

## Twelve chairs by I. Ilf and V. Petrov

For every method (LUHN, YAKE, and our method) we extracted 214 words. For YAKE and our method the actual number of words is larger; see below. Our method extracted 755 words. Among those 214 words for each method, human experts selected keywords of the text that are colored green. The selected keywords were counted, red numbers indicate on the running count. LUHN, YAKE and our method identified 44, 44 and 82 keywords, respectively. For our situation those 214 words were divided equally between local and global potential keywords.

OUR METHOD. GLOBAL KEYWORDS, STRONG CASES (criterion  $A < 1/5$  in the paper).

['father', 'theodore', 'caretaker', 'bezenchuk', 'batumi', 'coffin', 'nymph', 'tiflis', 'tikhon', 'odessa', 'shore', 'polish', 'fist', 'perform', 'frontier', 'switch', 'puddle', 'content', 'applause', 'brush', 'dozen', 'painting', 'pleasure', 'expert', 'strike', 'opponent', 'measure', 'clatter', 'blew', 'extraordinarily', 'routine', 'shady', 'jubilantly', 'hatchet', 'national', 'buffet', 'flute', 'neatly', 'canvas', 'chain', 'pawn', 'bourgeois', 'loudspeaker', 'mutual', 'musician', 'startle', 'lens', 'chum', 'deafen', 'developed', 'revolt', 'compare', 'bucket', 'take', 'alekhine', 'suitable', 'flung', 'practice', 'poetry', 'tough', 'linen', 'childrens', 'gherkin', 'decorate', 'lovingly', 'dealing', 'parallel', 'beloved', 'remind', 'entertain', 'budyonny', [71 words, 17 words] 'ink', 'blood', 'bachelor', 'snack', 'feeling', 'rage', 'socialsecurity', 'tyre', 'pursue', 'sideburn', 'rubbed', 'let', 'legal', 'goggle', 'outlay', 'trepidation', 'rule', 'porter', 'attract', 'treat', 'closing', 'spoken', 'ladder', 'intentionally', 'staropan', 'broom', 'devise', 'tropical', 'wail', 'link', 'grave', 'june', 'spike', 'herald', 'chant', 'put', 'naturally', 'enviously', 'sixteen', 'regular', 'textile', 'darling', 'weird', 'conclusion', 'rat', 'trooper', 'heaviness', 'fireplace', 'exhaust', 'interfere', 'printing', 'tunnel', 'span', 'lather', 'rendezvous', 'bent', 'engage', 'galosh', 'motorcar', 'flutter', 'initial', 'ernestula', 'mar', 'thirtytwo', 'siren', 'accustom', 'delegation', 'angel', 'shiver', 'tuesday', 'sew', 'resort', 'babble', 'underground', 'mental', 'shutter', 'ukrainian', 'indignation']

OUR METHOD. GLOBAL KEYWORDS, WEAK CASES (criterion  $1/5 < A < 1/3$  in the paper).

['ippolit', 'matveyevich', 'chair', 'kislarsky', 'nicky', 'passenger', 'shop', 'undertaker', 'bank', 'opening', 'road', 'theodores', 'dusty', 'division', 'tsarist', 'exchange', 'meal', 'howl', 'watchman', 'crazy', 'wish', 'silver', 'issue', 'deal', 'roam', 'trunk', 'lift', 'blanket', 'ivanopulo', 'queen', 'sheet', 'brocade', 'tourist', 'slip', 'retort', 'beg', 'foam', 'revolution', 'inscription', 'future', 'flow', 'rotten', 'depth', 'tailor', 'site', 'beat', 'doorway', 'rag', 'kerosene', 'cupboard', 'actor', 'grabbed', 'balalaika', 'stagger', 'meant', 'career', 'upholstered', 'bun', 'tradeunion', 'weep', 'emerald', 'andrew', 'heel', 'heatedly', 'shriek', 'monument', 'carthorse', 'jewellery', 'annoyance', 'prayer', 'vehicle' [71 words, 22 keywords], 'rude', 'tour', 'gloom', 'waist', 'triangle', 'menacingly', 'contribute', 'suck', 'creak', 'gubernsky', 'thrown', 'tuneless', 'pin', 'sweat', 'plain', 'flap', 'gradually', 'tile', 'provide', 'beam', 'occasion', 'bulge', 'weak', 'enthusiasm', 'base', 'identification', 'powder', 'gripped', 'milk', 'childhood', 'thoughtfully', 'contraband', 'sower', 'inhabitant', 'terrific', 'flat', 'result', 'boulevard', 'embrace', 'freshly', 'eternal', 'isle', 'trample', 'turkey', 'tasty', 'hug', 'shadow', 'college', 'folk', 'shameful', 'incidentally', 'attire', 'holiday', 'undertake', 'thirtyseven', 'joking', 'gem', 'tinkle', 'fourteen', 'delete', 'conceited', 'sensation', 'nod', 'pacific', 'erect', 'casually', 'gurgle', 'wealthy', 'brain', 'pie', 'joint', 'tack', 'tick', 'concert', 'remarkable', 'sunlight', 'righthand', 'astonishment', 'infernal', 'insist', 'daylight', 'response', 'advice']

OUR METHOD. LOCAL KEYWORDS (criterion  $A > 5$  in the paper).

['liza', 'pussy', 'treukhov', 'gavril', 'lottery', 'moosie', 'lapis', 'gavrilin', 'effect', 'korobeinikov', 'editorial', 'scriabin', 'depot', 'tramway', 'auctioneer', 'oneeye', 'fitter', 'pyatigorsk', 'stove', 'deck', 'oneeyed', 'douche', 'downstairs', 'carpet', 'galkin', 'recordkeeper', 'vote', 'nikifor', 'trubetskoi', 'flywheel', 'avdotyev', 'vegetarian', 'warden', 'ashore', 'column', 'mineral', 'sorbonne', 'eagle', 'palkin', 'mechnikov', 'terek', 'hydraulic', 'esmarch', 'zalkind', 'emigre', 'quayside', 'track', 'scenic', 'charm', 'jack', 'extinguisher', 'stalingrad', 'mayor', 'malkin', 'prosecutor', 'plekhanov', 'shepherd', 'chalkin', 'gorge', 'barge', 'wire', 'medal', 'nick', 'yakovlevich', 'titanic', 'baku', 'born', 'dye', 'vladikavkaz', 'communist', 'tramline', [71 words, 45 keywords] 'quay', 'simbievichsindievich', 'rehearse', 'valley', 'leftwing', 'ivanovnas',

'chebokary', 'yalta', 'palsie', 'rubens', 'bum', 'citizeness', 'resemble', 'sestrin',  
'truck', 'title', 'cliff', 'duma', 'cartoon', 'wheeze', 'fimka', 'rook', 'trail', 'entry',  
'sobak', 'awful', 'pretty', 'chessboard', 'squeak', 'hen', 'gusishe', 'tikhonovna',  
'justice', 'astrolabe', 'earthquake', 'uniform', 'plant', 'foundation', 'babe',  
'gale', 'hostel', 'echoed', 'teastrainer', 'economy', 'deeper', 'troupe', 'seventy',  
'emotion', 'metal', 'stew', 'napernikov', 'ghastly', 'georgetta', 'petrovna',  
'agronomist', 'purchase', 'rafter', 'tiraspolskikh', 'cobra', 'advantage',  
'captain', 'gerasim', 'suburb', 'raspopov', 'dismal', 'original', 'muddle',  
'petrovich', 'circus', 'lucky', 'maxim', 'defence', 'project', 'argument',  
'motherinlaws', 'pereleshinsky', 'musical', 'elizabeth', 'simultaneous',  
'income', 'goose', 'decanter', 'recreation', 'lermontov', 'hurriedly', 'negro',  
'ashtray', 'strainer', 'mashuk', 'choir', 'statistical', 'photographer', 'angelov',  
'crown', 'disgrace', 'krasilnikov', 'grief', 'occupant', 'dustbin', 'trumpet',  
'ballot', 'personnel', 'secondary', 'dairy', 'paraffin', 'amiably', 'problem',  
'requisition', 'funny', 'taxi', 'leaf', 'precaution', 'exist', 'doctor', 'harmonium',  
'variety', 'dash', 'orangecoloured', 'mistress', 'journal', 'punishment',  
'keyhole', 'mumu', 'ropemaker', 'polkan', 'firstate', 'flu', 'prince', 'section',  
'handle', 'leopard', 'msieu', 'gambit', 'ryazan', 'motionless', 'ordinary',  
'cannibal', 'messenger', 'kuznetsov', 'stayed', 'postoffice', 'publish',  
'delighted', 'resign', 'judge', 'pure', 'scorch', 'tolstoy', 'cardboardworker',  
'secondhand', 'surf', 'victory', 'fight', 'clubroom', 'motorcycle', 'benefit',  
'stairway', 'steve', 'admire', 'nich', 'kochkarev', 'grigoryev', 'punch', 'strictly',  
'amateur', 'seethe', 'ridge', 'asphalt', 'writer', 'hina', 'clarinet', 'nationalize',  
'gangrene', 'bid', 'gothic', 'bubbling', 'massacre', 'brunss', 'arnaud',  
'desperation', 'fascist', 'motherofpearl', 'jagged', 'admit', 'nizhni',  
'dousthehonour', 'snow', 'driven', 'horror', 'grainmillandliftconstruction',  
'vas', 'pressure', 'mohammedan', 'headlong', 'detective', 'everyones', 'unhurt',  
'maciste', 'bruise', 'agent', 'wheelhouse', 'hazard', 'rapid', 'thigh', 'headache',  
'mention', 'icy', 'net', 'imitate', 'rumanian', 'fairhaired', 'saxophone', 'mud',  
'eclair', 'mutualassistance', 'forgotten', 'banister', 'confidence', 'dancer',  
'exmember', 'prop', 'sioni', 'danger', 'orloff', 'shareholding', 'ellochkas',  
'sisterinlaw', 'chocolate', 'chuvash', 'construct', 'pierre', 'ache', 'resolution',  
'caspian', 'solely', 'pane', 'contemplate', 'dreamily', 'vostrikovs', 'chic',  
'firstclass', 'semashko', 'secrecy', 'materialism', 'like', 'pantelei', 'adapt',  
'complicate', 'polished', 'lace', 'wheelbarrow', 'league', 'fivekopek', 'daddy',

'cabbage', 'cling', 'spanish', 'lena', 'narzan', 'burn', 'remarkably', 'cleric',  
'accommodate', 'poincare', 'chimney', 'platoon', 'libellous', 'slope', 'threaten',  
'varsonofefsky', 'entangle', 'ivan', 'abstain', 'lyrical', 'soar', 'fuss', 'ladykiller',  
'wholl', 'jerk', 'counterfoil', 'terminus', 'slow', 'chinese', 'endow', 'satirical',  
'slice', 'chop', 'choose', 'transcaucasian', 'differently', 'fully', 'admittance',  
'strangle', 'thug', 'preparation', 'telephone', 'fortyfive', 'repent', 'fluid',  
'noodle', 'hallway', 'taste', 'interplanetary', 'suede', 'cabby', 'lorry', 'comb',  
'clearing', 'native', 'voting', 'reject', 'padlock', 'pursuer', 'twentynine', 'waft',  
'stray', 'skirt', 'owe', 'bony', 'curator', 'sketch', 'hygroscopic', 'maestro',  
'denmark', 'jealous', 'closeup', 'pal', 'scarf', 'cheaper', 'foreigner', 'bazaar',  
'lapiss', 'wool', 'taxidriver', 'conspiratorial', 'billionaire', 'sow', 'thursday',  
'nag', 'crimean', 'lively', 'lick', 'slam', 'prow', 'management', 'stationmaster',  
'daryal', 'jet', 'conqueror', 'tatata', 'parable', 'sex', 'insert', 'document',  
'skeleton', 'goodvalue', 'intrigue', 'curlicue', 'swim', 'contact', 'british',  
'tararara', 'stake', 'organizer', 'jours', 'present', 'burnt', 'chessroom', 'hurl',  
'shukins', 'carter', 'agreement', 'friendship', 'thermometer', 'carrot', 'moor',  
'add', 'confession', 'guidebook', 'imperial', 'khorassan']

## LUHN

['ostap', 'ippolit', 'matveyevich', 'chair', 'time', 'begin', 'room', 'man', 'rouble',  
'father', 'vorobyandinov', 'hand', 'ask', 'money', 'door', 'turn', 'people', 'day',  
'street', 'work', 'theodore', 'good', 'look', 'young', 'voice', 'citizen', 'head',  
'moment', 'bender', 'house', 'comrade', 'ill', 'left', 'town', 'face', 'open', 'wife',  
'moscow', 'life', 'cry', 'long', 'office', 'furniture', 'great', 'wait', 'polesov',  
'woman', 'eye', 'light', 'friend', 'shout', 'liza', 'write', 'window',  
'concessionaire', 'thought', 'sit', 'widow', 'move', 'stand', 'felt', 'night', 'girl',  
'point', 'engineer', 'chess', 'carry', 'sound', 'large', 'smooth', 'stargorod',  
'walk', 'even', 'operator', 'corridor', 'table', 'water', 'foot', 'stood', 'leave',  
'theatre', 'listen', 'sell', 'order', 'marshal', 'caretaker', 'cover', 'hour', 'spring',  
'continued', 'set', 'morning', 'call', 'wall', 'chief', 'station', 'remember', 'club',  
'pussy', 'minute', 'car', 'vasyuki', 'year', 'glass', 'pass', 'elena', 'brought', 'leg',  
'play', 'kopek', 'kislarsky', 'small', 'piece', 'reach', 'happen', 'business', 'sat',  
'member', 'place', 'chapter', 'stop', 'mind', 'idea', 'child', 'editor', 'persidsky',  
'eat', 'boot', 'moustache', 'arrive', 'boy', 'answer', 'number', 'stanislavovna',

'decide', 'whisper', 'talk', 'hold', 'victor', 'dream', 'white', 'hurry', 'floor',  
'finally', 'box', 'live', 'grossmeister', 'square', 'bad', 'green', 'lose', 'apartment',  
'told', 'visit', 'kind', 'corner', 'bought', 'notice', 'paper', 'arm', 'pay', 'train',  
'crowd', 'treukhov', 'ellochka', 'bed', 'coat', 'feel', 'husband', 'pocket', 'ship',  
'die', 'committee', 'sign', 'read', 'make', 'reply', 'fell', 'heard', 'buy', 'lay',  
'realize', 'hear', 'dear', 'building', 'bezenchuk', 'matter', 'yard', 'air', 'letter',  
'manage', 'jewel', 'nicky', 'black', 'remain', 'step', 'lady', 'bit', 'person',  
'approach', 'colour', 'drop', 'matveyevichs', 'question', 'cap', 'longer', 'tram',  
'iznurenkov', 'hair', 'meeting', 'clear', 'gentleman', 'case', 'gavrila', [214  
words, 44 keywords]

## YAKE

['ippolit', 'matveyevich', 'ostap', 'chair', 'time', 'father', 'begin', 'room', 'man',  
'rouble', 'vorobyandinov', 'hand', 'theodore', 'door', 'money', 'street', 'turn',  
'people', 'day', 'work', 'young', 'good', 'bender', 'citizen', 'voice', 'moment',  
'comrade', 'head', 'house', 'ill', 'left', 'town', 'open', 'face', 'cry', 'wife',  
'moscow', 'life', 'long', 'office', 'furniture', 'polesov', 'wait', 'great', 'eye',  
'woman', 'light', 'friend', 'shout', 'liza', 'write', 'sit', 'window', 'thought',  
'smooth', 'concessionaire', 'widow', 'move', 'chess', 'operator', 'felt', 'stand',  
'engineer', 'night', 'girl', 'point', 'sound', 'carry', 'stargorod', 'large', 'walk',  
'corridor', 'table', 'water', 'foot', 'theatre', 'stood', 'leave', 'sell', 'listen',  
'marshal', 'order', 'caretaker', 'cover', 'hour', 'continued', 'chief', 'ostaps', 'set',  
'station', 'spring', 'morning', 'club', 'call', 'wall', 'elena', 'pussy', 'remember',  
'pass', 'vasyuki', 'car', 'minute', 'glass', 'kislarsky', 'year', 'kopek', 'play', 'leg',  
'stanislavovna', 'brought', 'piece', 'reach', 'member', 'small', 'business', 'sat',  
'happen', 'editor', 'place', 'victor', 'persidsky', 'mind', 'idea', 'child', 'chapter',  
'stop', 'boot', 'boy', 'number', 'moustache', 'eat', 'whisper', 'answer', 'arrive',  
'hold', 'talk', 'decide', 'box', 'dream', 'hurry', 'grossmeister', 'white',  
'apartment', 'floor', 'live', 'finally', 'square', 'theodores', 'green', 'lose', 'bad',  
'visit', 'told', 'treukhov', 'ellochka', 'paper', 'pay', 'bought', 'notice', 'crowd',  
'arm', 'train', 'kind', 'corner', 'committee', 'coat', 'bed', 'ship', 'feel', 'pocket',  
'nicky', 'husband', 'hear', 'realize', 'dear', 'read', 'sign', 'make', 'buy', 'lay',  
'reply', 'fell', 'bezenchuk', 'building', 'die', 'heard', 'jewel', 'remain', 'yard',  
'matter', 'manage', 'iznurenkov', 'air', 'letter', 'lady', 'bit', 'black', 'step',



'person', 'approach', 'colour', 'cap', 'drop', 'longer', 'tram', 'question',  
'gavrila', 'gentleman', 'hair', 'meeting', 'clear', 'case', 'centre', 'red', [214  
words, 44 keywords] 'claudia', 'ernest', 'worker', 'mikhailovich', 'month',  
'alchen', 'jacket', 'sight', 'heart', 'conversation', 'wear', 'word', 'seat', 'today',  
'rest', 'complete', 'pavlovich', 'blue', 'horse', 'close', 'return', 'hotel', 'smile',  
'suppose', 'iron', 'sun', 'stage', 'cross', 'completely', 'passenger', 'stranger',  
'exclaim', 'late', 'pasha', 'line', 'lottery', 'secret', 'row', 'wave', 'ear', 'partner',  
'nice', 'desk', 'fat', 'shoulder', 'trouser', 'change', 'start', 'rabbit', 'treasure',  
'mattress', 'report', 'afraid', 'love', 'force', 'account', 'hope', 'reason',  
'ivanovna', 'service', 'bring', 'men', 'garden', 'flower', 'meat', 'railway',  
'understand', 'fellow', 'knew', 'repeat', 'tear', 'lead', 'run', 'ground', 'wash',  
'dark', 'visitor', 'housing', 'owner', 'cooperative', 'press', 'knock', 'soviet',  
'tomorrow', 'governor', 'charushnikov', 'priest', 'cost', 'paris', 'cent', 'pour',  
'nose', 'chairman', 'pincenez', 'auction', 'union', 'hall', 'figure', 'slowly', 'roll',  
'sausage', 'quietly', 'river', 'pull', 'fine', 'enter', 'body', 'wind', 'high', 'age',  
'form', 'boat', 'shop', 'moosie', 'suite', 'seize', 'primus', 'worry', 'hot',  
'gritsatsuyev', 'note', 'hat', 'carefully', 'honestly', 'situation', 'kiss', 'lapis',  
'dance', 'damn', 'market', 'stretch', 'artist', 'darkness', 'nature', 'bow', 'ready',  
'difficult', 'steal', 'plan', 'effect', 'gavrilin', 'undertaker', 'key', 'lock',  
'museum', 'public', 'receive', 'charge', 'finish', 'search', 'increase', 'remove',  
'suffer', 'dyadyev', 'master', 'smell', 'cloud', 'price', 'fool', 'hell', 'bank', 'rate',  
'position', 'gate', 'cabin', 'address', 'capital', 'batumi', 'russian', 'gold',  
'yellow', 'caught', 'madame', 'hambs', 'son', 'raise', 'middle', 'pencil',  
'waistcoat', 'match', 'administration', 'opening', 'korobeinikov', 'cold', 'stay',  
'yesterday', 'manager', 'spot', 'sky', 'pace', 'jumped', 'dress', 'mountain',  
'broke', 'laugh', 'joke', 'noise', 'columbus', 'editorial', 'walnut', 'assistant',  
'bruns', 'observe', 'band', 'brass', 'enthusiast', 'aboard', 'splendid', 'province',  
'cheek', 'excite', 'ring', 'flew', 'spirit', 'ticket', 'bridge', 'collect', 'wander',  
'unable', 'touch', 'end', 'kick', 'watch', 'chance', 'tire', 'finger', 'lot',  
'newspaper', 'living', 'road', 'push', 'disappear', 'dirty', 'land', 'mirror', 'hard',  
'emilevich', 'spent', 'grow', 'couple', 'soldier', 'department', 'pas',  
'government', 'bench', 'kitchen', 'bread', 'entrance', 'drive', 'silent', 'sing',  
'surprise', 'shut', 'sort', 'scriabin', 'reflect', 'smoke', 'speed', 'society', 'vodka',  
'chest', 'lit', 'fall', 'poem', 'short', 'star', 'mother', 'impossible', 'mutter',  
'technical', 'absalom', 'drawingroom', 'player', 'police', 'alexander', 'general',

'motherinlaw', 'international', 'lamp', 'shook', 'brother', 'coffin', 'held',  
'count', 'diamond', 'workshop', 'drink', 'threw', 'absolutely', 'rock', 'laughter',  
'god', 'waif', 'sleep', 'sigh', 'rise', 'militiaman', 'audience', 'cut', 'quiet',  
'direction', 'paid', 'silence', 'heavy', 'fly', 'country', 'side', 'shukin', 'vladya',  
'transparent', 'pink', 'breathe', 'court', 'shock', 'job', 'suit', 'pair', 'loudly',  
'wipe', 'prevent', 'poet', 'drag', 'dead', 'bond', 'fact', 'difficulty', 'easy',  
'platform', 'book', 'bottle', 'powerful', 'delight', 'agree', 'style', 'parrot',  
'dusty', 'usual', 'cat', 'attempt', 'picture', 'imagine', 'continue', 'school',  
'dinner', 'week', 'happy', 'repair', 'expect', 'family', 'free', 'warm', 'dog', 'race',  
'rush', 'size', 'fortuneteller', 'bird', 'holy', 'gain', 'personal', 'yardkeeper',  
'oneeye', 'grey', 'nymph', 'glance', 'fitter', 'guest', 'travel', 'basket', 'mouth',  
'hit', 'paint', 'tramway', 'game', 'depot', 'receipt', 'subject', 'beard', 'story',  
'catch', 'poor', 'city', 'plate', 'promise', 'material', 'neighbour', 'hang', 'wrong',  
'wonderful', 'neck', 'march', 'music', 'enemy', 'clean', 'narrow', 'special',  
'wouldnt', 'activity', 'auctioneer', 'sword', 'division', 'regional', 'stove',  
'hearing', 'tournament', 'social', 'church', 'kindly', 'loud', 'drew', 'recover',  
'dust', 'piano', 'concession', 'king', 'food', 'event', 'student', 'gaze', 'win',  
'deck', 'pyatigorsk', 'law', 'break', 'lean', 'edge', 'join', 'militia', 'knee', 'early',  
'fit', 'stone', 'sail', 'simple', 'float', 'wet', 'party', 'board', 'queue', 'sea', 'bus',  
'french', 'disturbed', 'groan', 'magazine', 'provincial', 'tiflis', 'cart', 'terrible',  
'oclock', 'speech', 'communal', 'ploughshare', 'adviser', 'nikesha', 'nobility',  
'stepan', 'tsarist', 'douche', 'podkolesin', 'factory', 'truth', 'lower', 'breath',  
'knight', 'belonging', 'shake', 'palace', 'oneeyed', 'donkey', 'married',  
'marvellous', 'marked', 'shot', 'explain', 'pen', 'reporter', 'wide', 'clerk', 'aha',  
'played', 'shave', 'politely', 'supper', 'drum', 'pensioner', 'shirt', 'carpet',  
'inspector', 'speak', 'lathe', 'marriage', 'fetch', 'flash', 'tremble', 'send', 'flee',  
'length', 'card', 'tea', 'roar', 'require', 'pile', 'unexpectedly', 'confusion',  
'straight', 'attention', 'met', 'flour', 'lie', 'express', 'trip', 'asleep', 'remark',  
'reading', 'advertisement', 'include', 'part', 'doubt', 'stole', 'mechanic', 'weve',  
'stuff', 'doesnt', 'driver', 'drove', 'downstairs', 'tikhon', 'recordkeeper',  
'vladimirovich', 'curve', 'turkish', 'upper', 'heavily', 'galkin', 'fastpack',  
'mastermind', 'burst', 'stamp', 'ashamed', 'wooden', 'strip', 'meal', 'condition',  
'breathing', 'deep']