672, 682
- blackjack, 574
- Blade Masters, 272
- blame, 215, 770
- Blix, 672
- bluffing, 404, 541
- Boal, A., 663, 667
- board games
 - Carolus Magnus, 428
 - combat, 718
 - Go, 204
 - Lord of the Rings, 21
 - Monopoly, 203, 419, 421, 674
 - sessions, 415
 - and socializing, 208
 - Space Hulk, 428
 - vs. trading card games, 553
 - zone of control, 719
- Bolter, J. D., 31

- Bombberman, 452
- Bookchin, N., 645
- books, 337, 345–355, 357–360
 - See also literature
- Booth, A., 362
- borderwork, 360
- boredom
 - and action, 688n20
 - and change, 521
 - and DOOM 3, 166
 - vs. interactivity, 868
 - and *ludus*, 144
 - and mastery, 535
 - and Operation Flashpoint, 428
 - and randomness, 205
 - and Zero Zero, 354
- Borel, E., 386
- borrowed rules, 523
- bounding components, 415
- boys and men
 - and avatars, 822, 844
 - books, 345–347, 358
 - boy culture, 338–347
 - in Foursquare game, 511–515
 - and game spaces, 68
 - gap between, 342
 - going against odds, 625
 - play spaces, 336–340, 346
 - primitive ceremonies, 115
 - and videogames, 6, 74
- bragging, 464, 483
- brainstorming, 215, 224
- Bransford, J. D., 265
- bravery, 105
- Breakout
 - game spaces, 67
 - pleasure, 3
 - skill, 559–569, 561, 573, 576
 - social aspects, 561, 577
 - tension, 4
- bridge
 - and *agôn*, 131, 143
 - on America Online, 208
 - frame analysis, 581
 - and *ludus*, 143
 - network version, 208
 - seriousness, 178
 - socializing, 208
- Brotchie, A., 86
- Bruckman, A. S., 768, 785, 786
- Bruer, J. T., 265
- bugs, 709, 739, 746
- builders, 766
- Burka, L. P., 786
- Burke, K., 297, 307
- Burnett, F. H., 348–352, 362
- Burns, M. S., 266
- Buzzwords, 59, 62
- Cabal process, 23, 215–225
- Cage, J., 195
- Caillois, R., 5–6, 28, 78, 80, 84, 123–155
- Cain, C., 639
- Calhammer, A., 202
- Campaigns for North Africa, 206
- Campbell, J., 678
- canasta, 326
- Candyland
 - and decisions, 209
- Can You See Me Now?, 68
- Carcassone, 421
- card games
 - canasta, 326
 - individually-owned decks, 541

- Centipede, 467–469
- in daydreams, 299
- and emergent narrative, 644
- identification with [see identification]
- in interactive drama, 653
- Metal Gear Solid, 634
- metaphors, 216f, 219f, 224f
- real people as, 75, 611, 663, 684
- in role playing games, 195, 200
- Saturn's Night, 359
- The Sims, 684
- Summoner, 273, 277, 279, 281, 284, 294
- vs. technology, 729
- traits, 134, 154
- women, 341, 355
- See also avatars; player-character construct
- charades, 144, 208
- chaturanga, 383
- cheating
 - by cleverness, 746–749
 - by code change, 745, 750
 - and game change, 531
 - and game design, 15
 - hidden vs. open, 524
 - and play, 106
 - and rules, 126, 417, 522
 - and slot machines, 154
 - solitaire, 522
 - Summoner, 291
 - and winning, 175
- checkers, 131, 447, 533
- Cherny, L., 786
- chess
 - action type, 418
 - and *agôn*, 143
 - appeal, 209
 - computerized, 481, 484, 496
 - cultural model, 71
 - decisions, 196
 - distractions, 481
 - framework, 417, 421, 584
 - and game theory, 389
 - as *ludus*, 143
 - mechanics, 440
 - mirroring battle, 383
 - opposition, 131, 198
 - and player-character, 72
 - rationality, 392
 - for real, 127
 - strategy, 393
 - tie rules, 391
 - time limits, 479
 - variety, 205
 - winning, 183
- Chi, M. T. H., 265
- Chick, T., 5, 156–169
- children
 - competition, 133, 141, 142
 - computer expertise, 253
 - and destruction, 142
 - dress-up, 107
 - and games of chance, 134
 - and handicapping, 535
 - hyperactivity, 223
 - identity formation, 258
 - learning hatred, 623
 - make-believe in, 28, 103
 - and mazes, 704
 - and outdoors, 332–336
 - performances, 108
 - and play, 103, 304
 - and rules, 16, 142, 511
 - seriousness, 112
 - threat and histrionics, 318

- and vertigo, 138
 - and video games, 6, 235–237, 258–262, 332, 613
 - and wagers, 142
- China, 108, 145, 154n16
- Chivalry and Sorcery, 585
- Chkhenkeli, M., 546
- choices, 304
 - See also* decisions
- Chomsky, N., 242, 244
- Chop Suey, 354
- ChronoTrigger, 376
- Chudowsky, N., 266
- Church, D., 53, 366–380, 413, 436
- city spaces, 685, 846
- civilization, 100
- Civilization, 197, 431, 451
- Civilization III, 73, 457, 611
- Clodius, J. A., 786, 787
- closed awareness, 584–590
- closure, 419, 449, 463
- clowns, 101
- Club Caribe, 749, 751
- Clue, 454
- coalitions, 406
- cock fights, 131, 132
- Cocking, R. R., 363
- code. *See* source code
- code of conduct, 792–794, 800–809
 - See also* etiquette
- cognition, 134, 299, 495, 520
 - See also* learning; thinking
- Cold War, 625–629
- Coles, G., 265
- Colker, D., 862
- collecting, 145, 299, 551
- collisions, 697
- color
 - Adventure, 712
 - Breakout, 560
 - Eastern Front (1941), 716
 - Magic, 60, 544
 - Monopoly, 207
 - Saturn's Night, 359
 - Secret Paths, 349
 - See also* environment
- comedy, 101
 - See also* humor
- comic books, 230
- commands
 - Habitat, 733
 - in MUDs, 765, 766
 - text games, 697, 698
- Commodore, 730, 738, 749, 751n1
- communication
 - about games, 43–50
 - abstraction levels, 315
 - between avatars, 822, 833
 - and Cabal process, 221
 - cryptography, 750
 - of data, 734, 737, 750
 - design vocabulary, 367–370
 - evolution, 84, 315
 - in interactive drama, 653
 - metacommunication, 28–30, 35, 84, 323–326
 - and MUDs, 734, 759, 764, 769
 - play as, 302
 - between players, 319, 418
 - of play intent, 315–318, 325
 - of plot constraints, 660
 - secret codes, 340
 - situated meaning, 239–241, 252, 254–256
 - and virtual worlds, 840
 - See also* semiotic domains

- communities. *See* cultural status; game communities
- competition
 - boys and girls, 358
 - and chance, 129, 134, 137
 - in children, 132
 - in courtesy, 487, 491, 606
 - equal adversaries, 131
 - between games, 434
 - game type, 5, 131–133, 148t
 - JKII, 603–608
 - and *ludus*, 144
 - in MMORPGs, 61
 - with non-opponents, 499
 - vs. opposition, 198
 - as pleasure, 5
 - slot machines, 153
 - social context, 49
 - social MUDs, 768
 - spectator role, 137
 - team sports, 868
 - and uncertainty, 126
- complexity threshold, 739
- component framework
 - actions, 418, 421
 - closures, 419
 - end conditions, 419
 - evaluation functions, 419, 421
 - events, 418
 - extra-game activities, 416
 - facilitator, 420
 - game elements, 421, 431
 - goals and subgoals, 417
 - instance, 415
 - interactions, 422–434
 - interface, 420
 - modes of play, 417
 - players, 420
 - rules, 416 (*see also* rules)
 - sessions, 415
 - set-up/set-down, 416
 - time, 421
 - without design pattern, 436
- computer games
 - characteristics, 250
 - and diplomacy, 203
 - documentation, xviii
 - and information, 200
 - vs. platform games, 250
 - and plot, 195
 - post-mortems, 457
 - racing games, 418
 - realism, 643
 - role-playing, 415, 417
 - saves, 249
 - single-player, 207, 209
 - tension, 209
 - triggering events, 418
 - computer role-playing games. *See* massively multiplayer on-line role-playing games
- computers
 - and children, 253
 - vs. game platforms, 248
 - as game players, 481, 484, 485, 496
 - as play, 299
- conflict
 - about games, 498
 - and Cabal process, 223
 - and community, 43
 - between cultural models, 628, 631, 638
 - between design patterns, 426, 427
 - between design tools, 375
 - and drama, 444
 - and game theory, 385

- and goodness, 615
- Habitat, 743
- Half-Life, 222f
- narrative vs. interactivity, 643
- player vs. system, 661, 664, 758
- rhetoric of play, 305
- between rule-sets, 500
- transformation vs. agency, 658
- unproductive, 33
- in virtual world, 821
- consensus, 500, 502, 524
- consequences
 - design patterns, 427, 430, 432
 - embedded narrative, 664, 682
 - perceivable, 373–377, 413
 - The Sims, 684
- consistency
 - in fighting games, 377
 - Habitat, 747–749
 - in interactive drama, 653
 - Mario, 371
 - in MUDs, 766, 769
- constitutive rules, 187
- constraints, 653–661, 825
 - bandwidth as, 734
- construction games, 143, 145
- consumerism
 - and education, 868
 - and game journalism, 49
 - of resources, 431–433
 - and video games, 344
 - and virtual worlds, 817, 819
- contagion, 136, 137, 139
- content
 - in real life, 251
 - social practices, 236, 241–246
 - video games, 262, 334, 343, 611
- contests, 144, 300, 444
- context, 480, 584
 - See also* frames and contexts; situated meaning
- control
 - in amusement parks, 676
 - and arcade games, 466
 - of design project, 473
 - in game vs. play, 519
 - and MUDs, 742, 743–750, 807
 - of narrative, 444, 687n8
 - by parents vs. others, 344
 - player vs. player, 757, 762, 765
 - player vs. system, 661, 664, 744–7490, 758
 - vs. power need, 867
 - in RPGs, 374
 - self-control, 144, 339
 - of source code, 221
- control, sense of
 - design for, 372, 433
 - and game community, 525
 - and girls, 345
 - in Half-Life, 214
 - and Mario 64, 371
 - and producer-consumer, 433
 - and tokens, 200
- controls
 - commands vs. joystick, 697
 - in Habitat, 733
 - and learning curve, 377
 - in Mario 64, 371
- conventions
 - for Goffman, 600n1
 - for immersion, 657
 - no takebacks, 534
 - social, 845
- Conway, J. H., 204
- Cook, K. V., 363

- cooperation
 - between achievers, 770
 - in design, 23, 215–225
 - vs. opposition, 198
 - research on, 845
- Cope, B., 265
- cops and robbers, 126
- Cornered Rat Software, 819
- Cosmic Encounter, 539
- Costikyan, G., 10, 78, 192–211, 436, 671, 678
- costumes, 107, 124
- Cotton, Charles, 3
- Counterstrike, 421
- courtesy
 - in games (see etiquette)
 - player rights, 792
 - in playtesting, 623
- crabs, 136
- Crawford, C., xv, 22, 25, 65, 81, 193, 210, 436, 687n7, 714–724
- creativity, 110, 305, 435, 741
- critical learning, 238, 254–263, 849
- critical thinking, 868
- croquet, 131
- crosswords, 143, 144
- Crowther, W., 691, 713
- cruelty, 133
- cryptography, 750
- Csikszentmihalyi, M., 7
- Cubism, 68
- cultural models
 - change in, 616
 - China, 145–147
 - definition, 45, 614, 617
 - and design, 73–75
 - in Habitat, 744–749
 - juxtaposition of, 638
 - and learning, 629–633
 - linearity, 635
 - Operation Flashpoint, 628
 - The Sims, 45, 71, 611
 - Sonic Adventure II, 612–619
 - and space, 67
 - of terrorism, 619–623
 - video games, 613–619, 633–637
 - and Wolfenstein, 45, 611, 624–629
 - See also values
- cultural status
 - and Breakout, 577
 - of games, 79, 124, 485–487, 491
 - of play, 46, 84, 99–119, 141
 - rhetorics of play, 309
 - semiotic domains, 251–253
 - of spectacles, 867–869
- cup-and-ball, 143, 144
- cursors, 351, 697, 700–703
- Curtis, P., 769, 786
- cybernetic feedback, 446–449

- Damer, B., 863
- dance, 138, 140, 151n8, 672
- D'Andre, R., 639
- danger. See risk
- Dark Age of Camelot, 819
- data communication, 735, 737
- data wiping, 809
- Davidsson, O., 436
- Davis, M., 540
- day-dreaming, 299
- death. See arcade games; killers
- Debord, G., 69, 867
- decals, 215

- deceit
 - in fantasy games, 582
 - in monkeys, 318
 - in poker, 385, 404
 - in shooter games, 625
- decelerators, 55, 451
- De Certeau, M., 69, 688n11
- decisions
 - and agency, 658
 - and design, 21, 427
 - and game definition, 196, 209
 - and game theory, 54
 - and information, 200
 - in Mario 64, 370
 - of MUD admins, 763–767
 - narrowing choices, 659
 - Operation Flashpoint, 627
 - vs. plot, 194
 - and resources, 10, 59–63, 199
 - to rework game, 213
 - and rules, 10
 - The Sims, 684
 - by voting, 744
 - War and Peace*, 676
- decision trees, 54
- Deep Blue, 481, 484
- Defender, 465
- DeKoven, B., 15, 17, 24, 518–537
- demeanor, 510
- demographics
 - of Norrath, 816, 828–832, 859n6
 - of players, 623, 830t, 860n10
- denouements, 457
- Dereth, 843
- Derrida, J., 301
- design
 - Adventure, 693–697
 - Centipede, 466–473
 - and cheating, 15
 - concept, 434
 - consistency, 218
 - fine-tuning, 219
 - for game community, 41
 - graphing, 220
 - Half-Life, 23, 213–218
 - for involvement, 369–380, 430, 443
 - for learning, 260
 - Magic, 539–550, 552–553
 - and means, 180
 - player role, 18, 22–24, 34, 62, 195, 742–750
 - redundancy, 681
 - reusability, 225
 - and semiotic domains, 48
 - side-quests, 293
 - strength factors, 194–201
 - by team, 23, 215–225, 344
 - tools, 54
 - triggering fun, 4
 - Twenty-One, 454–457
 - video games, 256, 263
 - See also* component framework; design patterns; documentation; iterative design
- designers
 - as cruise director, 741
 - experience(s), 21
 - open-mindedness, 723
 - signatures, 693, 712
- design grammar, 48, 245–250, 255
- design models, 53–56, 442–444
 - See also* aesthetics; dynamics

- design patterns
 - defined, 424, 426
 - and Easter Eggs, 429
 - examples, 427
 - interrelationships, 425, 427
 - and mechanics, 423
 - template, 426
 - uses, 54, 428, 430–435
 - without framework, 436
- design tools, 54, 366–380
- destruction, 142
- detail, 203
- detective stories, 143, 403, 681
- Deus Ex, 611, 625
- development stage
 - problem-solving, 434
 - saves, 220
 - See also* Cabal; iterative design; playtesting
- dexterity, 143, 340, 559–569, 576
- diabolo, 129, 143, 144
- diabetic mode, 665
- dialectical vertigo, 185
- dialog, 653, 659
- Diamond, D., 27
- Dibbel, J., 43, 786
- dice, 133, 718
- Die By the Sword, 333
- Dietz, J., 63
- Digital Chocolate, 867
- digital games. *See* Summoner
- diguise
 - as play, 107
- diplomacy, 202, 219f
- Diplomacy (game), 202, 582
- disbelief, suspension of, 29, 649
- discipline, 340
- diSessa, A. A., 639
- disguise
 - as aesthetic category, 649
 - costumes, 107, 124
 - in espionage, 591
 - in fantasy games, 582
 - in insect world, 135
 - vs. transmorph, 600n3
 - See also* masks
- disinterestedness, 103
- Disneyworld, 676
- disorder, 139, 141, 718
- disputes, 408
- disruption, 139, 141, 718
- Doctor Zhivago, 683
- documentation
 - of code, 721
 - of computer game, xviii
 - of design, 215, 218, 223, 224, 426
 - game manual, 692
 - of infractions, 806
 - of player rights, 790–795
- dodgeball, 40, 519
- Dogon, 143
- doll-play, 126, 142
- dolphins, 482
- Domike, S., 667, 668
- dominoes, 134
- Donaldson, F., 335, 362
- DOOM 3, 5, 39, 157–169
- The Dr. K–Project, 645
- drama
 - aesthetic model, 33, 442–444
 - animals, 318
 - competitions, 137
 - and fantasy RPGs, 592
 - interactivity, 646–656, 660–666
 - and mechanics, 440, 444–457

- and mimicry, 136, 144
 - as play, 100
 - uncertainty, 34, 445–453
- See also Aristotle; sacred performances
- dramatic arc, 33, 442–444, 449, 457, 661
- dramatic probability, 660
- dreams, 299, 321, 359
- Dresher, M., 382
- Drexler, K. E., 752, 753
- driving fast, 140
- dromenon*, 109
- Duke Nukem, 625
- Duncan, M., 307
- Duncan, T., 354–356
- Dungeons and Dragons
 - anachronisms, 585
 - player-character construct, 35
 - semiotic domains, 262
 - as subjective play, 299
 - in Summoner, 295
 - variety, 205
- Dunnigan, J., 210
- Dunniway, T., 678
- dynamics
 - and aesthetics, 4, 55, 441
 - defined, 440
 - and mechanics, 441
 - in MUDs, 777–784
 - tension, 446
 - tools, 33, 55, 446
- Dyson, F., 308
- Easter Eggs, 257, 340, 429
 - early examples, 693, 712
- Easterlin, R. A., 863
- Eastern Front (1941)
 - AI, 718–722
 - combat system, 717
 - preliminary description, 716
 - release, 724
 - Russian move, 719
 - scrolling map, 22, 715–717
 - source code, 724
 - tuning, 722
- eavesdropping, 804, 809, 822
- E-Bay, 61, 827, 861
- ecommerce, 816
- economic policies, 334
- economics
 - game theory, 387–389, 406
 - Habitat, 746, 751
 - (ir)rationality, 630
 - Magic, 551–555
 - meta-rules, 497
 - network monopolies, 843
 - on-line gaming revenue, 816, 860n8
 - research projects, 845
 - revenues, 816, 820, 868n8
 - scarcity, 61, 824–826, 834, 846
 - supply/demand, 833, 852, 856
 - See also game economies
- Eddy, A., 786
- Edge*, 49
- editing, 220, 223
- educational games, 868
 - See also learning
- Egyptians, 439
- Eisenstein, S., 679
- election, 744
- Electronic Arts, 819, 820
- Elias, S., 542, 547–549

- email, 164
- Emert, H. G., 786
- emotions
 - and aesthetics, 441
 - and Centipede, 472
 - and gender, 351, 357, 359
 - joy, 114, 125, 142
 - See also* fear
- Empire of the Petal Throne, 583
- Empson, W, 297
- end conditions, 419
- endings, 661
- endurance, 133
- engagement, moments of, 5
- engrossment, 580, 593–596, 599
- entertainment
 - mistakes, 219f
 - virtual worlds, 821, 823, 825, 856
- environment
 - Disney techniques, 676
 - fantasy RPGs, 585, 590
 - interactive drama, 663
 - Magic, 549, 550
 - tension, 222f
 - virtual world, 818
- environmental storytelling, 674–679
- Eon Products, 539
- Epperson, H. L., 786
- equality
 - chess, 131
 - and competition, 134
 - games of chance, 134, 135
 - and virtual worlds, 822, 824, 844, 855
 - See also* inequality
- equipment, 301
- Erasmus, 101
- Erector sets, 143
- Erikson, E., 310
- Erikson, F., 516
- Eriksson, D., 436
- escalation, 55, 449, 469–472
- escape, 305
- Eskelinen, M., 667, 671, 687n6
- espionage, 591
- ethical norms, 845
- ethical value, 105
- Ethnic Cleansing, 623, 637
- ethos, 483
- etiquette
 - competition in, 487, 491
 - and cultural context, 480
 - in Foursquare, 510
 - in informal game, 489
 - in JKII, 606
 - and tradition, 483
- evaluation, 419, 421
- Evard, R., 786
- EverQuest
 - economies, 61, 63
 - immersion, 657
 - narrative, 645
 - social culture, 40
 - subscribers, 820, 859n6
 - See also* Norrath
- evil
 - Black and White, 75
 - JKII, 607
 - and play, 102
 - Sonic Adventure, 612
- evolution, 84, 298, 302, 316
- expectations
 - of following rules, 501
 - Quake, 655
 - room connections, 704

- experience(s)
 - components, 378
 - and cultural models, 619–622, 629, 631
 - density, 214, 220
 - of game purchase, 157–161
 - immersion (*see* immersion)
 - involvement (*see* involvement)
 - memorable moments, 679
 - of outdoors, 335–340
 - and play definition, 84, 310
 - of player, 3–7, 49
 - of player types, 769–777
 - and pleasure types, 442
 - puzzle-based, 649
 - repetition, 659
 - semiotic domains, 238
 - of set-up/set-down, 416
 - in spectacles, 680
 - See also* agency
- exploration
 - and boy culture, 338–346
 - and girls, 349–352, 359
 - vs. linearity, 635
 - links, to narrative, 646
 - Magic, 550
 - Mario, 370
 - in MUDs, 757
 - of new media, 435
 - and player types, 758
 - Saturn’s Night, 359
 - Secret Paths, 349–352
 - spatiality, 675
 - in town games, 354–356
 - of virtual world, 817
- explorers
 - vs. other explorers, 772
 - vs. other types, 770, 772–776
- as player type, 6, 61, 758, 762
- proportion of, 778
- Expressive AI, 642
- extra-game factors, 416, 480
- Façade, 34, 656, 659, 664
- facilitator, 420
- FADT. *See* formal abstract design tools
- Fagen, R., 83, 297
- fairness
 - and avatars, 822, 857
 - equal opportunity, 131, 135
 - handicapping, 532–535
 - minimax principle, 388, 396–398
 - and MUD admins, 808–812
 - and unwritten rules, 481, 486, 496, 509
 - as value, 49
- Falstein, N., 53, 57, 413, 436
- family life, 334, 343
- Fandango, 644
- Fanderclai, T. F., 786
- fantasy
 - in amusement parks, 676
 - awareness of, 28
 - in girl books, 349
 - Habitat, 750
 - of niceness, 354
 - as play, 299
 - role, 315–327
 - in RPGs, 35, 72, 506
 - Saturn’s Night, 359, 361
 - and virtual worlds, 859n2
 - fantasy games, 581–591
 - See also* role-playing games (RPGs)
- FAQs, 17, 62, 269–295
- Far Cry, 164
- Farley, W., 346, 362

- Farmer, F. R., 18, 23, 41, 728–752, 787
- Farrell, J., 862
- fashions, 144, 152n15
- fate, 85, 304
- Fatsis, S., 43
- fear
 - amusement parks, 140
 - and children, 142
 - and exploration, 357
 - and mimicry, 135
 - and movies, 319
- feedback
 - for actions, 214, 373
 - Adventure, 700
 - from backend, 734
 - from playtesters, 22, 723
 - pseudo-feedback, 449
 - and socializers, 779
 - sound, 215
 - and uncertainty, 446–449
- Feinstein, K., 332, 362
- Feltovich, P. J., 265
- festivals, 107, 114, 300
- Feyerabend, P., 301
- fiction, 127, 195, 198, 206
 - short story, 156–169
- fighting games, 377
 - See also* war games
- films
 - Battleship Potempkin*, 679
 - David and Bathsheba*, 319
 - Gone with the Wind*, 683
 - Hans Christian Anderson, 319
 - kung fu, 680
 - Rebecca*, 683
 - Star Wars*, 75, 664, 676
 - Wargames*, 485
 - film theory, 671, 673, 688n19
- Final Fantasy, 376
- Fine, G. A., xviii, 29, 35, 72, 506, 515, 516, 578–600
- fire walls, 279
- first-person, 861n19
- first-person shooter games
 - agency, 654
 - bosses, 636
 - end conditions, 419
 - game state, 447
 - individualism, 625
 - resources, 428
 - as semiotic domain, 241, 261
 - See also* Operation Flashpoint: Cold War Crisis; Return to Castle Wolfenstein; Wolfenstein 3D
- Fischer, Bobby, 481
- Fitzhugh, L., 352–354, 362
- Five Magics, 540
- flackbacks, 681, 682
- flame wars, 771
- Flood, M., 382
- Fluxus, 68
- Flynn, E. A., 363
- fog of war, 33, 55, 446, 451
- folly, 101
- Fontaine, T., 545
- football, 484
- force, 444
- formal abstract design tools, 369–380, 413
- Formanek-Brunnel, M., 362
- Foucault, M., 307
- 400 Rules Project, 53, 413
- Foursquare
 - description, 507
 - rules, 16, 43, 508–516
 - social culture, 40, 43, 509–516

- frame analysis, 579
 - of fantasy games, 581–591
- frames and contexts, 320–327, 485, 515, 582–596
- frame switching, 593–596, 600
- framework. *See* component framework
- Frasca, G., 33, 51, 661–663, 667
- free choice, 304
- freedom
 - of admins, 810–812
 - to change game, 525–531
 - and fantasy RPGs, 593
 - vs. narrative, 647, 661, 663, 679
 - and play, 102, 126
 - player rights, 792, 794, 799, 802–809
 - vs. rules, 141–147
 - self-liberation, 136
 - and video games, 344
 - and virtual worlds, 825, 837, 844
- freeforms, 201
- Freeman, D., 7
- Freire, P., 265
- Freitag, W., 210
- Frequency and Amplitude, 65
- Friedman, T., 362
- frivolity, 85, 305
- Frobenius, L., 109–111, 117
- Fujitsu Habitat, 749
- Fuller, M., 678
- Fullerton, T., 13, 25, 437
- fun
 - aesthetics, 442
 - analysis, 98
 - density, 214
 - in fantasy RPGs, 593
 - and learning, 637
 - and meta-game, 498
 - and rules, 514
 - types, 4
- Funcom, 819
- Galileo, 629
- Gamasutra, 49
- gambling. *See* games of chance
- game(s)
 - analysis (*see* component framework; design patterns)
 - change recommendations, 531
 - classification, 129–147, 148t, 435, 612
 - definitions, 77–81, 184–191, 196, 477
 - elements of, 185–191, 196–209
 - instance, 415, 506, 658
 - instance of, 415, 506, 658
 - multiple run-throughs, 658
 - narrative hybrids, 662
 - nonlinearity, 194
 - non-narrative, 672 (*see also* narrative)
 - oldest, 439
 - vs. play, 519, 525–530
 - vs. puzzles, 193
 - and real life, 506, 579
 - session, 415
 - as social contract, 11–18, 796–805
 - speaking about, 43–50
- game communities
 - antisocial activity, 768
 - and change, 520–526
 - and conflict, 33
 - and cyberspace, 730, 734, 750
 - design for, 41
 - and first-person shooters, 241, 247
 - Foursquare, 17
 - Habitat, 23, 39–43, 746–749
 - Jedi Knights II, 603–608
 - magic, 554
 - and narrative, 645
 - and platform vs. computer games, 250
 - player rights, 796–812
 - and player types, 61

- purchase, 39, 157–161
 - and spoilsports, 106
 - See also multiplayer domains (MUDs)
- GameCube, 248, 692
- Game Developer*, 49
- game development software, 623
- game economies
 - defined, 59
 - in design patterns, 55, 430–433
 - in *Habitat*, 746, 751, 752n2
 - in *Magic*, 60, 63, 547–549, 551
 - in MMORPGs, 61
 - in *Norrath*, 59–63, 816, 826–840, 846–858
 - of *Ultima Online*, 861n19
- game mechanics. See mechanics
- game models, 505
- games of chance
 - cultural status, 124
 - and fate, 304
 - social ambiguity, 302
 - and threat, 318
 - transformations to, 129
 - See also *alea*; *baccara*
- games of patience, 143
- game spaces, 65–69
 - adventure island, 346
 - arcade games, 462
 - catacombs, 710–713
 - evocative spaces, 34
 - experiential nature, 687n9
 - and framework, 421
 - and gender, 74, 346–361
 - Habitat*, 731, 740, 743, 750
 - Joust*, 463
 - mazes, 66, 68, 703–713
 - in MUDs, 765
 - multiscreen, 66
 - narrative, 65, 68, 664, 674–682
 - property rights, 794, 795, 860n15
 - for rehearsal, 681
 - in *Saturn's Nights*, 359
 - scrolling map, 65, 715–717
 - secret gardens, 348–352
 - secret room, 712
 - The Sims*, 685
 - single screen, 463
 - towns, 352–356
 - in virtual worlds, 834, 846, 860n15, 862n27
- Gamespot, 49
- game state, 447
- game theory
 - and chess, 392
 - and component framework, 414
 - and economics, 387–389
 - and genetics, 404
 - minimax principle, 54, 388, 396–398, 405
 - mixed strategy, 399–405, 408n3
 - N*-person games, 406
 - origins, 383–386
 - table of outcomes, 392–395
 - tic-tac-toe, 389–392
 - zero-sum games, 54, 395
- gaming, 506, 580, 746–749
- gaming mind, 520
- Gamma, E., 437
- Gandhi, 661
- Gardner, H., 265
- Garfield, R., xviii, 22, 23, 60, 63, 205, 538–555
- Garfinkel, H., 601
- Gee, J., 45, 47, 73, 228–264, 265, 610–638
- Geertz, C., 86
- gender
 - in avatars, 822, 844
 - books, 337, 345–355, 357–360

- boy culture, 338–347
- cultural models, 616, 618, 625
- and cursor, 351
- Foursquare, 511–514
- misogyny, 341, 343, 358 (*see also* girls and women)
- playthings, 151n6
- and representation, 71, 74
- and spaces, 69, 74, 336–338, 346–352
- spoilsports, 106
- Genesis 3D, 623
- genetics, 298, 404
- genres, 412, 435, 679, 867–869
- Gibson, W., 752
- Gillen, K., 49, 51, 602
- girls and women
 - and avatars, 822, 844
 - in books, 348, 352–357
 - and boy culture, 341
 - exploration-oriented game, 349
 - game movement, 344
 - and male games, 358
 - misogyny, 341, 343, 358
 - in rituals, 116
 - and spaces, 68, 336, 348–356
 - and video games, 6, 74, 355
- Glaser, B., 584
- Glaser, R., 265, 266
- Go, 204, 383, 453
- goals
 - and action, 654
 - and addiction, 340
 - Adventure, 699
 - adventure games, 375
 - Breakout, 560
 - in Cabal process, 215
 - chess, 183
 - in component framework, 417
 - and diplomacy, 202
 - in freeforms, 201
 - as game element, 186, 191
 - in game vs. work, 173
 - golf, 174
 - Habitat, 740
 - levels of, 372
 - and linearity, 635
 - Mario, 370, 372
 - Operation Flashpoint, 627
 - prelusory, 186, 191
 - resource collection, 430
 - and resources, 430
 - and RPGs, 197
 - and rules, 174–177
 - Sim City, 197
 - subgoals, 417
 - and toys, 194
- god games, 430
- Godzilla, 160
- Goffman, E., 510, 516, 579–581, 582, 596, 601
- Goldberg, A., 753
- Goldberg, E., 210
- Goldstein, J., 51
- Goldstein, K., 15, 19, 505, 506, 515, 516
- golf, 174, 178
- Gooding, M., 86
- goodness, 607, 612, 614
- gothic romances, 349
- Gould, S. J., 298
- Grammatron, 645
- Grand Theft Auto, 65, 75, 439
- graphics, 542, 696, 735
- greed. *See* minimax principle
- Greenberg, E. R., 479
- Greenfield, P. M., 363
- Griffin, P., 266

- Groos, K., 132, 139, 142
- Grossman, A., 25
- Grusin, R., 31
- GTA San Andreas, 75
- Guardini, R., 112
- Gygax, G., 9, 205
- Habbo Hotel, 41
- Habermas, J., 265
- Habitat
 - current status, 749
 - election, 744
 - future directions, 750
 - incipient vs. percipient level, 744–746
 - in Japan, 749
 - lessons learned, 734–747
 - object-orientation, 733
 - player contribution, 18, 22
 - precursors, 730
 - regions, 731–733
 - scaling, 740
 - social culture, 41
 - violence, 743
- hackers, 291, 744–746
- Haiti, 138
- Hale, R.-E., 63
- Haley, J., 326
- Half-Life, 23, 213–220, 611, 682
- Hall, F., 601
- Halmos, P., 386, 407
- Hammer, D., 639
- handicapping, 448, 532–535
- hard drives, 248
- harmony, 105
- Harré, R., 516
- Harrigan, P., 37
- Harris, L., 202, 203
- Harris, L. V., 863
- Harris, R., 199
- Hart, R., 335, 336, 362
- Haslam, F., 200
- hate groups, 623
- Hayek, F. A., 753
- Hays, J., 540
- hazing, 133, 318
- heads or tails, 133, 399–402, 405, 408n3
- Heath, S. B., 265
- hedgehog. *See* Sonic Adventure 2 Battle
- Helm, R., 437
- heroes, 624
- Herold, C., 667
- HeroQuest, 207
- Herron, R. E., 86
- Herz, J. C., 19
- Hickey, D., 51
- hidden energy, 33, 450
- hide and seek, 142
- high-jumper, 179, 182
- Hill, C., 265
- history
 - Adventure, 691, 694–697
 - Apple II, 715
 - Eastern Front, 715
 - of infractions, 806
 - Magic, 539–543
 - of virtual worlds, 818–820, 824, 860n13
 - of war games, 383
- hobbies, 145, 299
- hockey, 506
- Hoffman, S., 13, 25, 437
- holidays, 114
- holistic components, 415
- Holland, D., 639

- Holland, N. N., 349, 362
- Holmsten, P., 858n2, 860n9
- Holopainen, J., 10–11, 54, 57, 79, 80, 436
- Homo Ludens*, 83, 96–119, 123
- horse races, 131, 132
- hot cockles, 139
- Houser, N., 266
- Hudson, 136
- Hughes, L., 16, 43, 504–516
- Huhtamo, E., 19
- Huizinga, J., 46, 83, 97–119, 123, 417
 - critique of, 123–124
- human nature, 751
- humor, 625, 766
 - See also joking
- hyperactivity, 334
- hypertext, 195, 646, 663, 671
- Ice Age, 552
- identification, 27–31
 - and agency, 650
 - in fantasy RPGs, 35, 72
 - in Mideast game, 622
 - as mimicry, 28, 137
 - with moving shape, 697
 - in races and contests, 137
 - and simulation, 204
 - and tokens, 206
- identity(ies)
 - Under Ash, 621–623
 - in fantasy RPGs, 592–599
 - of on-line players, 74
 - as problem-solver, 258, 262
 - in religions, 117
 - and representations, 109
 - as rhetoric of play, 85, 305
 - in society, 258, 262
 - three-layer, 29
 - See also player-character construct
- ideology, 43–50, 73, 309
- idleness, 146, 154n16
- ilinx*, 5, 138–140, 148t
 - and *ludus*, 144
 - in slot machines, 153
 - See also vertigo
- illusion
 - of closeness, 446
 - in fantasy RPGs, 589
 - fog of war, 446, 451
 - trompe l'oeil*, 319
 - and uncertainty, 449
- I Love Bees, 68
- imagination
 - and myth, 100
 - representations as, 99, 108
 - and rhetorics of play, 85, 305
 - and seizure, 110
 - See also make-believe
- immersion
 - disbelief suspension, 649
 - environmental storytelling, 674–676, 682
 - in experience, 29
 - in Jedi Knights II, 30
 - mechanisms, 657
 - and narrative, 34
- immersive fallacy, 29
 - See also lusory attitude; magic circle
- improvisation, 126
- individualism, 625
- inefficiency
 - and game definition, 78
 - of play, 124
 - of rules, 9, 173–184, 188

- inequality
 - and pleasure, 61
 - and virtual worlds, 840, 845, 858, 860n12
 - See also* equality
- inevitability
 - destiny, 133
 - in fantasy RPGs, 506
 - and interactivity, 660–664
 - sources, 453–456, 459n2
 - and transformation vs. agency, 458
 - vs. uncertainty, 33, 55, 445
- infinite play, 463
- infinite regression, 492–494, 501
- information
 - as content, 236
 - game analysis, 434
 - and game design, 217f, 421
 - and game theory, 390
 - and player types, 772
 - relevance, 200–202
 - See also* knowledge
- information availability
 - about resources, 429
 - about score, 451
 - in arcade games, 463, 465
 - in Aristotelian drama, 656
 - backstory revelation, 681–683
 - Clue, 454
 - in fantasy RPGs, 586–590
 - Majestic, 683
 - outcome, 126
 - See also* deceit; fog of war
- instinct, 103, 118, 141, 145
- intellectual property, 434, 805–807, 815, 835
- intention
 - in adventure games, 654
 - of changing game, 531
 - description, 372–377
 - in interactive drama, 652
 - of playing well, 527
 - and Rooie Rules, 509
- interactive fiction, 646, 648, 663
- interactivity
 - in arts, 645
 - vs. boredom, 868
 - and cyberspace, 730, 734, 750
 - in drama, 646–656, 660–666
 - as game trait, 194, 196
 - in literature, 645
 - in MUDs, 764, 767
 - vs. narrative, 439, 643, 664–666, 671
 - and player types, 769–777
 - theories of, 660
 - in virtual world, 818
 - See also* agency; involvement; social interaction
- interconnectedness, 467–469, 737
- interfaces. *See* user interfaces
- Internet
 - Under Ash, 620
 - as learning tool, 253, 257
 - Magic, 554
 - multiplayer games (see multiuser domains; virtual worlds)
 - Project Entropia, 843
- interpretation, 71–75, 547, 553
- interstitials, xxiii, 873–875
- Intruder, 645
- involvement
 - and agency, 650
 - design for, 369–380, 430, 443
 - fantasy RPGs, 580, 593, 599
 - and frame analysis, 579
 - Habitat, 746–748
 - and narrative, 376–380, 643, 659, 662
 - puzzles, 649and rules, 495

- ISO Model, 737
 Israelis, 73, 619–623
 iterative design, 21–24, 55, 213, 218–225
- James, W., 579, 601
 Japan, 152, 749
 Järvinen, A., 436, 437
 Jedi Knights II: Jedi Outcast
 identity
 of on-line player, 74, 604
 player-character, 30, 603–608
 lightsabre dueling, xviii, 603–605
 and Quake III, 605
 as social culture, 40
 Jenkins, H., 6, 33, 34, 51, 67, 69, 74, 75, 330–361, 362, 664, 667, 668–689
 Jensen, A. E., 115–117
 Jeopardy, 449, 450
 Jewitt, C., 266
 Johnson, D., 362
 Johnson, R., 437
 Johnson, S., 63
 joking, 595, 598
 Jones, J., 75
 Jones, K., 476
 journalists, 49, 433
 See also always_black
Journey to the Center of the Earth, 683
 Joust, 463
 joy, 114, 125, 142
 joysticks, 248, 697
 Junta, 207
 Just Grandma and Me, 194
 Juul, J., 33, 37, 57, 80, 81, 671, 677, 682
- Kalantzis, M., 265
 Kant, I., 524
 Kaplan, C. S., 863
 Karp, D., 863
 Katz, J., 339, 362
 Katz, M. L., 863
 Kaufman, D., 210
 Kennedy, H. W., 75
 Kent, S., 362
 Kerényi, K., 114
 Kessen, W., 308
 Kettman, S., 863
 keyboards, 248
 killers
 vs. other killers, 776
 and other types, 757, 762, 765, 771–783
 as player type, 6, 42, 61, 759, 762
 proportion, 778
 in social MUDs, 768
- Kinchloe, J. L., 362
 Kinder, M., 51, 363
 King, T., 210
 Kirmse, A., 819
 Kirmse, C., 819
 kites, 127, 142, 143, 154n16
 Kloesel, C., 266
 kludges, 681
 Knizia, R., 21, 437
 knowledge
 anachronisms, 585, 591
 content orientation, 236–239
 and decisions, 200–202
 and fantasy, 583–591
 of outcome, 126
 of player vs. character, 72
 as power, 303
 and producers, 231
 from simulation, 204
 See also information; information availability
- Kolbert, E., 861n19, 863

- Kort, B., 787
- Korzybski, A, 317
- Koster, R., 7, 11, 42, 788–812
- kredati*, 141
- Kreimeier, B., 57, 436, 437
- Kress, G., 266
- Kriegspiel, 383
- Kuhn, T. S., 307
- Kuittinen, J., 436
- Kushner, D., 25
- Lachicotte, W., 639
- Landow, G., 667
- language
- about games, 43–50, 412
 - abstraction levels, 315
 - assembly language, 721
 - BASIC, 718
 - capitalizations, 211
 - in card game, 59
 - Chinese, 141, 146, 154n16
 - critical language, 193
 - design vocabulary, 367–370
 - and “fun,” 98
 - ludus*, 141–147
 - metaphors, as play, 100, 299
 - meta-rules, 497
 - “play” definitions, 126
 - play rhetorics, 48, 85
 - recognition, 34
 - and rules, 492, 547
 - The Sims, 684
 - for structuralists, 242–247
 - in tennis game, 490
 - See also* dialog; linguistics; software
- lapsed players, 555
- LARPs, 195, 198
- Larsen, E., 265
- lassi, 680
- Latinos, 623
- laughing, 101
- launch activities, 5, 62
- Laurel, B., 25, 29, 33, 37, 349, 647, 655, 667, 668, 867–869
- lawsuits, 768, 805
- leapfrog, 139, 142
- learning
- about real life, 502
 - of arcade games, 465
 - by contemporary children, 253, 259
 - critical and active, 237, 254–263
 - and critical thinking, 156, 253, 256–259
 - and cultural models, 629–637
 - educational games, 868
 - from failures, 636
 - for future work world, 344
 - and girls, 352, 356, 358
 - Half-Life, 611
 - and MUDs, 765
 - and Norrath, 843
 - (not)counting, 487
 - play as, 304
 - to play Breakout, 569–579
 - and videogames, 236–239, 263, 358, 611–613, 633–637
- learning curve, 377
- learning principles, 263
- LeBlanc, M., 4, 33, 55, 438–459
- The Legend of Zelda, 421, 439, 693
- Legionnaire, 718
- Lemke, J., 266
- Lemmings, 430
- levels
- of abstraction, 315
 - and achievers, 767
 - in arcade games, 463

- of avatars, 849–851, 857, 858
 - behavior vs. presentation, 736
 - Breakout, 577
 - of cognition, 495
 - of constraints, 660
 - in data communication, 737
 - of difficulty, 220, 471
 - in fantasy gaming, 582–584
 - frame analysis, 579, 582–584, 592–596
 - of game change, 525
 - of goals, 372
 - in MUDs, 766
 - of narratives, 679
 - of rules, 493
 - Summoner, 274
 - of virtual world, 744–748
- Levy, D. J., 753
- Lewis, E., 548
- Lieberman, J., 334
- Liebowitz, S. J., 863
- Life, 204
- lifeworlds, 251–259
- limits
 - and animals, 132
 - in Atari Adventure, 698
 - and competition, 131
 - of culture, 253
 - gender, 360
 - of human nature, 751
 - of play, 104, 113, 125
 - rules vs. means, 177–183
 - on sexual activity, 685
 - in spectacles, 680
 - on twinkling, 858
 - See also* rules; time limits
- Lin, Jim, 546
- Lineage, 40
- linearity, 194, 635, 644, 687n7
 - See also* narrative(s)
- linguistics, 242–247, 317
- literacy, 47, 229–235, 345, 357
- literature
 - Alice in Wonderland*, 677
 - electronic, 645
 - spatial exploration, 675
 - War and Peace*, 676
 - See also* books
- Logg, E., 473, 715
- logic
 - asymmetrical relations, 321
 - frames and contexts, 320–327
 - and game spaces, 66
 - and game theory, 388
 - and psychotherapy, 327
 - and resources, 430
 - See also* frames and contexts; paradoxes
- Logical Types, 317, 327
- logistics, 722
- London, J., 346
- The Longest Journey, 623
- The Lord of the Rings, 21
- losing, 498
- lotteries, 133
- Lucasfilm Games, 729
- Lucey, P., 459
- ludology, 411, 422, 660, 673, 687n1
- ludus*, 141–147
- Luigi's Mansion, 644
- Lundgren, S., 436, 437
- lusory attitude
 - and game, 78, 185, 188–190
 - and make-believe, 137

- and religious feasts, 115–117
 - and rules, 501
 - and spoilsports, 106, 127
- lusory goals, 186
- lusory means, 187
- lusory rules, 187
- Lynch, K., 685
- Mackay, D., 31
- Magic: The Gathering
 - antecedents, 539
 - appeal, 209
 - deck types, 545, 550
 - design, 539–550, 553
 - economies, 60, 63, 547–549, 551
 - formats, 553
 - and Ice Age, 552
 - inevitability, 453
 - iterative design, 22, 23
 - playtesting, xviii, 542–546, 550
 - Pro Tour, 554
 - releases, 541–543
 - resource management, 459n1
 - role play, 549
 - tension, 445
 - variety, 205, 541, 544
- magic circle, 106, 113
- Magic Online, 554
- mail games, 415
- mais d'or*, 138
- Majestic, 68, 672, 683
- make-believe
 - awareness of, 103
 - and characters, 27–31
 - in children, 136
 - dressing-up, 107
 - fabrications within, 600n2
 - in game definition, 78
 - pleasure in, 5, 136
 - and rules, 126, 137, 501
 - The Sims2, 71
 - societal view, 262
 - See also* fantasy; simulations
- Malinowski, B., 116
- Manning, F. E., 504
- Manser, M., 787
- maps, 317–321, 705f, 758, 766
 - scrolling, 715–717
- marbles, 129, 134, 540
- Marett, R. R., 116
- Margolis, S., 863
- Mario Bros., 347, 371, 463
 - See also* Super Mario Bros.
- Mario Golf, 169
- Mario Golf Advance, 163
- Mario 64
 - consequences, 374
 - design, 370–372
 - design tool model, 372–380
- marketing
 - and addiction, 868
 - and bugs, 709
 - and design patterns, 434
 - and infinite play, 463
 - key premise, 868
 - potential research, 845
 - of source code, 724
- Martins, I., 266
- masculinity, 340
 - See also* boys and men
- masks, 118, 124, 135, 680
 - See also* disguise

- massively multiplayer on-line role-playing games (MMORPGs)
 - admins, 812 (*see also* rights)
 - economies, 61
 - and narratives, 645
 - and planning, 738–741
 - play mode, 417
 - and role-playing, 207, 757
 - sessions, 415
 - See also* virtual worlds
- mastery
 - and boredom, 535
 - and gender, 339, 345, 347
 - handicapping, 532–535
 - and pleasure, 142
 - undoing, 258
- matching pennies, 399–402
- Mateas, M., 29, 33, 34, 642–669
- mathematics, 143, 302, 322
 - and game theory, 385
 - See also* Life
- Matthews, M. H., 335
- Matthews, R. C., 363
- Mauldin, M. L., 787
- Mayer, R. E., 266
- Mayfair Games, 539
- mazes, 182
 - Adventure, 66, 68, 703–711
- McConville, R., 500
- McCulloch, W. W., 321
- McEnany, L., 343
- McGillicuddy, K., 266
- McGilvray, J., 266
- McGonigal, J., 69
- MdLuhan, M., 45
- meaning, 581
 - See also* fantasy games; goals; resource management; semiotic domains
- means, 9, 179–184, 187, 188
- mechanical bias, 448
- mechanics
 - in arcade games, 465
 - defined, 413
 - and design patterns, 423
 - and drama, 440, 444–457
- Medal of Honor Allied Assault, 611
- medieval games, 585
- meditation, 146
- Mega Man, 347
- Meier, S., 197
- melodrama, 683
- memories, 676–679
- men. *See* boys and men
- merchants, 819, 833, 853–856
- Meridian 59 (M59), 819
- Merkle, B., 479
- merry-go-rounds, 129
- messaging, 418
- metacommunication, 28–30, 35, 84, 323–326
- metalevel thinking, 256, 263
- Metal Gear Solid, 634, 636
- Metal Gear Solid 2: Sons of Liberty, 625
- metaphors
 - avatar/worker, 822, 835, 838, 852
 - flags, 319
 - games as, 506, 579
 - psychopathology, 326, 327
 - visual, 216f, 219f
- meta-rules, 489, 493, 497–4500
- Mexico, 138
- Microsoft, 248–250, 819, 843
 - See also* Xbox
- military barracks, 139
- Miller, M. S., 752, 753
- mimetic mode, 665

- mimicry
- in animals, 136, 149n5
 - and *ludus*, 143
 - play type, 5, 28, 135–137, 148t
 - scale models, 143
 - Secret Paths, 350
 - in slot machines, 153
- Mindark, 817, 840
- minimax principle, 54, 388, 396–398, 405
- Minnie case, 806
- Minstrell, J., 639
- Mirage, 552
- mischief, 142, 152n12, 300
- misogyny, 341, 343, 358
- Missile Command, 576
- mixed-reality games, 68
- mixed strategy, 399–405, 408n3
- MMORPGs. *See* massively multiplayer on-line role-playing games
- mobile objects (MOBs), 819, 853–857, 859n4
- Mochan, xviii, 27, 63, 269–295
- models
- to scale, 143, 145, 299
 - See also* cultural models; design models
- Molyneux, P., 682
- money
- and *alea*, 149n4
 - games of chance, 134
 - monetary system, 497
 - from on-line gaming, 816, 860n8
 - payment issues, 803, 806, 809
 - and poker, 173
 - virtual world profit, 820
 - in virtual worlds, 832, 835, 838, 842, 857, 860n12
 - zero-sum games, 395
- Monopoly, 203, 419, 421, 674
- monsters, 819, 862n26
- Montfort, N., 649, 668
- Moock, C., 787
- Moore, R. C., 335, 338
- morality
- goodness, 615
 - play, 47, 102
 - rules, 176, 181–183, 483, 496
 - vertigo, 139
 - video games, 613
- Morganstern, O., 387, 437
- See also* game theory
- Morningstar, C., 18, 23, 41, 728–752, 859n3
- Morrowind, 272
- Mortal Kombat, 341
- Mortensen, T., 69
- motivation, 654
- motorcycles, 140
- mountain climbing, 144
- movies. *See* films
- MUDs. *See* multiuser domains
- multiculturalism, 253
- multimodal texts, 229
- multiuser domains (MUDs)
- cheating, 745
 - commercial viability, 782
 - and community, 40–42
 - cyberspace use, 730, 734, 750
 - elections, 744
 - extensibility, 769
 - game spaces, 765
 - game status, 755, 769, 784
 - game vs. social, 767–769, 782
 - interest, 761f, 763–767, 783
 - narratives, 645
 - player rights, 789
 - player types, 6, 756–763
 - stability, 763–767, 777–784, 790–795

- See also Habitat; massively multiplayer on-line role-playing games; rights
- Murphy, P., 208
- Murray, J., 29, 33, 37, 647, 649, 668, 672, 685, 687n6
- music, 256, 300, 347
- Muslims, 619–621
- Myst, 644, 682
- mystery, 112, 114, 118, 124
- myth, 100
- Mythic Entertainment, 820
- NAPLPS, 736
- Napoleon's Last Battles, 204
- narrative(s)
- and Cabal process, 216
 - embedded, 34, 664, 681–684, 686
 - emergent, 34, 644, 665, 684–686
 - enacted, 34, 664, 685–686
 - evoked, 664, 685
 - and exploration, 646
 - vs. freedom, 647, 661, 663, 679
 - and games, 664–666, 671–674
 - adventure games, 375
 - arcade games, 465
 - MUDs, 645, 769
 - RPGs, 33–36, 375–377
 - spaces, 65, 68, 664, 674–680
 - Ultima Online, 645
 - Half-Life, 682
 - keeping track of, 218
 - linearity, 194, 635, 644, 687n7
 - and links, 646
 - micronarratives, 679
 - and multiple run-throughs, 658
 - Pac-Man, 643
 - vs. player involvement, 376–380, 643, 659, 662
 - rhetorics as, 310
 - The Sims, 645, 665, 684
 - vs. simulation, 204
 - structured vs. episodic, 678
 - Summoner, 294
 - in town games, 355
 - traditional forms, 439
 - See also tension
- narratologists, 666n1, 670, 672
- National Alliance, 623
- nature
- equal opportunity, 131
 - mimicry, 135
 - and rituals, 108–111
 - Secret Paths, 350
- navigation, 65
- NBA Live, 375, 378
- negotiation, 12, 30, 43
- neo-Aristotelianism, 647–649, 656, 660–666
- Neo-platonism, 100
- network games, 201, 343
- network monopolies, 843
- networks
- of screens, 713
 - social, 343
- Neverwinter Nights, 812
- New Games Foundation, 518
- New London Group, 266
- Newson, E., 363
- Newson, J., 363
- NHL 99, 377
- niceness, 509–516, 543
- Nichols, D. A., 786
- Nifty Serve, 749
- Nintendo, 248, 612, 674
- nonreversible processes, 454
- nonviolence, 623

- No One Lives Forever II, 625
- Norman, D., 21
- Norrath
- demographics, 816, 828–832, 859n6
 - economy, 826–840
 - goods markets, 853–856
 - inflation, 837
 - labor market, 852, 855
 - per capita GNP, 836, 849
 - meetings and classes, 843
- Norrish, J., 787
- no takebacks, 534
- novices, 465
- N*-person games, 406
- Nussbaum, M., 437
- objectivity, 307
- object-oriented programming, 730, 733, 735, 750
- objects
- Adventure, 699, 713
 - in design, 735–737
 - Habitat, 731–733, 743, 748, 750
 - in MUDs, 766, 769
 - The Sims, 685
 - in virtual worlds, 819, 833, 853–857
- obsession, 178
- Ogborn, J., 266
- Old Man Murray, 49
- olorhymes, 143, 152n14
- OMM, 668
- on line board game lounges, 420
- online sites, 49
- open awareness, 584
- open-endedness, 741
- Operation Flashpoint: Cold War Crisis, 625–629, 637
- order, 105, 110, 139
 - disorder, 139, 141
- orgies, 107
- outdoors, 332–336, 675
- pacemaking
- Centipede, 469–472
 - decelerators, 451
 - denouement, 457
 - of difficulty (see challenges)
 - of engineering, 224
 - in fine-tuning, 220
 - of girl game, 351
 - in racing games, 448
 - Summoner, 289
 - and tension, 4, 208, 218
- Pac-Man
- framework, 417, 421
 - game spaces, 65, 463
 - graphics, 675
 - producer-consumer, 432
 - story, 643
- pageantry, 203
- paida*, 141–147, 148t
- Palestinians, 73, 619–623
- Paper-Rock-Scissors, 415
- paradoxes
- awareness, 317, 319
 - Foursquare rules, 514
 - frames and contexts, 324, 515
 - necessity, 327
- Parlett, D., 437
- parody, 625
- participation
- and cyberspace, 730, 734, 750
 - significance, xii, 195
 - and tokens, 200
 - See also interactivity; involvement
- patience, 143, 146
- patience (game). See solitaire
- Patrizio, A., 863

- patterns
 - and architecture, 54
 - and cultural models, 631
 - and fun, 4
 - and game definition, 79
 - See also* design patterns
- payment, 803, 806, 809, 816
- PC Gamer*, 5, 49, 160, 602
- Pearson, P. D., 266
- Pechuel-Loesche, E., 116
- Peitz, J., 436
- Pelligrino, J. W., 266
- penalties
 - Foursquare, 510, 512
 - player rights, 793, 801, 806, 808
 - for rule violation, 188, 506
 - Twenty-One, 457
- pen pals, 299
- Pepper, S., 307
- perceivable consequences, 373–377, 413
- perceptions
 - Breakout, 576
 - of goodness, 614
 - of inevitability, 449, 454
 - of intentionality, 509–511
 - and reality, 449, 454, 579
 - in virtual world, 744–747
- persistence, 104, 143, 636, 818
- personality
 - Cabal process, 221, 224
 - and poker, 134
 - transformation, 650
 - See also* player types
- perspective
 - first- vs. third-person, xviii, 861n19
 - political, 73
- Peterson, S., 210
- Petrik, P., 363
- Phantom Menace, 160
- physical sensations
 - and multimodality, 229
 - See also* vertigo
- physical strength, 358
- physical surrender, 84
- physics, 629–631, 744, 818, 822
- Piaget, J., 13
- Piccione, P. A., 459
- Pictionary, 208
- Pikmin, 235, 254–259, 262, 430
- pinball games, 463
- Ping Pong, 535
- Pirates of the Caribbean, 676
- place, sense of, 203
- .plan, 5
- Planetquake, 49
- planning
 - Centipede, 467
 - Mario, 371
 - for MMORPGs, 738–742
 - platform games
 - characteristics, 250
 - vs. computer games, 248–250
 - design patterns, 435
 - RPGs, 376
 - saves, 248
 - semiotic domains, 248
 - Sonic Adventure 2 Battle, 612
 - web phones, 867
 - See also* Xbox
- Plato, 112, 119, 236
- play
 - awareness, 35, 85, 99, 114–116, 127, 128, 320–323
 - characteristics, 102–107, 124, 128
 - as communication, 28, 316–320

- and culture, 46, 84, 99–119, 141
- definitions, 83–87, 97–100, 123–128, 310
- diversity, 298–301
- extrinsic/intrinsic, 310
- forms, 5, 129–147
- functions, 97, 104, 108, 111
- vs. game, 519, 525–530
- and game models, 505
- and limits, 104, 113, 125
- and morality, 47, 102
- over time, 104, 125
- and progress, 304
- vs. rules, 126, 505
- sacredness, 119
- scholarship, 301–311
- seriousness, 101, 103, 114
- vs. table of outcomes, 394
- theories, 309
- vertigo examples, 138
- play-by-mail games, 415
- player-character construct
 - in *Under Ash*, 621
 - avatars, 42, 85, 420
 - and core beliefs, 611
 - description, 27–31
 - in *Dungeons & Dragons*, 35
 - and emergent narrative, 644
 - in interactive drama, 648, 660
 - in JKII, 30, 603–608
 - real people, as characters, 611, 663
 - in RPGs, 35, 72, 583–599
 - in *Sonic Adventure 2 Battle*, 612
 - See also* agency
- player experience. *See* experience(s)
- player identity. *See* identification
- players
 - acknowledgement of, 214
 - as allies, 202, 406
 - assumptions about, 742
 - attitude (see attitude; lusus attitude; seriousness)
 - and characters (see player-character construct)
 - as component, 420
 - demographics, 301, 623, 828–832, 860n10
 - design awareness, 256
 - design role, 18, 22–24, 34, 62, 195, 742–750
 - as focus, 41
 - and game spaces, 67
 - in game theory, 388
 - involvement, 369–380, 430, 443, 495
 - in fantasy RPGs, 580, 593, 599
 - lapsed, 555
 - messaging between, 319, 418
 - mistakes, 219f
 - and narrative, 34, 644
 - novices, 465
 - position, 131
 - predictability, 18, 39
 - professionals, 125
 - rights of (see rights, of players)
 - and rules, 188
 - and sessions, 415
 - subjectivity, 71, 449, 454, 547, 554
 - three-layer identity, 29
 - types (see player types)
 - video game benefits, 236–239, 263, 358, 611–613, 633–637
 - See also* avatars
- player types, 6, 41, 61, 756–763
 - interactions, 769–777
 - and MUDs, 777–784
- playerwiping, 809
- playful behaviors, 300

- playgrounds
 - backyards, 332–335
 - demarcation, 105, 113, 125
 - as game spaces, 68
- playing mind, 520
- playing well, 527
- play session, 415
- play spaces
 - gender differences, 336–338, 358
 - outdoors, 68, 332–335
- Playstation, 248, 692
- playtesting
 - crashes, 220
 - Eastern Front, 722
 - feedback, 22, 723
 - Habitat, 746
 - Half-Life, 218–220
 - Magic, xviii, 542–546, 550
 - and new games, 21–24, 543
- pleasure
 - analysis, 3–7, 98, 442
 - and artifice, 29
 - in make-believe, 5, 136
 - in pain, 142
 - in process, 680
 - and rules, 9
 - and scarcity, 61, 824–826, 834
 - and vertigo, 140
 - plot, 375, 651, 657–660, 681
 - See also* narrative(s)
- Plucky Little England, 198
- poetry, 143
- Poirier, J. R., 787
- Pokémon, 71, 550
- poker
 - bluffing, 404
 - and chips, as signals, 319
 - and game theory, 385
 - goal, 173
 - network version, 208
 - player traits, 134
 - and socializing, 208
- politics, 73, 181, 744
- polo, 127, 482
- Pong, 675, 692
- pool, 450
- Poole, S., 75
- Popper, K. R., 753
- post-mortems, 457
- Poundstone, W., 54, 382–408
- power
 - of administrator, 798–812
 - of agency, 649
 - and cashing out, 452
 - and casual tennis game, 491
 - and consensus, 500, 502
 - of cultural models, 632
 - and game change, 525
 - and girls, 358
 - of interactive vs. passive media, 623
 - and Jedi Knights II, 606
 - and knowledge, 303
 - learning about, 611
 - Magic, 60, 445, 543, 552
 - need satiation, 867
 - and player rights, 794
 - of referees, in fantasy RPGs, 587
 - and rhetoric of play, 305
 - Sim City, 353
- powerlessness, 349
- predictability
 - and boredom, 205, 535
 - and Mario 64, 371
 - of players, 18, 39

- and rules, 500
- of situation, 126
- See also* variety
- Preece, J., 437
- prelusory goals, 186, 191
- prelusory means, 187
- prelusory rules, 187
- presentation, 203
- primitives, 108–118
- prisoner's base, 127
- privacy, 804, 809
- privileges, 809
- probability, 399–402, 408n3, 660
- problem-solving
 - and design patterns, 423, 433
 - in development, 434
 - in interactive drama, 648
 - Pikmin, 258, 262
 - for pleasure, 142
 - and puzzles, 193
 - in simulations, 204
 - in video games, 635
- productivity, 124, 231
- profit, 124
- progress, 85, 145, 304
- Project Entropia, 842
- property rights
 - intellectual, 434, 805–807
 - virtual, 794, 795, 819
- prototypes, 21–23, 694
- Prussia, 383
- psychology, 134, 799
- psychotherapy, 325–327
- purchase, 5, 60, 157–161, 433
- purpose, 111
- put-ons, 595
- puzzles
 - actions and goal, 654
 - crosswords, 127, 143, 144
 - DOOM 3, 168
 - vs. games, 127, 193
 - and girl culture, 349
 - and interactive drama, 648
 - and ludus, 143, 144
 - in MUDs, 767
 - rings, 143, 155n16
 - Secret Paths, 350, 352
- Qix, 432
- Quake, 654, 655, 682
- quake girls, 358
- Quake III, 605
- quality, 223
- Quantum Computer, 730, 746
- quests. *See* Adventure
- quickslots, 278, 282
- Quinn, N., 639
- races, 137, 178, 180, 300
- racial terms, 74
- racing games, 418, 448, 450, 454
- Raessens, J., 51
- RAM, 692
- randomness, 205
- random numbers, 459n3
- rapture, 110
- rationality
 - game theory, 388, 392, 398, 405
 - and play, 99, 111, 113
- realism, 626, 643
- reality
 - abstractions, 502
 - and ambiguity, 72
 - Club Caribe, 751

- and cultural models, 73, 618
- vs. game, 506, 579
- Habitat, 747–749
- interlude from, 103, 107, 114
- Jedi Knights II, 607
- mixed-reality, 68
- vs. perceptions, 449, 454, 579
- and physics, 629–631
- and player rights, 802–805
- and psychotherapy, 326
- real people, as characters, 75, 611, 663, 684
- and representations, 109
- rhetorics in, 306
- and RPGs, 585–591, 593–599
- rules in, 189, 515
- Saturn’s Night, 359
- semiotic domains, 251–259
- The Sims 2, 71
- vs. spectacle, 867
- in town games, 354
- and vertigo, 138
- vs. virtual worlds, 61, 622, 821, 824, 844, 858, 860nn10,15
- vs. perceptions, 579
- See also* society
- real-time, 368, 421, 698
- real-time strategy (RTS) games, 368, 428, 431
- rebuses, 144
- reconstructions, 849
- recovery, 718
- Red Faction, 611
- red queen dilemma, 430
- redundancy, 681
- referees, 586–591, 594
- rehearsal, 681
- Reid, E., 787
- Reizler, K., 601
- relationships
 - producer-consumer, 55, 431–433
 - See also* social interaction
- relativism, 500–502
- relaxation, 104, 146, 305
- religion, 109, 112–114, 117–119
- repetition, 104, 143, 249
- representations, 71–75, 108
- research, 411–413, 422
 - in AI, 659
 - virtual worlds, 840, 844–846
- Resident Evil, 644
- resource management
 - bandwidth, 734–736
 - design patterns, 55, 427–430
 - Eastern Front, 722
 - Habitat, 746
 - and inevitability, 454, 459n2
 - and interactive drama, 652
 - Magic, 459n1
 - producer/consumer, 55, 431–433
 - profitability, 124
 - scarcity, 61, 824–826, 834, 846
 - time, 453
 - tokens, 200
 - uses, 10, 59–63, 105, 199
 - in virtual worlds, 818
- respect, 506, 606, 770, 772
- Return to Castle Wolfenstein, 45, 611, 624–629
- reusability, 225
- Reversi, 453
- rewards, 215, 766, 823, 825
- Rheingold, H. L., 363
- rhetorics
 - defined, 302
 - of everyday life, 306
 - of play, 46, 85, 302–311

- Rickman, B., 668
- Rifkin, J., 266
- rights, of players
- comments, 796–805
 - in ordinary language, 808–812
 - reality vs. game, 802–804
 - social contract, 11–18, 42, 796–805
 - theories, 790–795
 - See also* intellectual property
- Riner, R. D., 787
- ring-around-a-rosy, 80
- risk
- in *alea*, 133
 - and gender, 346, 348, 353
 - and player types, 771
 - strategy, 399–405, 408n3
 - Super Mario Brothers, 347
 - and threat, 318
 - in town games, 356
 - types, 126, 301
 - in virtual worlds, 825
- rituals, 100, 107–118, 124, 318
- voladores*, 138, 151n8
- Rivest, R., 753
- Robinett, W., 55, 66, 690–725
- RoboRally, 540
- Robson, D., 753
- Rocky's Boots, 691, 713
- Rogers, Y., 437
- role-play
- in boy culture, 342, 347
 - and fiction, 195
 - and insects, 135
 - and knowledge, 591
 - Magic, 549
 - in MUDs, 207, 757, 781
 - and rules, 126
 - and socializing, 207
 - subversion, xviii
 - as technique, 207
- role-playing games (RPGs)
- characters, 29, 206
 - consequences, 373–378
 - fantasy, 35, 72, 506, 582–586
 - framework, 419, 421
 - goals, 197
 - on-line (*see* massively multiplayer on-line role-playing games)
 - opposition, 198
 - Pikmin, 235
 - and real-time strategy, 368
 - referees, 586–591, 594
 - resources, 428
 - social interaction, 208
 - and spaces, 674
 - SquareSoft, 376
 - Star Wars, 204
 - time-out, 593
 - tokens, 200
- Roller Coaster Tycoon, 611
- Rolston, K., 210
- Romanes, G. J., 142
- Rosas, R., 437
- Rosenberg, J., 668
- Rosenberg, M. S., 787
- Rotundo, E. A., 337, 341, 347, 363
- roulette, 133, 209
- Rouse III, R., 4, 56, 266, 450–473
- Roush, W., 787
- rules
- bending, 188, 520–523
 - by the book, 488

- borrowing, 523
- change, 12–18, 500, 515, 531
- and children, 142, 509–516
- constitutive, 11, 187
- cultural context, 73
- and decisions, 10
- and ends, 9, 174–177
- explicit vs. implicit, 48, 500, 511, 515 (*see also* unwritten rules)
- and facilitator, 420
- and framework, 414, 583, 591
- vs. freedom, 141–147
- vs. fun, 514
- game definition, 80, 173–184
- Habitat, 743
- ideal and real, 15, 507
- incomplete, 126, 492–495
- interpretation, 492, 547, 553
- linguistics, 48, 317
- lusory, 187
- Magic, 546, 553
- and meaning, 581
- vs. mechanics, 413
- and morality, 181–183
- and MUD admins, 806, 808
- and order, 105
- and play, 106, 125
- and psychotherapy, 326
- in real life, 189
- vs. rulings, 479
- self-defeating, 478
- and seriousness, 178, 483, 495
- of skill, 187
- and tension, 9, 15
- for tournaments, 554
- and trading cards, 553
- violations, 126, 175–184, 188, 500, 524
- Russell, B., 315, 317, 321, 324
- ruthlessness, 543
- Ryan, M., 665, 668
- Ryan, M.-L., 37
- Rydenhag, T., 436
- sacred performances, 107–118, 124
- saddle point, 398–402
- St. Louis Court Brief, 51
- Salim, A., 620
- Salkowski, J., 863
- Sandoval, G., 863
- saturnalia, 107
- Saturn's Nights into Dreams, 359
- saves
 - by developers, 220
 - game state metaphor, 447
 - by players, 248
 - Summoner, 294
- Saving Private Ryan*, 611
- scale models, 143, 145, 740
- scapegoating, 509, 512
- scarcity, 60, 824–826, 834, 846
- Scardamalia, 265
- scatological images, 341
- Schechner, R., 297
- schizophrenia, 325, 327
- Schmittberger, R. W., 13
- Scholder, A., 13, 63
- Schon, D. A., 266
- schools, 232, 629–633, 868
 - See also* learning
- Schutz, A., 579, 601
- Schwartz, D. L., 265
- Schwartzman, H., 307, 505, 516
- Schweickart, P. P., 363

- science
 - critical learning, 238, 254–263
 - cultural models, 629
 - rhetorics of, 306–308
- Scollon, R., 266
- Scollon, S. B. K., 266
- scoring
 - in arcade games, 463
 - cashing out, 452
 - and change, 535–537
 - function, 447
 - hiddenness, 451
 - and player types, 757
 - ties, 391, 448
 - Twenty-One, 456
- screens, network of, 713
- scripts, 282, 286–288
- scrolling, 465
- scrolling map, 65, 715–717
- Sea Dogs, 676
- Searles, H., 363
- Second Life, 41
- secrecy, 107, 124, 349, 352
- secret codes, 340
- The Secret Garden*, 348–352
- Secret Paths in the Forest, 349–352
- see-saws, 127
- Sega, 343, 359
- Segel, E., 345, 348, 357, 358, 363
- Seiter, E., 343
- Seitzer, E., 363
- seizure, 110, 138
- self. rhetoric of, 85, 305
- self-control, 144, 339
- self-esteem, 215, 464, 483
- self-interest, 388, 396–398
- self-pity, 318
- semiotic domains
 - carryover, 261
 - and cultural models, 632, 638
 - description, 47, 233, 239–250
 - design grammars, 245–250, 255
 - external and internal views, 241–244, 251
 - and learning, 238, 254–261
 - in real life, 251–259
 - situated meaning, 239–241, 252, 254–256
- Senet, 439
- Sengers, P., 660, 668
- seriousness
 - vs. awareness, 112, 116
 - and play, 101, 103, 114–116
 - and ritual, 111
 - and rules, 178, 483, 495
 - and virtual world, 861n20
- Serious Sam, 625
- servers, 845, 855, 858, 861n22, 862n27
- session, 415
- set-up/set-down, 416
- sexual activity
 - in films, 319
 - orgies, 107
 - as play, 299, 300
 - The Sims, 685
 - virtual rape, 768
- sexual harassment, 768
- Shamir, A., 753
- Shanahan, I. See *always_black*
- Shapiro, C., 863
- Sharp, H., 437
- Shelley, B., 197
- Shenmue, 672
- Sherman, L. F., 349, 362

- shooter games. *See* first-person shooter games
- shopping, 817, 819, 827, 832
 - virtual stores, 842
 - See also* consumerism; game economies; purchase
- Shore, B., 639
- Shultz, J., 516
- Siberia, 623
- Siegal, J., 154
- signals, 315–318
- signatures, 693, 712
- Sim City, 194, 197, 353
- Sim Earth, 200
- Simon says, 493
- The Sims, 684, 685
- The Sims II
 - cultural model, 45, 71, 611
 - as innovation, 672
 - and narrative, 645, 665
 - precursor, 41
- The Sims Online, 684
- simulations
 - of battle, 383
 - classification, 148t
 - and narrative, 645
 - in slot machines, 153
 - of social environment, 663
 - uses, 204–207
- single-player games
 - computer games, 207, 209
 - and diplomacy, 203
 - and ludus, 144
 - opposition, 195
 - solitary play, 299, 305
- Sinistar, 464f, 465
- situated meaning, 239–241, 252, 254–256
- Situationist Texts (Web site), 86
- skill
 - acquisition, 142
 - of avatars, 822
 - Breakout, 561, 573, 576
 - critical thinking, 868
 - and disputes, 498
 - rules, 187
 - Summoner, 274–278, 280, 284, 287
- Skinner, D., 639
- sliding, 138
- slot machines, 143, 152n15, 154
- Smalltalk, 733
- Smarty, 354
- Sniderman, S., 11, 15, 47, 48, 476–502
- Snood, 672
- Snooze, 175, 180
- Snow, C. E., 266
- social contract, 11–18, 42, 796–805
- social engineering, 742
- social interaction
 - Breakout, 561, 577
 - Foursquare, 16
 - friendship adventures, 349, 352–357
 - and fun, 514
 - game metaphor, 506, 580
 - and girl culture, 354, 356
 - Habitat, 23
 - and killing, 772
 - in MUDs, 757, 767–769
 - predominance, 208
 - in purchase, 39, 157–161
 - and RPGs, 207
 - rule disputes, 499
 - sportsmanship, 487, 491
 - tennis game, 16, 484–489, 492
 - virtual worlds, 822, 840–843

- socializers
 - increasing/decreasing, 778
 - and other player types, 771–780
 - vs. other socializers, 774, 779
 - as player type, 6, 41, 61, 758, 762
- social networking, 343
- social practices
 - vs. content, 236, 241–246
 - and learning, 238
 - and literacy, 230–232
 - and rhetorics of play, 309
 - and semiotic domains, 258
 - See also* affinity groups
- social standing, 823, 844
- social structures, 48, 106
 - See also* game communities
- society
 - family life, 334, 343
 - and game spaces, 67
 - gender roles, 357
 - ideal, 860n14
 - and play, 104
 - play-communities, 106
 - representations, 71–75
 - research topics, 844–846
 - rituals, 110
 - semiotic domains, 258
 - virtual world effect, 840–843
 - in virtual worlds, 823
- socioeconomic class
 - and cultural models, 618
 - Everquest players, 830t
 - and fate, 302
 - GTA San Andreas, 75
 - in Norrath, 840, 845
 - software
 - for game development, 623, 663
 - object-oriented, 730, 733, 735, 750
 - Smalltalk, 733
- solitaire, 143, 205, 522, 523
- solitary play. *See* single-player games
- Sonic Adventure 2 Battle, 612–619
- Sony, 248, 816, 819, 820, 827, 861n18
- sound
 - Breakout, 564
 - as feedback, 215
 - multimodality, 229
 - Super Mario Brothers, 347
 - in town game, 254
- source code
 - control of, 221
 - decrementing functions, 459n2
 - documentation, 721
 - of Eastern Front, 724
 - emphasis on, 220
 - marketing, 724
 - reusing, 225
- Sowell, T., 753
- Space 1899, 203
- Space Hulk, 428
- Space Invaders, 332, 417, 432, 467
- spam, 164, 809
- Spariosu, M., 297, 307
- spatiality
 - and cultural model, 67
 - and inevitability, 454
 - limits, 105
 - and narrative, 34, 674–680
 - sacred performances, 108, 113
 - and tracks, 131
 - See also* game spaces
- spectacles, 679, 867–869
- spectators
 - drama, 651, 655, 662, 665

- and mimicry, 137
 - and play, 300
 - and threat, 318
 - traditional artforms, 195
 - of vertigo, 140
- Spector, W., ix–xiii
- speed
 - Centipede, 469
 - and girl game, 351
 - Summoner, 289, 294
 - and vertigo, 138, 140
- spies, 591
- spin the bottle, 85
- spoil-sports, 106, 126, 499
- sports, 300, 479, 868
- sports games
 - characters, 206
 - equal adversaries, 131
 - intention, 377
 - power, 305
 - semiotic domains, 230, 232, 236
 - statistics, 377
 - tokens, 200
 - tradition, 489
- sportsmanship, 482, 487, 491
- spoil-sports, 106, 126
- SquareSoft, 376
- Squire, K., 69
- standards
 - for admins, 792, 808–812
 - data communication, 737, 750
- StarCraft, 432
- Star Wars*, 75, 664, 677
- Star Wars: The Roleplaying Game, 204
- Star Wars Galaxies, 664
- stealing, 543, 743
- stealth. *See* deceit
- Steinberg, S. R., 362
- Sterling, B., 753
- Stern, A., 29, 33, 34, 642–666, 668, 669
- story, 375, 681, 687n7
 - about DOOM 3, 157–169
 - See also* narrative; plot
- strategy
 - and chance, 399–405, 408n3
 - chess, 393
 - minimax principle, 396–402
 - mixed, 399–405, 408n3
 - resource management, 430
 - Summoner, 278
 - tic-tac-toe, 392
 - Strat-o-matic™ Baseball, 540, 542
- Stratus, 749
- Strauss, A., 584
- Strauss, C., 618, 639
- Street, B., 267
- strength, 358
- structural components, 419–422
- structuralists, 242–246
- subjective play, 299
- Sudnow, D., 3, 67, 558–571
- Suits, B., 9, 11, 78, 172–191
- Summoner, 269–295
 - algorithms, 272
 - bugs, 290
 - chain combo, 288
 - characters, 273, 277, 279, 281, 284, 294
 - cheating, 291
 - economies in, 62
 - FAQ, 17, 269–295
 - firewalls, 279
 - gameplan, 278
 - quickslots, 278, 282, 286
 - releases, 271

- saves, 294
- scripts, 282, 286–288, 293
- side-quests, 293
- skills, 274–278, 284, 287
- speed, 289, 294
- storyline, 294
- tactics, 279, 282, 286
- time to finish, 293
- Super Mario Bros., 68, 347, 675
- Super Mario Sunshine, 440
- Super Metroid, 341
- surprise, 205
- suspension of disbelief, 496, 649
- suspicion, 499, 584
- Sussman, G. J., 753
- Sustare, B. D., 601
- Sutton-Smith, B., 46, 81, 85, 86, 296–311, 516, 667
- Swain, C., 13, 25, 437
- Syria, 73, 619
- systems
 - complexity threshold, 739
 - as discourse universe, 71
 - and flexibility, 15
 - games as, 80, 499–502
 - learning about, 263
 - and patterns, 54
 - and rhetorics of play, 85
 - of spaces, 67
 - See also* game economies
- System Shock, 164
- table of outcomes, 392–395
- tactics, 279, 282, 286
- Talisman, 199
- Tapscott, D., 339, 363
- Taylor, C., 267
- Team Fortress II, 221
- teamwork, 625, 691
 - See also* Cabal process
- technology
 - and Atari 2600, 692
 - bandwidth, 734–736
 - vs. characters, 729
 - vs. community, 41
 - cryptography, 750
 - data communication, 737
 - as emphasis, 220
 - evolution, 737
 - and game spaces, 65
 - and journalists, 59
 - platform/computer, 248–250
 - reusability, 225
 - servers, 845
 - and slot machines, 154
 - standards, 737, 750
 - timeliness, 224
 - See also* artificial intelligence
- teetotum, 138, 142
- Tekken, 377
- telepresence, 648
- television
 - networks, 203, 208
 - quiz shows, 449, 450, 454–457
 - watching, 299
- Tempest, 464f, 643
- tennis
 - Breakout, 577
 - extra-game activities, 414
 - McEnroe antics, 498
 - scoring, 536
 - unwritten rules, 16, 484–492
- tension
 - and aesthetics, 105
 - Centipede, 4, 55, 469–472

- components, 33, 55, 445
 - and contests, 444
 - and dynamics, 446
 - and environment, 222f
 - and joy, 114
 - and *ludus*, 143
 - and mistakes, 219f
 - pacing, 4, 208, 218
 - playing vs. gaming mind, 520
 - play vs. story, 679
 - and plot, 195
 - resolution, 457
 - in RPGs, 593–596, 598
 - and rules, 9, 15
 - uncertainty, 445
- Terminal Time, 645
- terror, 116, 319
- terrorism, 619, 634, 637
- testing. *See* playtesting
- Tetris, 672, 687n6
- text adventures, 646, 691, 694–699, 703
- thematic structure, 218
- Thief: The Dark Project, 625
- thinking
 - all-or-nothing, 320
 - critical, 868
 - metalevel, 256, 263
- third-person, xviii, 861n19
- Thompson, K., 681
- Thorne, B., 360, 361, 363
- threaded execution, 719
- threat, 317
- 3D
 - Breakout, 576
 - development software, 623
 - and realism, 68, 319
 - Saturn's Night, 360
 - and virtual worlds, 818
 - Wolfenstein 3D, 261
- thrills, 573, 575
- ticking clocks, 453–457
- tic-tac-toe
 - extra-game factors, 480
 - game theory, 389–393
 - rules, 11, 477, 527–530
- tie scores, 391, 448
- tightrope, 144
- time
 - anachronism, 585, 591
 - and change, 524
 - denouement, 457
 - diversity of, 301
 - to finish Summoner, 293
 - and framework, 415, 418, 421
 - and inevitability, 453–456
 - infinite play, 463
 - Jeopardy, 450
 - Magic, 546
 - and play, 104
 - and players
 - of EverQuest, 820, 831t, 832, 849
 - lapsed, 555
 - of MUDs, 763
 - real-time, 368, 421, 698
 - as resource, 430
 - trading card games, 553
 - video games, 635
- time limits
- chess, 481
 - and information, 201
 - of play, 104, 125
 - sports, 479
 - for technology, 224
 - tic-tac-toe, 477

- time-out, 486, 493, 593
- TinyMUD, 767, 782
- tips
 - vs. advice, 257
 - on Summoner, 269–295
- tokens
 - and characters, 206
 - and control, 200
 - in framework, 420
 - Habitat, 746, 752n2
- Tolkien, J. R. R., 858, 863
- Tomb Raiders, 425, 644, 818
- top-spinning, 127
- tournaments, 478, 554
- Town, 352–356
- town games, 352–356
 - See also urban design
- toys, 143, 151n6, 194, 336
- trading card games, 550, 553
- traditions, 104, 107, 489, 491
- transformation, 649, 657–659
- transmorph, 582, 600n3
- transport, 139
- trash-talking, 49, 483, 603–608, 759
 - See also flame wars
- Traveller, 590
- travesty, 136
- trends, 144, 152n15, 332
- Tribble, D. G., 753
- triggers, 418
- triviality, 751
- Trivial Pursuit, 208
- trompe l'oeil*, 319
- troubleshooting, 55
- trust
 - and minimax principle, 398
 - and new games, 499
 - in players, 744–747
 - and unwritten rules, 497
- Tsao, V., 207
- Tsatsarelis, C., 266
- tug-of-war, 399
- tumult, 139, 141, 718
- Turkle, S., 7, 31
- Turner, V., 297
- Twain, M., 337, 346
- Twenty-One, 454–457
- twinking, 845, 857
- Ultima Online
 - game economy, 861n19
 - narrative, 645
 - players, 820, 859n6
 - precursor, 693
- uncertainty
 - and games of chance, 134
 - vs. inevitability, 33, 55, 445
 - and play, 126
- Under Ash, 73, 619–621, 637
- underdogs, 625
- The Undying, 682
- units, 430, 432
- unwritten rules, 477–502
 - constitutive, 11, 187
 - of etiquette, 483
 - gaming the game, 15–17
 - infinite regression, 492–494, 501
 - meta-unwritten rule, 489
 - and MUD administration, 806
 - implicit vs. explicit, 48, 500, 511, 515
 - playing fair, 481
 - sportsmanship, 482
 - tennis example, 16, 484–492
 - time out, 486
- urban design, 685, 846
- Urdang, L., 787

- user interfaces
 - action opportunities, 652–655, 657, 660
 - Breakout, 559–569
 - tokens, 420
 - and virtual worlds, 818
- utility, 395
- utopianism, 844, 860n14
- Valéry, P., 106, 125
- values
 - China, 145
 - cultural models, 45–48, 75, 618, 636
 - fate vs. free choice, 304
 - gender, 345–352
 - individualism, 625
 - Metal Gear Solid, 634
 - platform vs. computer, 250
 - proWess testing, 105
 - and rhetorics of play, 309
 - and rule-breaking, 176
 - semiotic domains, 258, 261
 - tenacity, 105
 - video games, 411, 613
 - viewpoints, 614
 - See also* cultural models; sportsmanship
- Valve. *See* Cabal process
- van Leeuwen, T., 266
- Vanouse, P., 667, 668
- van Staden, J. F., 363
- Van Vliet, W., 335, 363
- Varian, H. R., 863
- variety
 - as aesthetic, 649, 657–659
 - in arcade games, 462
 - Cosmic Encounter, 539
 - of encounter, 205
 - of goals, 197
 - Magic, 205, 541, 544
 - patience game, 205
- Verant Interactive, 816, 819, 845
- Vertical Blank Interrupt (VBI), 719
- vertigo
 - dialectical, 185
 - in game definition, 78
 - as play type, 5, 138–140, 148t
 - ring-around-a-rosy, 80
 - in slot machines, 153
- vicarious play, 300
- Victoria, 428
- video arcades, 340, 343
 - See also* arcade games
- video games
 - and children, 6, 235–237, 258–263, 332
 - and computer careers, 262
 - content, 262, 334, 343, 611
 - cultural models, 613–619, 633–637
 - game spaces, 65–67
 - gender, 6, 74, 339, 356–361
 - history of, 74, 692
 - iterative design, 22
 - and learning, 236–239, 358, 611–613, 633–637
 - and literacy, 229–235
 - morality, 613
 - opinions of, 45–48
 - and September 11th, 619
 - trends, 332
 - and violence, 46, 334, 341
- Vinge, V., 730, 753
- violence
 - Under Ash, 619–621
 - boy culture, 340
 - eradication, 623
 - Habitat, 743

- The Sims Online, 684
- in video games, 46, 334, 341
- virtual rape, 768
- Virtua Fighter, 453
- virtual communities, 791–812
 - See also game communities
- virtual jobs, 842
- virtual rape, 768
- virtual shopping, 817, 842
- virtual worlds
 - appeal factors, 842, 860n14
 - definition, 818, 858n2
 - history, 818–820, 824, 860n13
 - incipient vs. percipient level, 744–746
 - persistence, 818
 - profitability, 820
 - and reality, 821, 822, 824, 844, 858, 860n10, 860n15
 - research potential, 840, 844–846
 - utopian elements, 844
 - and zoning, 860n15
 - See also Habitat; massively multiplayer on-line role-playing games; Norrath
- visual literacy, 229
- visual metaphors, 216f, 219f
- Vlissides, J., 437
- vogues, 144, 152n15
- voladores, 138, 151n8
- volleyball, 520, 523
- voluntariness. See freedom
- von Neumann, J., 384, 437
 - See also game theory
- VR Sports, 333
- wagers, 124, 127, 134, 142
- Waltzer, 267
- Waltz, S. P., 53, 436
- wan, 141, 145
- war, 611, 622, 846
 - See also battles
- War and Peace, 676
- Warcraft, 449, 451, 453, 457
 - See also World of Warcraft
- Ward, C., 336, 363
- Wardrip-Fruin, N., 37
- war games, 200, 383, 719
 - for U.S. army recruiting, 629
- Wargames (movie), 485
- warp zones, 340
- weapons, xviii, 743, 748, 757
- web phones, 867
- Weiss, D. B., 65
- Wellman, B., 796
- West, E., 334, 363
- Wheel of Fortune, 453
- whirling dervishes, 138
- Whitehead, A. N., 315
- white supremacists, 623
- Whitlock, T. D., 787
- Whorf, B. L., 315
- winner-take-all, 139
- winning
 - and cheating, 175
 - chess, 183
 - desire for, 132
 - in framework, 419
 - as goal, 186, 417
- winning condition, 419
- wiping, 809
- Wittgenstein, L., 77–80, 307, 315
- Wizards of the Coast, 540, 554
- Wolf, M. J. P., 69, 437
- Wolf, S., 267
- Wolfenstein 3D, 261

women. *See* girls and women
Woods, D., 691, 713
work
 and competition, 132, 199
 vs. game, 173
 and games of chance, 133
 situated meanings, 239–241
 vs. video games, 342
 virtual jobs, 842
World of Warcraft, 29
Worlds Chat, 860n13
World War II Online, 819
Wright, W., 200, 210, 684

Xbox, 160, 248–250, 692

Yee, N., 820, 863
yo-yos, 143, 144
Yu-Gi-Oh, 550

Zagal, J. P., 437
zero-sum games, 54, 124, 395
Zero Zero, 354–356
Zito, K., 863
zone of control, 719, 722
Zork, 193, 439, 654, 674
Zucker, K., 204