

Coding system for the analysis of free descriptions of emotional experience

In the early eighties, a group of European psychologists conducted an intercultural study of emotional experiences using free-response format questionnaires. In order to allow quantitative statistical analysis of the qualitative data, a coding system was developed that allowed to categorize both the type of antecedent or eliciting situation as well as the nature of the individual's response. Since, to our knowledge, nothing comparable is currently available, at least with respect to an attempt to classify emotion-eliciting situations, the code is reproduced below. The working document used by the researchers in the intercultural studies was made available in an appendix to the book *Facets of Emotion* edited by K. R. Scherer (1988; see below). This document, Appendix B, is reproduced below. No attempt has been made to make it accessible in a more user-friendly form. It should be seen as a convenient starting point for developing a coding system adapted to the specific needs of a concrete study.

The development of the coding system as well as the data obtained in the cross-cultural studies is described in:

Scherer, K. R., Wallbott, H.G., & Summerfield, A.B. (Eds.). (1986). *Experiencing emotion: A cross-cultural study*. Cambridge: Cambridge University Press.

If you make use of this material, it would be kind to cite the source. Please use the following citation format:

Appendix B. Antecedent and reaction codes used in the "Emotion in Social Interaction" studies. In K. R. Scherer (Ed.) (1988). *Facets of emotion: Recent research* (pp. 241-243). Hillsdale, NJ: Erlbaum. Copy retrieved [Date] from <http://www.unige.ch/fapse/emotion/resmaterial/resmaterial.html>

**APPENDIX B:
ANTECEDENT AND REACTION CODES USED IN
THE "EMOTION IN SOCIAL INTERACTION"
STUDIES**

In this appendix all codes that have been developed to code the free-response questionnaires are reported. As for some analyses antecedent categories and symptom/reaction categories can be combined into broader categories, the combination rules are also given.

1. Codes for characteristics of the reported emotion

Which emotion?

- 1 = joy
- 2 = sadness
- 3 = fear
- 4 = anger

Where did the event happen?

(location)

- 1 = inside, familiar place
- 2 = inside, unfamiliar place
- 3 = outside
- 4 = transport

How long ago was it?

- 1 = today
- 2 = yesterday
- 3 = up to a week ago
- 4 = up to a month ago
- 5 = several months ago
- 6 = several years ago

Who was involved?

- 1 = alone
- 2 = one other person known
- 3 = one other person unknown
- 4 = several persons known
- 5 = several persons unknown

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Time

- 1 = past or present
(still going on)
- 2 = future

Reality

- 1 = realistic, actually perceived or anticipated (cognitive)
- 2 = imagined or dreamt, unrealistic fantasies

Immediacy

- 1 = own experience (event happened to subject)
- 2 = empathic experience (event happened to other person, subject empathizes)

How long did it last?

- 1 = under 5 minutes
- 2 = 5 minutes to 1 hour
- 3 = 1 to 24 hours
- 4 = several days and longer

Description of situation (compare antecedent codes)

Intensity

0 - 9

Handle the situation differently?

- 1 = the same
- 2 = something different

Verbal behavior

- 1 = says nothing
- 2 = "inner" talk
- 3 = exclamation, affect word, humming
- 4 = sentences, complete expressions, discussion

Control of verbal behavior

0 - 9

Control of symptoms/reactions

0 - 9

2. Antecedent codes

JOY = 1

- 00 = uncodable
- 01 = GOOD NEWS (immediate social context). *Example:* an unexpected job offer
- 02 = GOOD NEWS (mass media). *Example:* cheering news in newspapers or on TV
- 03 = CONTINUING RELATIONSHIPS WITH FRIENDS AND PERMANENT PARTNERS. *Example:* pleasure from contact with friends
- 04 = CONTINUING RELATIONSHIPS WITH BLOOD RELATIVES AND IN-LAWS (see 03)
- 05 = IDENTIFICATION WITH GROUPS (actual and reference). *Examples:* pleasure in belonging to a club; returning to your own country after a holiday

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- 06 = MEETING FRIENDS, ANIMALS, PLANTS. *Examples:* seeing one's dog again; meeting one's friend for dinner
- 07 = MEETING BLOOD RELATIVES OR IN-LAWS (see 06)
- 10 = ACQUIRING NEW FRIENDS
- 11 = ACQUIRING NEW FAMILY MEMBERS. *Examples:* birth of a baby; marriage of one's brother
- 12 = PLEASURE IN MEETING STRANGERS (short-term chance encounters).
Example: talking to a stranger on a train
- 13 = PLEASURE IN SOLITUDE. *Example:* being left alone with one's own thoughts
- 14 = NEW EXPERIENCES. *Examples:* adventures; planning a holiday
- 15 = SUCCESS EXPERIENCES IN ACHIEVEMENT SITUATIONS.
Example: passing an examination
- 16 = ACQUIRING SOME MATERIAL FOR SELF OR OTHER (buying or receiving). *Examples:* presents from others; buying something nice for oneself or others
- 18 = RITUAL. *Examples:* religious, academic ceremonies, festivals, birthdays
- 19 = NATURAL, ALSO REFINED, NONCULTURAL PLEASURES.
Examples: sex, food, nature, landscape
- 21 = CULTURAL PLEASURES. *Examples:* art, music, ballet, etc.
- 22 = ACQUIRING NONMATERIAL BENEFITS (emotional support, altruism). *Example:* helping an old lady cross the road
- 23 = HAPPINESS WITHOUT REASON.
- 31 = "SCHADENFREUDE." *Example:* malicious pleasure in another person's misfortune

SADNESS = 2

- 00 = uncodable
- 01 = BAD NEWS (immediate social context). *Example:* not selected for a job
- 02 = BAD NEWS (mass media). *Example:* bad news in newspapers or on TV
- 03 = PROBLEMS WITH FRIENDS, ANIMALS, PLANTS. *Examples:* quarrels, disappointments, estrangement, rejection
- 04 = PROBLEMS WITH BLOOD RELATIVES AND IN-LAWS (see 03)
- 05 = PROBLEMS WITH GROUPS (actual and reference). *Examples:* feeling rejected, an outsider, etc.
- 06 = TEMPORARY SEPARATION FROM LOVED FRIENDS, ANIMALS, PLANTS (indication that they will come back)
- 07 = TEMPORARY SEPARATION FROM LOVED BLOOD RELATIVES AND IN-LAWS (indication that the relative or in-law will come back)
- 08 = PERMANENT SEPARATION FROM LOVED FRIENDS, ANIMALS, PLANTS.
- 09 = PERMANENT SEPARATION FROM LOVED BLOOD RELATIVES AND IN-LAWS)
- 10 = DEATH OF FRIENDS, ANIMALS, PLANTS
- 11 = DEATH OF BLOOD RELATIVES AND IN-LAWS
- 12 = HARMING A STRANGER OR STRANGERS. *Example:* running over their dog with one's car

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- 13 = UNEXPECTED OR UNWISHED-FOR SOLITUDE. *Examples:* having to spend a holiday on one's own; having little social contact; having not made new acquaintances yet when living a new place
- 14 = END OF PLEASURABLE EXPERIENCE. *Examples:* end of holiday; end of nice evening with friends
- 15 = FAILURE TO ACHIEVE WHAT WAS HOPED FOR IN AN ACHIEVEMENT-RELATED ENTERPRISE (frustration). *Example:* failure to pass an examination
- 16 = OBJECT LOSS (selling, theft, loss). *Examples:* loss of a piece of jewelry; selling one's car
- 18 = SADNESS ABOUT RITUALS. *Example:* the anniversary of one's mother's death
- 19 = SICKNESS OF CLOSE ORGANISMS IMPORTANT TO SUBJECT AND OF SELF. *Examples:* sickness of one's dog; friend has heart attack
- 23 = GENERAL DEPRESSION, ALIENATION (for no specific reason)

FEAR = 3

00 = uncodable

01 = BAD NEWS (immediate social context). *Example:* anticipation of losing one's job

02 = BAD NEWS (mass media). *Example:* anticipation of bad news in newspapers or on TV

03 = FEAR OF PROBLEMS IN RELATIONSHIPS WITH FRIENDS AND PERMANENT PARTNERS, ANIMALS, AND PLANTS. *Example:* fear of quarrels, estrangement, etc.

04 = FEAR OF PROBLEMS IN RELATIONSHIPS WITH BLOOD RELATIVES AND IN LAWS, (see 03)

05 = FEAR OF PROBLEMS WITH GROUPS (actual and reference). *Example:* anticipation of problems with the members of one's football team

06 = FEAR OF TEMPORARY SEPARATION FROM FRIENDS AND PERMANENT PARTNERS, ANIMALS, AND PLANTS (indication that the person will come back)

07 = FEAR OF TEMPORARY SEPARATION FROM BLOOD RELATIVES AND IN-LAWS (indication that the person will come back)

08 = FEAR OF PERMANENT SEPARATION FROM FRIENDS, ANIMALS, AND PLANTS

09 = FEAR OF PERMANENT SEPARATION FROM BLOOD RELATIVES AND IN-LAWS

10 = FEAR OF DEATH OF FRIENDS AND PERMANENT PARTNERS, ANIMALS, AND PLANTS

11 = FEAR OF DEATH OF BLOOD RELATIVES AND IN-LAWS

12 = FEAR OF PHYSICAL AGGRESSION BY OTHERS. *Examples:* sexual assault, robbery, attack by hooligans

13 = FEAR OF SOLITUDE.

14 = FEAR OF THE UNKNOWN (something unspecified).

15 = FEAR OF FAILURE IN ACHIEVEMENT-RELATED SITUATIONS.

16 = FEAR OF LOSS OR DAMAGE OF OBJECT OR MONEY. *Example:* burglary

17 = FEAR OF TRAFFIC (accidents). *Examples:* driving too fast; being endangered by others

18 = FEAR OF RITUALS AND ANNIVERSARIES. *Example:* fear of the anniversary of a loved one's death

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- 19 = FEAR OF OWN SICKNESS (illness, tests, or treatments). *Example:* believing one is seriously ill or in danger of death
- 20 = FEAR OF PAIN
- 23 = FREE-FLOATING ANXIETY
- 24 = FEAR OF SUPERNATURAL EVENTS, AND THE "UNHEIMLICHE."
Examples: horror films, seances, witchcraft, weird situations
- 25 = CONSCIOUS RISK TAKING. *Example:* rock climbing
- 26 = PHOBIA (situations such as fear of closed spaces, animals, high altitudes, going out)
- 27 = FEAR OF ADVERSE EFFECTS FROM EXTERNAL FORCES.
Examples: thunderstorms, bad weather at sea, dangerous machine not functioning

ANGER = 4

- 00 = uncodable
- 01 = BAD NEWS (immediate social context). *Example:* your sister having been humiliated by her boss
- 02 = BAD NEWS (mass media)
- 03 = ANGER AT FAILURE OF FRIENDS, ANIMALS, PLANTS TO CONFORM TO SOCIAL NORMS, TO BE CONSIDERATE ABOUT PERSONS AND PROPERTY
- 04 = ANGER AT FAILURE OF BLOOD RELATIVES AND IN-LAWS TO CONFORM TO SOCIAL NORMS, TO BE CONSIDERATE ABOUT PERSONS AND PROPERTY
- 05 = ANGER AT GROUPS (actual or reference). *Example:* one's club behaves badly during an outing
- 06 = ANGER ABOUT TEMPORARY SEPARATION FROM FRIENDS, ANIMALS, PLANTS (indication that person will come back)
- 07 = ANGER ABOUT TEMPORARY SEPARATION FROM BLOOD RELATIVES AND IN-LAWS (indication that person will come back)
- 08 = ANGER ABOUT PERMANENT SEPARATION FROM FRIENDS, ANIMALS, PLANTS
- 09 = ANGER ABOUT PERMANENT SEPARATION FROM BLOOD RELATIVES AND IN-LAWS
- 10 = ANGER ABOUT DEATH OF FRIENDS, ANIMALS, AND PLANTS
- 11 = ANGER ABOUT DEATH OF BLOOD RELATIVES AND IN-LAWS
- 12 = ANGER AT FAILURE OF OTHERS TO CONFORM TO SOCIAL NORMS AND TO BE CONSIDERATE ABOUT PERSONS AND PROPERTY
- 15 = FAILURE TO REACH GOALS OR TO ACHIEVE AN OBJECTIVE.
Examples: anger about failing an examination
- 16 = DAMAGE TO PERSONAL PROPERTY BY OTHERS AND ONESELF.
Example: anger about losing money
- 17 = ANGER IN TRAFFIC (about inconsiderate, norm-violating behavior by others)
- 18 = ANGER ABOUT RITUALS AND ANNIVERSARIES. *Example:* anger about having to attend an aunt's birthday party
- 20 = ANGER ABOUT A PHYSICAL HURT. *Example:* an assault

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- 23 = FREE-FLOATING ANGER (bad mood for no specific reason)
- 28 = ANGER ABOUT INAPPROPRIATE REWARDS FOR SELF (feeling unjustly treated). *Examples:* Failure to get a deserved reward; being the object of unfair accusation
- 29 = ANGER AT DAMAGE TO COMMON PROPERTY. *Examples:* damage to public buildings; vandalism
- 30 = UNEXPECTED, UNNECESSARY INCONVENIENCE, TIME LOSS. *Example:* time loss caused by failure of machines to work properly

3. Codes for nonverbal and physiological concomitants of emotions

Experienced subjective quality (ESQ)

- | | | |
|-----|--|--|
| XX1 | Normal | Code ESQ only if mentioned explicitly by subject! Check other more specific codes first! |
| XX2 | Aroused positive | |
| XX3 | Aroused negative ("tight, nervous, tense") | |
| XX4 | Increase (Fast/Much/Strong) | |
| XX5 | Decrease (Slow/Little/Weak) | Co Code Associated emotions only if mentioned explicitly by subject! |
| XX6 | Controlled | |
| XX7 | Changed (unspecified) | |

Associated emotions

- XX1 Happiness
- XX2 Sadness
- XX3 Fear
- XX4 Anger
- XX5 Surprise
- XX6 Disgust
- XX7 Contempt

3.1 Speech

- | | | |
|-----|--|-------------------------------------|
| 101 | Silence, Say nothing | |
| 11X | Experienced subjective quality ESQ. see above) | 12X Associated emotions (see above) |
| 181 | Hesitant | 100 Not specified |
| 182 | Change in articulation | 109 Other |
| 183 | Change in rhythm | |

3.2 Voice

- | | | |
|-----|---------------------------------|---|
| 21X | ESQ (see above) | If possible code ESQ for:
23X Loudness |
| 22X | Associated emotions (see above) | . |
| | | . (1 to 7) |
| | | 24X Pitch |

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		(1 to 7)
281	Tense, choked	285
282	Harsh	
283	Trembling	200
284	Whistling	209

Warm

Not specified

Other

3.3 Facial expression

331	Laugh	334	No smile
332	Smile	335	Cry
333	Painful smile	32X	Associated emotions (see above)
31X	ESQ (see above)		
381	Pressing, biting lips	385	Other action in lower face
382	Clenched teeth	386	Action around nose (wrinkle, etc.)
383	Pulling lip corners down	387	Action around forehead
384	Mouth open	388	Other muscular action
300	Not specified	309	Other

3.4 Gaze

431	Stared	434	Closed one's eyes
432	Sought eye contact	435	Looked at objects
433	Avoided eye contact		
41X	ESQ (see above)	42X	Associated emotions (see above)
400	Not specified		
409	Other		

3.5 Movements and posture of bodily parts

Behaviors of head, arms, feet, trunk; person staying in one place (for movement of whole body see 3.6):

531	Turning toward other (head or trunk)		
532	Turning away from other (head or trunk)		
533	Touching positive (to hug, caress, also to kiss)		
534	Touching negative (to hit, beat)		
535	Instrumental action positive (putting away something carefully, etc.)		
536	Instrumental action negative (throwing, also kicking objects, slamming door, etc.)		
537	Rest, relaxing, lean back		
538	Unrest, not to be able to sit quietly, move back and forth		
539	Tense, attending movements (lean forward, etc.)		
51X	ESQ (see above)	52X	Associated emotions (see above) 500
551	Eating, drinking	500	Not specified
522	Sleeping	509	Other

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If necessary, specify further:

Head	Arms, hands, gestures
561 Head down	571 Adaptors (manipulation of body or objects)
562 Head up	572 Illustrators (speech-related gestures of head, hands, arms)
569 Head other	573 Emblems (head shaking, clenched fist, gesture of kicking, etc.)
Feet, legs	574 Hands in pockets, arms crossed
581 Legs pulled up	575 Arms, hands, other
582 Stamp one's foot	591 Trunk movements, other
589 Feet, legs, other	

3.6 Body movement, displacement, and posture

(When walking, taking a chair, posture related to *whole* body; for bodily parts, see 3.5):

631 Approaching, turning toward somebody to contact (walking, not only 531!)	641 Collapsed posture
632 Distancing, turning away from somebody (walking, not only 532!)	642 Freezing
633 Leaving the situation, slow to normal	643 Sitting down
634 Running away	644 Erect posture, attending, tense
61X ESQ (see above)	645 Walking up and down
	646 Jumping, Dancing around
	600 Not specified
	609 Other
	62X Associated emotions (see above)

3.7 Behavioral tendencies (not actually done but rather "feel like ..." or "need for ..." or "have a desire to..."):

Bodily parts (see 3.5)

731 Turning toward other (head or trunk)	
732 Turning away from other (head or trunk)	
733 Touching positive (to hug, caress, also to kiss)	
734 Touching negative (to hit, beat)	
735 Instrumental action positive (putting away something carefully, etc.)	
736 Instrumental action negative (throwing, also kicking objects, slamming door, etc.)	
737 Rest, relaxing, leaning back	
738 Unrest, not to be able to sit quietly, move back and forth	
739 Tense, attending movements (lean forward, etc.)	
751 Eating, drinking	700 Not specified
752 Sleeping	709 Other

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Whole body (see 3.6)

- | | |
|--|-------------------------------------|
| 781 Approaching, turning toward somebody to contact (walking, not only 731!) | 791 Collapsed posture |
| 782 Distancing, turning away from somebody (walking, not only 732!) | 792 Freezing |
| 783 Leaving the situation, slow to normal | 793 Sitting down |
| 784 Running away | 794 Erect posture, attending, tense |
| | 795 Walking up and down |
| | 796 Jumping, dancing around |

3.8 General sensations

- | | |
|--|-----------|
| 831 Pleasant-Rest
Harmony, ease, complete absorption, feeling delight, relaxed, rest, satisfaction, to feel well | |
| 841 Pleasant — Arousal
Refreshed, lighthearted, "winged/* watchfulness, full of energy, animated, boiling over with happiness, pleasant arousal of the whole body | |
| 851 Unpleasant — Rest
Feeling tired, drowsiness, feeling heavy, weakness, laxity, slackness, decreasing readiness to react, dejected, disappointed | |
| 861 Unpleasant — Arousal
Tense, restless, not concentrated, being nervous, to feel like exploding, impatience | |
| 800 Not specified | 809 Other |

3.9 Vegetative sensations and symptoms

General

- | | |
|------------------------------------|-------------------|
| 931 Pleasant | |
| 932 Unpleasant (slight pain, etc.) | |
| 933 Severe pain | 900 Not specified |
| 934 Headaches | 909 Other |

Body temperature and skin sensations

- | |
|--|
| 941 Pleasant |
| 942 Unpleasant |
| 943 Cold (coldness, to feel cold, to be pale |
| 944 Warm (heat, raising of body temperature, rush of blood to the brain, head feels hot) |
| 945 Blushing |

Chest and Heart

- | |
|--|
| 961 Pleasant |
| 962 Unpleasant |
| 963 Rising blood pressure, heart beats faster |
| 964 Heart beats slower |
| 965 Chest (chest pain, sense of weight, anguish, feeling squeezed) |

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- | | |
|--|---|
| 946 Perspiration, sweaty palms | 966 Difficulty in breathing, breath stops |
| 949 Other (goose pimples, pins and needles in the arm) | 967 Deep breathing |
| | 969 Other |

Mouth

- 951 Pleasant
- 952 Unpleasant (dry mouth, etc.)
- 959 Other

Muscles

- 981 Pleasant
- 982 Unpleasant
- 983 Trembling, weak knees
- 984 Tension of the muscles, muscle cramps
- 985 Other

Stomach

- 971 Pleasant
- 972 Unpleasant or other odd feelings
- 973 "Butterflies in the stomach"
- 974 Pressure on the stomach
- 975 Churning stomach, feeling sick in the stomach
- 976 Hunger, thirst
- 979 Other

4. Combined nonverbal and physiological symptoms/reactions

As the symptom/reaction codes consists of a multitude of categories, it may be necessary to combine categories into larger symptom/reaction groups. The symptom/reaction groups that were used in the previously mentioned studies are specified in the following table and the relevant categories are indicated by their respective code numbers (see Section'3).

<i>Variable Code</i>	<i>Name of variable</i>	<i>Codes combined</i>
Speech		
SPEEON	Speech subjective quality normal	111, 116
SPEEOC	Speech subjective quality changed	112-115, 117
SPEESY	Speech reactions mentioned	181-183, 100, 109
Voice		
VOION	Voice subjective quality normal	211, 216, 231, 236
VOIOC	Voice subjective quality changed	212-215, 217, 232-235, 237
VOISY	Voice reactions mentioned	281-285, 200, 209
Facial expression		
FACQN	Face subjective quality normal	311, 316
FACOC	Face subjective quality changed	312-315, 317
LAFSMI	Laughing/smiling	331, 332
CRY	Crying	335
FACSY	Face reactions mentioned	381-388, 300, 309
Gaze		
GAZESY	Gaze reactions mentioned	431-435

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<i>Variable Code</i>	<i>Name of variable combined</i>	<i>Codes</i>
<i>Body part movements</i>		
MOVQN	Normal movements of body parts	511, 516
MOVOC	Changed movements of body parts	512-515, 517
PERSMOV	Interpersonal movement	531-534
INSTACT	Instrumental action	535-536
UNREST	General unrest	538-539
HANDSY	Hand movements mentioned	571-575
<i>Whole body movements and postures</i>		
BODYQN	Normal body movements	611, 616
BODYOC	Changed body movements	612-615, 617
AVOID	Avoidance/distancing	632-634
FREEZ	Freezing	642, 644
EXPAN	Expansive movements	645, 646
<i>Sensations</i>		
PLEARES	Pleasant rest sensations	831
PLEAROU	Pleasant arousal sensations	841
UNPLRES	Unpleasant rest sensations	851
UNPLROU	Unpleasant arousal sensations	861
<i>Vegetative symptoms</i>		
COLDTEM	Symptoms of coldness	943, 949
WARMTEM	Symptoms of warmth	944, 945
PERSPIR	Perspiration	946
BLOPRES	Blood pressure rise	963
CHESBRE	Chest/breathing problems	965, 966
STOTROU	Stomach symptoms	972-975
MUSCLSY	Muscle symptoms	983, 984

5. Combined antecedent codes — antecedent groups

As for the symptom/reaction codes, for statistical purposes some of the antecedent codes can be combined into larger groups. These combinations are based on frequencies of occurrence and on content of categories and are presented in the following table together with the categories included in each group. Most of the groups can be used for all four emotions, but some are emotion-specific.

<i>Variable Code included</i>	<i>Antecedent group</i>	<i>Categories</i>
NEWS	News	01, 02
RELA	Relationships	03, 04
INST	Social institutions	05, 18
TEMP	Temporary meeting/separation	06, 07
PERM	Permanent separation	08, 09
ALPH	Birth/death	10, 11

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<i>Variable Code</i>	<i>Antecedent group</i>	<i>Categories included</i>
BODY	Pleasure/pain	19, 20, 21
STRANG	Interactions with strangers	12
ACHI	Achievement	15

only for fear:

SUPER	Supernatural	24
RISKI	Risk-taking/External forces	25, 26, 27
TRAF	Traffic	17
NOVEL	Novelty	14

only for anger:

JUST	Injustice	28
INCON	Inconvenience	30

