## Animal farm by G. Orwell

For every method (LUHN, YAKE, and our method) we extracted 131 words. For our method the actual number of words is much larger; see below. Among those 131 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 65, 62 and 60 keywords, respectively. For our situation those 131 words were divided equally between global and local potential keywords. Word counting is indicated in brown.

OUR METHOD. GLOBAL KEYWORDS WERE SELECTED ACCORDING TO  $A_6 < 1/3$  ( $A_6$  is the sixth degree variance). 363 EXTRACTED WORDS IN TOTAL.

['farm', 'napoleon', 'snowball', 'pig', 'work', 'boxer', 'comrade', 'day', 'jones', 'squealer', 'dog', 'moment', 'leg', 'human', 'men', 'sheep', 'frederick', 'life', 'rebellion', 'yard', 'order', 'beast'[20], 'morning', 'night', 'happen', 'horse', 'remember', 'hoof', 'pilkington', 'barn', 'commandment', 'being', 'battle', 'man', 'bed', 'turn', 'foot', 'mollie', 'stall', 'major', 'food', 'big', 'lay', 'place', 'live', 'hay', 'van', 'die', 'white', 'walk', 'speak', 'fact', 'look', 'foxwood', 'kind', 'ration', 'sleep', 'talk', 'tremendous', 'creature', 'pass', 'green', 'willingdon'[16], 'letter', 'question'[65], 'early', 'rest', 'dream', 'finally', 'knew', 'tune', 'remain', 'stand', 'broke', 'door', 'news', 'discover', 'number', 'sound', 'produce', 'ribbon', 'listen', 'pinchfield', 'kill', 'moses', 'silence', 'short', 'make', 'neighbour', 'air', 'intend', 'dead', 'farmer', 'save', 'kick', 'light', 'surely', 'march', 'sugar', 'honour'[100], 'sell', 'form', 'animalism', 'window', 'equal', 'longer', 'garden', 'whip', 'fire', 'told', 'manor', 'strange', 'nose', 'receive', 'reading', 'single', 'victory', 'reduce', 'inch', 'corner', 'care', 'geese', 'file', 'agree', 'problem', 'feed', 'continued', 'water', 'imagine', 'end', 'friend', 'house', 'dozen', 'grass', 'kitchen', 'gallop', 'need', 'forgotten', 'figure', 'contrary', 'mountain', 'earth', 'boar', 'distance', 'destroyed', 'hiding', 'whisk',

'attend', 'support', 'struggle'[150], 'won', 'sugarcandy', 'close', 'beer', 'return', 'shoulder', 'unable', 'cruel', 'trace', 'glass', 'perch', 'starve', 'season', 'direction', 'appearance', 'storeshed', 'study', 'warm', 'crept', 'principle', 'flee', 'express', 'middle', 'business', 'terrify', 'paper', 'prepared', 'weak', 'laid', 'master', 'bird', 'miserable', 'month', 'speed', 'loud', 'alcohol', 'slip', 'dignity', 'fivebarred', 'age', 'sat', 'slept', 'gentleman', 'side', 'secretly', 'object', 'boulder', 'spent', 'maxim', 'reach', 'skull', 'open', 'bare', 'abolish', 'clever', 'excellent', 'spirit', 'chew', 'remove', 'privately', 'blow', 'inscribed', 'regular', 'drew', 'burst', 'collect', 'quietly', 'biscuit', 'observe', 'flutter', 'machine', 'devote', 'stout', 'law', 'sooner', 'uttered', 'mash', 'sung', 'uproar', 'teach', 'ladder', 'prosperity', 'mare', 'mane', 'hop', 'supply', 'clothes', 'complain', 'electric', 'treat', 'celebration', 'stupid', 'understood', 'straight', 'assume', 'knacker', 'successful', 'raven', 'condition', 'oat', 'sang', 'shut', 'platform', 'foolish', 'circulate', 'jessie', 'asleep', 'rich', 'respect', 'regard', 'breakfast', 'admiration', 'waste', 'pull', 'interrupt', 'draw', 'power', 'duckling', 'lump', 'wing', 'lantern', 'health', 'republic', 'county', 'stroll', 'tidings', 'woke', 'dung', 'faithful', 'organise', 'taught', 'beneath', 'boot', 'smoke', 'existence', 'quarter', 'decorate', 'own', 'quarrel', 'lot', 'thrown', 'leisure', 'market', 'interest', 'serve', 'alphabet', 'ring', 'accumulate', 'push', 'influence', 'brick', 'laborious', 'remind', 'occupy', 'whisper', 'mysterious', 'buy', 'share', 'spell', 'detail', 'crowbar', 'possess', 'wish', 'reappear', 'doubt', 'achieve', 'fence', 'sentence', 'perfect', 'sole', 'paddock', 'correct', 'worn', 'mighty', 'succeed', 'attention', 'panic', 'twelfth', 'worker', 'baying', 'anniversary', 'heel', 'sky', 'smart', 'mixed', 'fashion', 'happiness', 'inspect', 'liable', 'cloud', 'purpose', 'command', 'rule', 'sharp', 'previous', 'fourth', 'decoration', 'pack', 'wonder', 'flew', 'sown', 'nod', 'country', 'seed', 'privilege', 'drove', 'dogcart', 'rigid', 'neck', 'activity', 'exist', 'defend', 'imagination']

OUR METHOD. LOCAL KEYWORDS WERE SELECTED ACCORDING TO  $A_6 > 3$  ( $A_6$  is the sixth degree variance). 356 EXTRACTED WORDS.

['animal', 'time', 'year', 'great', 'set', 'hen', 'thought', 'sunday', 'cow', 'eye', 'call', 'tail', 'bad', 'cry', 'stone', 'death', 'announce', 'young', 'carry', 'song', 'plan', 'whymper', 'enemy', 'late', 'straw', 'mind', 'egg', 'large', 'muriel', 'race',

'usual', 'minute', 'milk', 'believe', 'piece', 'rumour', 'pasture', 'black', 'ground', 'flag', 'finish', 'lie', 'even', 'ask', 'difficulty', 'felt', 'timber', 'chapter', 'wear', 'sit', 'agreement', 'case', 'attack', 'pile', 'grow', 'vote', 'winter', 'arrangement', 'clear', 'leader', 'confess', 'earlier', 'utter', 'cover', 'rat' [24] [65] 'quarry', 'spread', 'decide', 'prove', 'watch', 'complete', 'feel', 'debate', 'committee', 'flight', 'matter', 'explain', 'cockerel', 'growl', 'true', 'road', 'happy', 'shout', 'hero', 'special', 'drinking', 'rebuild', 'name', 'enter', 'effort', 'protest', 'cat', 'fight', 'simply', 'wild', 'wound', 'table', 'left', 'fro', 'assemble'[100], 'warn', 'run', 'charge', 'meal', 'increase', 'refuse', 'build', 'floor', 'company', 'skip', 'allow', 'main', 'strong', 'duck', 'duty', 'harnessroom', 'terror', 'blood', 'knoll', 'spot', 'deep', 'plot', 'cut', 'machinery', 'story', 'halt', 'triumph', 'traitor', 'excitement', 'bring', 'book', 'agent', 'settle', 'wrong', 'fail', 'roof', 'argument', 'crop', 'bought', 'difficult', 'general', 'nowadays', 'impossible', 'relation', 'argue', 'pronounce', 'convince', 'chase', 'leadership', 'red'[150], 'move', 'stretch', 'stop', 'bound', 'pool', 'toast', 'snuffed', 'idea', 'fell', 'tire', 'grown', 'league', 'task', 'engage', 'extra', 'comfortable', 'instance', 'sacrifice', 'flagstaff', 'dash', 'slogan', 'february', 'potato', 'emerge', 'belly', 'occasionally', 'mention', 'poem', 'exclaim', 'ready', 'shot', 'accord', 'explanation', 'huge', 'banknote', 'foundation', 'fear', 'roar', 'instant', 'rear', 'determine', 'simultaneously', 'meant', 'deadly', 'bedroom', 'stroke', 'nature', 'mother', 'signal', 'wore', 'wheat', 'pain', 'autumn', 'pension', 'hearing', 'rubbish', 'shock', 'iron', 'repeat', 'picture', 'cause', 'simple', 'surprise', 'decision', 'smell', 'teeth', 'spoke', 'breath', 'reality', 'procession', 'muscle', 'dynamo', 'paid', 'shrill', 'pause', 'deliver', 'heavy', 'hoist', 'store', 'production', 'block', 'procure', 'enjoy', 'worth', 'glance', 'lift', 'report', 'tame', 'purchase', 'developed', 'addition', 'neatly', 'dim', 'stablelad', 'admire', 'countryside', 'stole', 'demand', 'friendly', 'alter', 'spare', 'benefit', 'squeal', 'slaughter', 'porker', 'marked', 'appoint', 'arrange', 'bitter', 'fresh', 'society', 'improvement', 'execution', 'whimper', 'talker', 'capable', 'fool', 'mud', 'realise', 'strain', 'pace', 'slavery', 'document', 'equally', 'manner', 'anxious', 'caught', 'pay', 'mouth', 'failure', 'decreed', 'limp', 'stump', 'muzzle', 'evil', 'cent', 'character', 'bleeding', 'admit', 'list', 'exhaust', 'critical', 'birthday', 'steal', 'sparrow', 'pound', 'paw', 'cart', 'complicate', 'tour', 'natural', 'butt', 'unanimously', 'rabbit', 'period', 'shoe', 'suitable', 'humanity', 'calf', 'taste', 'contact', 'discussion', 'supervision', 'forelock', 'deal', 'tool', 'tactic', 'oppose',

'forbidden', 'avoid', 'january', 'root', 'closely', 'cheer', 'windfall', 'cast', 'drive', 'murder', 'mouthful', 'majority', 'instruct', 'turnip', 'price', 'way', 'owner', 'sale', 'stack', 'issue', 'congratulate', 'despair', 'seldom', 'divide', 'trust', 'sun', 'survey', 'public', 'uneasy', 'level', 'bit', 'bucket', 'cease', 'sand', 'oil', 'medicine', 'mark', 'litter']

## **LUHN (131 EXTRACTED WORDS)**

['animal', 'farm', 'napoleon', 'snowball', 'pig', 'boxer', 'work', 'comrade', 'day', 'time', 'jones', 'windmill', 'squealer', 'dog', 'moment', 'clover', 'leg', 'human', 'year', 'long', 'men', 'sheep', 'farmhouse', 'frederick'[20], 'great', 'life', 'benjamin', 'good', 'yard', 'rebellion', 'order', 'beast', 'night', 'england', 'happen', 'morning', 'set', 'horse', 'remember', 'hoof', 'building', 'barn', 'begin', 'field', 'commandment', 'pilkington', 'hen', 'sunday', 'thought', 'week', 'being', 'hour', 'labour', 'man', 'sing', 'write', 'battle'[19], 'appear', 'bed', 'call', 'cow', 'eye', 'gun', 'bad', 'tail', 'wall', 'face', 'foot', 'turn', 'hard', 'cry', 'major', 'big', 'mollie', 'stall', 'food', 'meeting', 'voice', 'death', 'read', 'stone', 'lay', 'place', 'speech', 'heard', 'live', 'summer', 'announce', 'lead', 'young', 'carry', 'hay', 'white', 'die', 'enemy', 'song', 'stood', 'plan', 'whymper', 'van', 'straw', 'fact', 'walk', 'speak', 'look', 'ration', 'kind', 'late', 'hedge', 'harvest', 'learn', 'foxwood', 'terrible', 'sleep', 'pigeon', 'small', 'muriel', 'egg', 'race', 'large', 'mind', 'come', 'cowshed', 'hand', 'tremendous', 'talk', 'usual', 'creature', 'milk', 'minute', 'corn'[26]

## YAKE (203 EXTRACTED WORDS)

['animal', 'farm', 'napoleon', 'snowball', 'pig', 'work', 'comrade', 'boxer', 'day', 'time', 'jones', 'windmill', 'squealer', 'dog', 'leg', 'moment', 'clover', 'human', 'long', 'year', 'men', 'sheep', 'frederick', 'good', 'farmhouse'[20], 'benjamin', 'life', 'great', 'beast', 'england', 'rebellion', 'yard', 'order', 'morning', 'night', 'happen', 'set', 'horse', 'remember', 'hoof', 'building', 'barn', 'pilkington', 'commandment', 'begin', 'field', 'sunday', 'week', 'hen',

'thought', 'battle', 'sing', 'hour', 'write', 'labour', 'man', 'bed', 'call', 'gun', 'cow'[18], 'cry', 'eye', 'bad', 'wall', 'hard', 'tail', 'foot', 'turn', 'face', 'big', 'death', 'stone', 'meeting', 'read', 'major', 'voice', 'stall', 'mollie', 'live', 'food', 'summer', 'speech', 'heard', 'announce', 'lay', 'place', 'young', 'hay', 'carry', 'lead', 'white', 'song', 'stood', 'plan', 'van', 'die', 'enemy', 'whymper', 'walk', 'foxwood', 'straw', 'late', 'terrible', 'ration', 'hedge', 'learn', 'fact', 'harvest', 'speak', 'kind', 'cowshed', 'sleep', 'muriel', 'race', 'small', 'egg', 'pigeon', 'mind', 'large', 'tremendous', 'milk', 'usual', 'creature', 'minute', 'hand', 'talk', 'corn', 'pass', 'class', 'flag'[24], 'dream'[131], 'green', 'rest', 'black', 'pasture', 'raise', 'question', 'early', 'finish', 'willingdon', 'lie', 'point', 'piece', 'letter', 'lose', 'finally', 'notice', 'ground', 'rumour', 'remain', 'orchard', 'door', 'broke', 'tune', 'stand', 'difficulty', 'felt', 'word', 'knew', 'kill', 'harder', 'pile', 'pinchfield', 'timber', 'attack', 'silence', 'stir', 'moses', 'resolution', 'rush', 'case', 'chapter', 'listen', 'number', 'produce', 'sit', 'grow', 'discover', 'wear', 'reason', 'sound', 'broken', 'agreement', 'ribbon', 'short', 'vote', 'winter', 'neighbour', 'trotter', 'leader', 'sugar', 'earlier', 'light', 'slowly', 'fly', 'sell', 'gaze', 'paint', 'honour', 'arrangement', 'apple', 'kick', 'clear']