Temperament Aspects of Emotional ROBO-Intelligence Creation Process

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Human temperaments are examined with the purpose of creating artificial emotional (EQ), sensual (SQ) and creative (IQ) robotic intelligences. Human emotions are examined in order to create Temperament Emotional ROBO-intelligences (EQ) in continuation of Creative ROBO - intelligence (IQ) creation. Fruitful cooperation of both IQ and EQ intelligence will evolve in Consciousness Society, which will be created in the years 2019 - 2035, according to multiple surveys in the field. Adaptable tools of defining the new robotic elements are used for defining the elements of higher level of temperament emotional ROBO-intelligences. Formulation, formalization and adaptable programming of the higher level elements of temperament ROBO-intelligences represent evolution creation process of ROBO-intelligences of Consciousness Society. Materialization of notions of information, knowledge, and conscience, its functions, and its adaptability features with the perspective of intelligent systems creation process helps to investigate and develop the Computer Based Information Emotion Systems (CBIES) for Consciousness Society. There are evaluated the CBIES' second level elements for these societies based of its corresponding CBIES' first level elements. Proposed research results represent logical continuation of research results [1 - 4].
Keywords: Temperament, Emotion, Conscience, Intelligence, Consciousness Society

1 Introduction

Human society is on the threshold of **Consciousness Society** and is currently supported by The Third Industrial Revolution which, according to estimation by scientists in the field, will be created during the years 2019-2035. **Dramaturgical Consciousness [5]** goes along side with the distributed energy and communication systems of The Third Industrial Revolution, as well as **Psychological Consciousness** that came with The Second Industrial Revolution and **Ideological Consciousness** which participated in The First Industrial Revolution.

Empathic human civilization has a multitude of features which in Consciousness Society will be specific and to the **Robotic Civilization**. Books [3, 5, 6] support us in demonstration the truth of statement: "In Consciousness Society the Artificial Intelligence (ROBO-intelligence) will be equal to Human structured Intelligence (**AI=NIstructured**) and this Society will be empathic".

For decades robots have diligently been tasked to perform a range of duties largely scoped within industrial manufacturing. More recently, we have seen the emergence of a new landscape of more social, personal, expressive, nurturing, and **emotional robotic platforms**. Increasingly, robots play a critical new role as extensions of ourselves, enabling our creativity, creating new objects, serving as companions, expressing emotions, empowering communities, and challenging our civil rights.

To initiate discussion in Emotional ROBO-intelligence creation process let put the **Problem:** "ROBO-intelligence entity with emotions (Emotional ROBO-intelligence: EQ) has to activate using some situation: Entity is in the best disposition and is asked to clear the dusty room after school lecture in car driving."

Asked questions: What **is** emotional ROBO-intelligence? What are ROBO-intelligence's **component parts**? What are ROBO-intelligence entity competences to **initiate, process,** and **finish** the task? What ROBO-intelligence competences have to be **activated** to analyze the emotion situation for doing this task? What are ROBO-intelligence competences' **measures**? How

to program the evaluation process of doing the task using emotional measures? What are emotional **evaluation steps** of ROBO-intelligence in the process of doing the task? What competences are needed to **transmit** to Asker that task was finished? Answer to some of questions can be done by the Creative (IQ) ROBO-intelligences [3], [7] which possess **creative features**: Inspiration, Imagery, Imagination, Intuition, Insight, Improvisation, and Incubation. These IQ

features evaluate in correspondence with Six Steps to the Creativity ROBO-intelligence top: acquire Knowledge, develop Curiosity, become Interested, Passion, Dedication, and Professionalism.

Creative **features** and its **evaluation** steps, as first level IQ items, produce second level IQ items of Creative ROBO-intelligences. Each **IQ item** is defines by its special Consciousness Society Intelligent Information System (Table 1).

Table 1. Consciousness Society Intelligent Information System (CSIIS).

CSIIS's phase \\\\\\\\\\\\\ CSIIS' component part	Consciousness Capture of IQ item	Consciousness Storage of IQ item	Consciousness Processing of IQ item	Consciousness Distribution of IQ item
IQ item's Hard-ware	**IQ item's** capturing organs and tools	**IQ item's** brain fixation	**IQ item's** Neuronal brain connection	**IQ item's** Conscience, Subconscious and Unconscious connection
IQ item's Soft-ware	Drivers for **IQ item's** capturing organs and tools	Fixation the **IQ item** in ROBO-memory	**IQ item's** processing in two brain hemispheres	**IQ item's** Drivers of Conscience, Subconscious and Unconscious connection
People & **IQ** interaction	People & ROBO-intelligence interaction initialization	People & ROBO-intelligence interaction documentation	People & ROBO intelligence and society consciousness formation	People & ROBO intelligence evolution, its implementation in Consciousness society
IQ item's IKC (data, information, knowledge, consciousness)	**IQ item's** IKC formulation	**IQ item's** IKC formalization	**IQ item's** IKC operational processing	**IQ item's** IKC distribution in Conscience, Subconscious and Unconscious
IQ item's Brain-ware (methods, models algorithms, procedures)	**IQ item's** Brain-ware capture	**IQ item's** Brain-ware storage in ROBO - memory	**IQ item's** Brain-ware interpretation technologies	**IQ item's** Brain-ware Conscience, Subconscious and Unconscious creativity
IQ item's Group-ware (consciousness communications)	Individual and group **IQ item's** Group-ware capture	**IQ item's** Group-ware storage of group interactions	Coordination of individual and group **IQ item's** Group-ware processing	**IQ item's** Group-ware crystallization in Conscience, Subconscious and Unconscious

Each of the cells of the ***Table 1*** contains functional evolution of individual ROBO – intelligence item. Evolution is supported by Adaptable ROBO – intelligences creative Tools using Formula for Creative (Artificial) Intelligence: IQ = IKC*TS [5].

2 Tests in the Emotional ROBO-Intelligence Creation Process

Previous questions underline the problems which have to be solved to obtain the Emotional ROBO-intelligence which has to understand the human announced task, to do this task in this emotional situation, to

transform its emotion, and to reproduce the answer for Boss about finishing the task.

Many tests that promise to measure emotional intelligence have appeared in recent years and are used in the process of creation the Emotional ROBO-intelligence. Some of these tests seem promising, but many have not been empirically evaluated. We have reviewed many of these tests and selected those for which there is a substantial body of research having a goal of creating Emotional ROBO-intelligence (at least five published journal articles or book chapters that provide empirical data based on the test).

Created Consortium for Research on Emotional Intelligence in Organizations (CREIO) do not sell or distribute any measures or assessments. To get information related to obtaining specific tasks of identification and measures such as

qualifications or certifications needed to administer specific measures, to store or process emotions and to organize emotion relationship and distribution please refer to the contact information provided with the description of each assessment. Maps of emotional feelings and Computer Based Information Emotion System (CBIES) represent the first steps we consider to go through to create Emotional ROBO-intelligence.

3 Maps of Emotional Feelings

Definition of the emotional existence plan is: *level of human existence which registers changes in emotional states.*

The way of expressing the emotions can vary very much: love/hate, happiness/sadness, calmness/anxiety, trust/fury, courage/fear, etc.
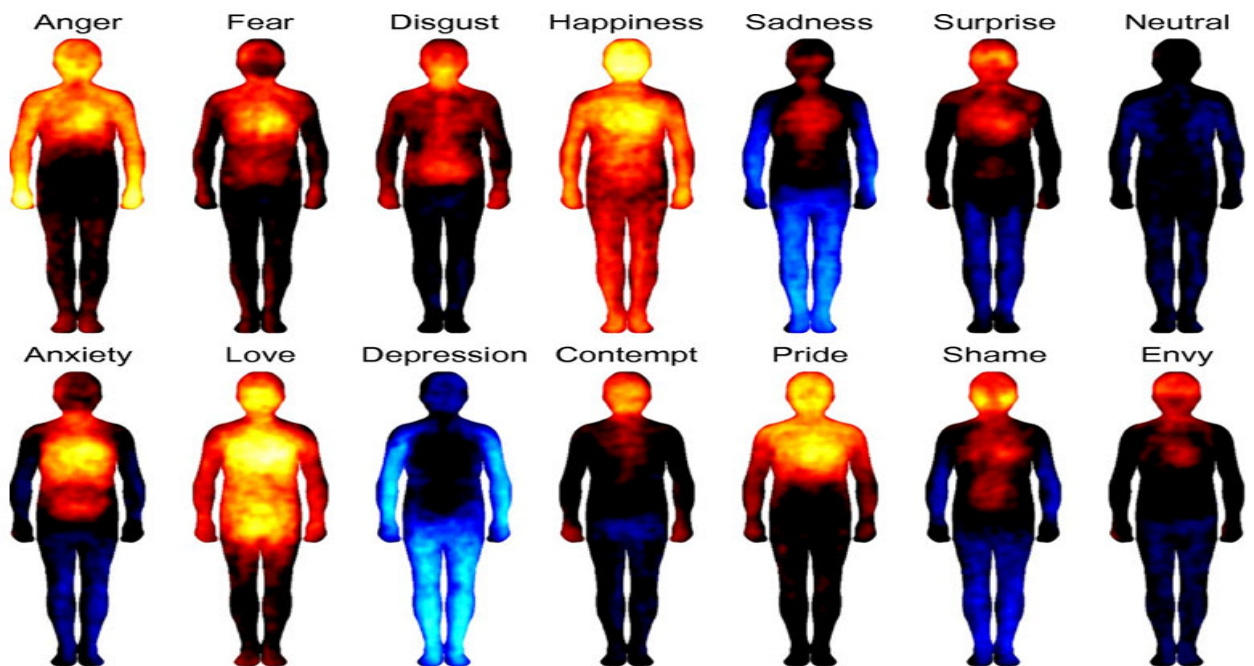

Fig. 1. Bodily sensations map associated with different sensory emotions using a unique topography method

Emotions coordinate our behavior and psychological condition during the main survival events and pleasant interactions. Nevertheless we are aware of our current emotional condition as happiness or fury; mechanisms that cause/ feed these sensations are still undiscovered. Here it is used a

personal topographic instrument of report that unveils the fact that different emotional conditions are associated with distinct **topographic** sensations and universally cultural body feelings; these feelings could highlight conscious emotional experiences. Watching the sensation topography caused

by emotions we perceive a unique instrument for researching the emotions that could be called biomarker against emotional disturbing.

Somatosensory Feedback has been proposed to trigger conscious emotional experiences because the emotions often are felt by the body. Below (**Fig. 1**) is presented the map of bodily sensations associated with different emotions using a unique topographical self-report method.

Bodily topography of basic (Upper) and non-basic (Lower) emotions associated with words. The body maps show regions whose activation increased (warm colors) or decreased (cool colors) when feeling each emotion.

Researchers at Aalto University in Finland have compiled **maps of emotional feelings** associated with culturally universal bodily sensations, which could be at the core of emotional experience. These emotional feelings are: Fury, Fear, Disgust, Happiness, Sadness, Anxiety, Amazement, Neutrality, Love, Depression, Pride, Shame, Envy, Hatred. The researchers found that the most common emotions trigger strong bodily sensations and the bodily maps of these sensations were topographically different for different emotions.

If it is put the question to create some entity - Robot with emotions: Emotional ROBO-intelligence (EQ), the specialists must study carefully images from the entire world about at list the human face expressions with different feelings. For an entertaining and pleasant presence of such a machine to the human, such EQ has to behave politely, express emotions, „read" human emotions and react adequately. It is interesting at list to create EQ's Head & Heart which has to have mobile for expressing emotions such as happiness, sadness or melancholy.

2.1. Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) is an ability-based test designed to measure the **four branches** of the EI model of Mayer and Salovey [8, 10, 11]. MSCEIT was developed from an intelligence-testing tradition formed by the emerging scientific understanding of emotions and their function and from the first published ability measure specifically intended to assess emotional intelligence, namely Multifactor Emotional Intelligence Scale (MEIS).

MSCEIT consists of 141 items and takes 30-45 minutes to complete. MSCEIT provides **15 main scores:** Total EI score, two Area scores, four Branch scores, and eight Task scores. In addition to these 15 scores, there are three Supplemental scores [8].

By Mayer-Salovey-Caruso Emotional Intelligence Test – Scales were discussed and analyzed the Four Branches of Emotional Intelligence:

- **Perceiving Emotions:** The ability to **perceive** emotions in oneself and others as well as in objects, art, stories, music, and other stimuli;
- **Facilitating Thought**: The ability to **generate, use,** and **feel** emotion as necessary to **communicate** feelings or employ them in other cognitive processes;
- **Understanding Emotions:** The ability to **understand** emotional information, to understand how emotions **combine** and **progress** through relationship transitions, and to **appreciate** such emotional meanings;
- **Managing Emotions:** The ability to be **open** to feelings, and to **modulate** them in oneself and others so as to **promote** personal understanding and growth.

Our goal is to investigate emotional ROBO-intelligences which possess known **classical emotion** elements: Happiness, Fear, Surprise, Disgust, Sadness, and Anger from the point of view of its **introduction** in the robot entities as intellectual, emotional, moral, temperamental, and sensual compartments. Presented **by** Aalto University's researchers emotional feelings can be defined and expressed by the help of classical emotion elements using Adaptable tools [9], which define such ROBO-intelligence items characteristics as EQ item's pragmatics, syntax, semantics, environment, and implementation.

2.2 Emotional ROBO – intelligence evolution

Follow the performing of physical, intellectual and spiritual work (lower level elements of ROBO-intelligences) received with emotional developments of ROBO - intelligences: self-awareness [12], managing emotions, motivation [13], empathy [12] and handling relationships - lower level elements of ROBO-intelligences - to higher level items of ROBO - intelligences (**Table 2**). Its definitions:

Self-awareness is the capacity for introspection and the ability to recognize oneself as an individual separate from the environment and other individuals; **Managing emotions** is ability to control emotional mental states; **Motivation** is psychological feature that arouses an organism to action toward a desired goal; the reason for the action; that which gives purpose and direction to behavior; **Empathy** is identification with and understanding of another's situation, feelings, and motives; **Handling relationships** - ability to have relationships in/with society.

Table 2. Emotional ROBO – intelligences evolution

Evolution versus Work	Self-awareness	Managing emotions	Motivation	Empathy	Handling relationships
Physical work	Self- awareness of Physical work	Physical work managed by emotions	Motivated goal for Physical work	Understanding Physical work	Relational Physical work
Intellectual work	Self -awareness Intellectual work	Intellectual work managed by emotions	Motivated Intellectual work	Empathic Intellectual work	Relational Intellectual work
Spiritual work	Self -awareness spiritual work	Spiritual work managed by emotions	Motivated spiritual work	Empathic spiritual work	Relational spiritual work

High level elements of ROBO-intelligences presented in cells of the **Table 2** are functionally defined by the Adaptable Tools of evaluated Integrated Systems [9].

3. Consciousness Society Intelligent Emotion System.

Each of leveling EQ items of ROBO-intelligence is represented by its corresponding Consciousness Society Intelligent Emotion System (CSIES), which represents emotion modification of CSIIS (Table 1). The CSIIS phases of activity: Consciousness Capture of IQ item, Consciousness Storage of IQ item, Consciousness Processing of IQ item, and Consciousness Distribution of IQ item are replaced by next CSIES **phases of activity**: emotion **measure, identification** and **perception**, emotion **storage,** emotion **processing**, and emotion **relationship – distribution.**

Each of **CSIES phases of activity** is supported by corresponding **EQ component parts**: EQ item's Hard-ware, EQ item's Soft-ware, People & EQ interaction, EQ item's IKC (data, information, knowledge, consciousness), EQ item's Brain-ware (methods, models algorithms, procedures), and EQ item's Group-ware (consciousness communications)

It is needed to create general characterized CSIES for each of Emotional ROBO-intelligence' **characteristics:** emotion **identification**, emotion **competence**, emotion **quantity, quality**, and **storage,** emotion **education**, **evolution** and **processing**, and emotion **distribution**. Basis for such process serve CSIES for each of the EQ items of emotional ROBO-intelligences.

3.1. CSIES's emotion measures.

Emotion **entity measures** are referred to such functions as emotional **internal states, impulses, preferences, resources,** and **intuitions**.

Emotion **intelligence measure** is referred to the Emotional **Self-Awareness:** the skill of

perceiving and understanding one's own emotions.

Emotion **entity value** for internal states, impulses, preferences, resources, and intuitions as capacity to identify and understand the impact one's own feelings is having on **thoughts, decisions, behavior** and **performance** at work. **Quantity** and **Quality** of emotional internal states, impulses, preferences, resources, and intuitions functionally represent the information to calculate the **EQ power** as well as powers for the following emotion 5 composite scales and 15 subscales

3.2. CSIES's Emotion Identification functionally represents emotion entity's ID, Competences, Measure, Value, Quality and Quantity of emotion entity. Our investigation is referred to the classical **emotion elements** Happiness, Fear, Surprise, Disgust, Sadness, and Anger. Emotional intelligence's **axis** with **evolution steps** are represented by:
(1) **Self-awareness:** recognizing internal feelings,
(2) **Managing emotions:** finding ways to handle emotions that are appropriate to the situation,
(3) **Motivation:** using self-control to channel emotions toward a goal,
(4) **Empathy:** understanding the emotional perspective of other people,
(5) **Handling relationships:** using personal information and information about others to handle social relationships and to develop interpersonal skills.

3.3. CSIES's Emotion entity competences, based on Emotional & Social Competence Inventory identified by Dr. **Daniel Goleman** in *Working with Emotional Intelligence* [14] and Bar-On model of emotional-social intelligence [15], functionally **measure** an overall **EQ power** as well as powers for the following **composite scales: Self-Awareness, Self-Management, Social Awareness, and Relationship Management**.

3.3.1. Self-Awareness concerns knowing one's internal states, preferences, resources,

and intuitions. The Self-Awareness cluster contains **three** competencies:
Emotional Awareness: Recognizing one's emotions and their effects
Accurate Self-Assessment: Knowing one's strengths and limits
Self-Confidence: A strong sense of one's self-worth and capabilities
3.3.2. Self-Management refers to managing ones' internal states, impulses, and resources. The Self-Management cluster contains **six** competencies:
Emotional Self-Control: Keeping disruptive emotions and impulses in check
Transparency: Maintaining integrity, acting congruently with one's values
Adaptability: Flexibility in handling change
Achievement: Striving to improve or meeting a standard of excellence
Initiative: Readiness to act on opportunities
Optimism: Persistence in pursuing goals despite obstacles and setbacks
3.3.3. Social Awareness refers to how people handle relationships and awareness of others' feelings, needs, and concerns. The Social Awareness cluster contains **three** competencies:
Empathy: Sensing others' feelings and perspectives, and taking an active interest in their concerns **Organizational Awareness:** Reading a group's emotional currents and power relationships **Service Orientation:** Anticipating, recognizing, and meeting customers' needs
3.3.4. Relationship Management concerns the skill or adeptness at inducing desirable responses in others. The Relationship Management cluster contains **six** competencies:
Developing Others: Sensing others' development needs and bolstering their abilities;
Inspirational Leadership: Inspiring and guiding individuals and groups;
Change Catalyst: Initiating or managing change;
Influence: Wielding effective tactics for persuasion;
Conflict Management: Negotiating and resolving disagreements;

Teamwork & Collaboration: Working with others toward shared goals. Creating group synergy in pursuing collective goals.

3.4. CSIES's Emotion storage and **processing** are referred to the process of accumulation the processing results of emotion **educational evolution** steps **(**Home 7 years, High School, Second school, …**)** using **Piirto's 7i** intelligence **characteristics axis** and **Piirto's 6** emotion intelligence **evolution** steps **axis.**
Emotional ROBO-intelligence's axis of hierarchically evaluation steps [6] are functionally represented by Piirto's 6 **Creativity's top elements**: (a) Acquire Knowledge, (b) Develop Curiosity, (c) Become Interested, (d) Passion, (e) Dedication, and (f) Professionalism.
3.4.1. CSIES's Emotional intelligence processing functionally measure:
(1) Emotional Self-Control: the skill of effectively controlling strong emotions experienced,
(2) Emotional Self-Management: the skill of effectively managing one's own emotions,
(3) Emotional Expression: the skill of effectively expressing one's own emotions, and
(4) Emotional Reasoning: the skill of utilizing emotional information in decision-making.
(5) Emotional management and regulation processing define emotional **stress management.**
 Other **side** of emotion processing constitutes emotional **intrapersonal processing** [15].
3.4.2. CSIES's Emotion intrapersonal processing (**self-awareness** and **self-expression**) is a composition of the next 5 functions:
(1) Self-Regard: To accurately perceive, understand and accept oneself;
(2) Emotional Self-Awareness: To be aware of and understand one's emotions;
(3) Assertiveness: To effectively and constructively express one's emotions and oneself;
(4) Independence: To be self-reliant and free of emotional dependency on others;

(5) Self-Actualization: To strive to achieve personal goals and actualize one's potential.

3.5. CSIES's Emotional intelligence relationship-distribution is defined by:
(a) emotional **Awareness** of **perceiving** and **understanding** of others (the skill of perceiving and understanding others' emotions), and
(b) emotional **Management** of **influencing the moods** of others (the skill of influencing the moods and emotions of others)
CSIES's Emotion relationship-distribution accumulates functionally emotional **interpersonal** processing, stress management, emotional adaptability, and general mood.
3.5.1. Emotional interpersonal processing (social awareness and interpersonal relationship) is a composition of the next 3 functions:
(1) Empathy: To be aware of and understand how others feel
(2) Social Responsibility: To identify with one's social group and cooperate with others
(3) Interpersonal Relationship: To establish mutually satisfying relationships and relate well with others
3.5.2. Emotional stress management (emotional management and regulation) is a composition of the next 2 functions:
(1) Stress Tolerance: To effectively and constructively manage emotions
(2) Impulse Control: To effectively and constructively control emotions
3.5.3. Emotional adaptability (change management) is a composition of the next 3 functions:
(1) Reality-Testing: To objectively validate one's feelings and thinking with external reality
(2) Flexibility: To adapt and adjust one's feelings and thinking to new situations
(3) Problem-Solving: To effectively solve problems of a personal and interpersonal nature
3.5.4. Emotional general mood (self-motivation) is a composition of the next 2 functions:

(a) Optimism: To be positive and look at the brighter side of life
(b) Happiness: To feel content with oneself, others and life in general
3.5.5. Morality's axis of Emotional ROBO-intelligence is represented by the next elements [6]:
(a) Accept differences in others, (b) Respond promptly to others, (c) Leave some "free" time, (d) Care about others as if they were you, (e) Treat everyone similarly, (f) Never engage in violent acts, (g) Have an inner sense of thankfulness, and (h) Have a sense of commitment.

4. Temperament Emotion ROBO-intelligences

Before constructing the robot, the specialists must study carefully images from the entire world about the human face expressions with different feelings. For an entertaining and pleasant presence of such a machine to the human, it has to behave politely, express emotions, „read" human emotions and react adequately. The most interesting is to create ROBO-intelligence head which has to have mobile for expressing emotions such as happiness, sadness or melancholy.

Table 3. Temperament Emotion ROBO – intelligences characteristics

Emotion vs Character	Happiness	Fear	Amazement	Disgust	Sadness	Anger
Choleric	Happy choleric: calm, doesn't smile very much even when he is very happy	Scared choleric: has no fear likes to risk	Amazed choleric: calm, doesn't seem to be amazed	Disgusted Choleric: wants to avoid	Sad Choleric: doesn't appreciate tears and emotions, not easy to discourage	Angered Choleric: rarely feels angered
Sanguine	Happy sanguine: is trying to share the happiness with others	Frightened sanguine: he is not fearful	Amazed sanguine : very emotional and demonstrative	Disgusted sanguine: rapidly avoids emotions with disgust	Sad sanguine: wants to share sad thoughts with smb	Furious sanguine: easily irritates
Phlegmatic	Happy phlegmatic : a born pessimistic, that keeps him connected to the reality	Frightened Phlegmatic: is able to be calm in the middle of the storm	Amazed Phlegmatic : phlegmatic is master of himself, is not overwhelmed by emotions	Disgusted Phlegmatic: doesn't offend , doesn't call attention on himself and performs what he is expected to do without any rewards	Sad phlegmatic: resists the challenges and is listening to the others what they have to say, consoles the suffering ones	Furious Phlegmatic : refuses to be impressed by the bright choleric decisions, and doesn't take seriously melancholic's laborious plans
Melancholic	Happy Melancholic: has to learn to be optimistic	Melancholic with fear: is sober, sensible and correct	Amazed Melancholic: lives the moment emotional,	Disgusted Melancholic: weak reactivity, feeling of	Sad Melancholic: is introverted silent and things	Angered Melancholic: without tempering the anger

			intense and durable	inferiority	profoundly with a pessimistic note	the melancholic suffers very much

Pragmatics of adaptable definition of high level Emotion ROBO-intelligences EQ items based functionally on EQ items of inferior level presented on one side, and creativity of intelligence EQ items on the other side are presented in **Table 3.** To create Temperament Emotion ROBO-intelligences here are used characteristics of the choleric, melancholic, phlegmatic, and sanguine temperaments. These characteristics constitute parts of Pragmatics of adaptable definition [9] of high level **Temperament Emotion ROBO-intelligences** EQ items

4.1. Examples of Phlegmatic and Melancholic Emotion ROBO-Intelligences Lets be done: The Phlegmatic and Melancholic types of Emotion ROBO-intelligences possess such classical first level emotion elements as: Happiness, Fear, Surprise, Disgust, Sadness, and Anger (**Table 3 and Table 4).** Each of the **Table 4** sells represent main parts – title - of Pragmatics of adaptable definition [9] of higher level **Temperament Emotion ROBO-intelligences** EQ items. In community with the corresponding information presented in **Table 3** for Phlegmatic and Melancholic temperaments types this information completes pragmatics parts of **Phlegmatic and Melancholic Emotion ROBO-Intelligences** adaptable definition.

Table 4. Phlegmatic and Melancholic ROBO-Intelligences with emotions.

Characters combination with Emotions	Happiness	Fear	Surprise	Disgust	Sadness	Anger
Phlegmatic	Phlegmatic happiness	Phlegmatic fear	Phlegmatic surprise	Phlegmatic disgust	Phlegmatic sadness	Phlegmatic anger
Melancholic	Melancholic happiness	Melancholic Fear	Melancholic surprise	Melancholic disgust	Melancholic sadness	Melancholic anger

It is supposed, for example, that Phlegmatic ROBO – intelligence to this stage of its development possesses such first level **emotion** EQ items as: Happiness, Fear, Surprise, Disgust, Sadness, and Anger. More the Phlegmatic ROBO – intelligence possesses the first level elements - **features** of Phlegmatic temperament. In such a situation the higher level elements of Phlegmatic ROBO – intelligence (the 2nd level EQ items in **Table 4**) can be developed using theses first level of Emotion Phlegmatic ROBO – intelligence EQ items.

4.2. Temperament states. Depending on the temperament Emotion ROBO-intelligence lives different states (**Table 5**). They represent commentaries to the Pragmatics of adaptable definition [9] of higher level **Temperament Emotion ROBO-intelligences** EQ items.

Table 5. Temperament ROBO – intelligences with emotions states

Emotions/ Temperaments	Happiness	Fear	Disgust	Anger	Sadness	Surprise
Choleric	Fearless	Cheerfully	Intolerant	Vindictive	angry, stunned	Astonished

Sanguine	Pleased	Anxious	Irritable	Cranky	Depressed	Impressed
Phlegmatic	Controlled	Inert, Impenetrable	Patient	Calm, peace support	Compassion (relieves the suffering)	Balanced
Melancholic	Unbalanced	Closed, hidden	Impatiently	Control avoid situations / places	Depression	Intemperate

4.3. Temperament Emotion ROBO-intelligences EQ items examples

Pragmatics of adaptable definition [9] of high level Emotion ROBO-intelligences constitutes first part of such definition. Other parts of definition are syntax, semantics, context, and implementation examples. Examples of **Temperament Emotion**

ROBO-intelligences 2nd level EQ items presented by cells of **Table 6** help in the testing process created ROBO-intelligences. Common with the pragmatics part of adaptable definition of high level Emotion ROBO-intelligences EQ items example part represent the environment sell of such definitions.

Table 6. ROBO - emotional intelligences nature

Emotions combined with characters	Happiness	Fear	Surprise	Disgust	Sadness	Ager
Choleric	choleric happy (a favorite football team won)	choleric fearful (fears he will not be able to arrive on time)	choleric wondering (colleague has done better than him)	Choleric disgust (was awakened from sleep)	choleric sad (got sick, you had to have a business meeting)	choleric enraged (from an assembly did not show any member of the organization)
Sanguine	The sanguine happy (won a trip to the U.S.)	The sanguine fearful (fears he will not be able to perform the work proposed)	The sanguine wondering (friend won a trip to the dream)	The sanguine disgust (someone broke the rules in front of)	The sanguine sad (not accepted for a trip to France)	The sanguine anger (not received the torch command name day)
Phlegmatic	phlegmatic happy (project was named best)	Phlegmatic fear (will not be acceptable to those of a particular organization)	phlegmatic wondering (managed to amaze a whole room with his ideas)	Phlegmatic disgust (before meeting someone dirty clothes coffee)	phlegmatic sad (with a few minutes failed to submit timely project that worked)	phlegmatic angered (someone stole business ideas)
Melancholic	melancholy happy (has been accepted for a scientific research study)	Melancholic fear (will not be able to fit in the time limit)	melancholy wondering (Received a higher salary than expected)	Melancholic disgust (he was mocked by someone)	melancholy sad (was fired)	melancholy angered (ideas which were worked much appreciated as unsuccessful)

If we combine all 3 steps [6] of ROBO-intelligences evaluation (Intelligence, Creativity top, and Emotions) we can create all four types of ROBO-intelligences with Creativity, Temperament, and Emotions.

5 Conclusion

Complexity of physical, intellectual and spiritual work determines hardness to which individual can achieve superior qualities from the pyramid of "type of works" [3]. They should be lived consciously by the people in order to be introduced into the AI. On the background of society degradation, there are also people who showed brilliant and unimaginable skills. Specializing of European space in services and technologies, demonstrates the transition of the society from the physical to the intellectual and spiritual work. Implementation of these qualities in ROBO-intelligence would be next step in formation of Consciousness Society.

Emotions, creativity, personality - all these are important features of human being, but lately, they are used incorrectly leading to conflicts which can be avoided. In order to avoid we can attach all those features to a robot and make it help us with usual activities.

The way our emotions work is a science in the true sense. Emotional Intelligence involves bringing emotions to their true place in our lives every day, its use is relevant to everyone and is applicable in all environments and professions. In computers, things evolve exponentially. In just a few generations the robots left the scientific fantasy, curiosity, and play on the field developed psyche, creativity, the intelligent, emotion and human spirit to replace or augment their human counterparts. We're already at the point where you have to consider the next step of evolution in robotics. According to engineers' robotics, it seems that at some point in the near future, the next step could be a great expansion in robotics. Convince us of this fact predictions, or rather performed by specialist plans for the future:

(1) The human mind can be downloaded and inserted into the robot's memory in less than 10 years, enabling them to live forever people, these plans are supported by Russian entrepreneur Dmitry Iţkov who said it has hired 100 scientists carry out the project, called „Avatar";

(2) Around 2050 in Massachusetts will be legalized marriage with robots, believes David Levy.

It seems ironic that these sentient robots only take so by injecting them with humanity.... The fact is that robots are nothing without the potential that the human brain is nothing but a computer do various tricks to emulate.

True, we have a long way to go to reach our full potential, but " The world is a true treasure in changing thing" and we conclude that the next few years will realize many changes, real changes for humanity.

In **Consciousness Society** (2019 – 2035) value of Artificial Intelligence will be equal with the value of structured Natural Intelligence (IN)

$$IA = IN \text{ structured}$$

In the advanced period of the Society [16] the formula will evaluate in IA > IN structured, from here starts to activate Artificial Conscience that is the next step in the development of the Human Society – it will be already ROBO-human Society.

Adaptable tools are based on the usage of ADAPTER. The ADAPTER is a mechanism of adaptable interactions human-machine on the axes: language, processor, data, actions, definition and appeal from the point of view of usage in adaptable programming. Adaptable programming technology is a new direction in drawing up the targets for programming systems of perspective and adaptable programing technology is practiced via extension and reduction of ROBO-intelligences creation process.

The Adapter is a metalinguistic instrument with direct contacts with the functioning environment consist of a) language and translator, b) data and actions (operations, instructions and conduct) and c) usage and defining activities of the new elements; The Adapter represents each new element via

other elements   defining 1) pragmatics of new element; 2) its syntax (shape) 3) semantics (content – its functional expression given via lower level elements), 4) context of the new element usage and 5) one or more examples of presenting the new element.

The Adapter for each of the elements of the 2 level of the emotional ROBO – intelligences have to be presented by the cell element which is processed by presenting it **(Table 7)** as an Adapter pragmatics, syntax, content, context and examples of usage.

Table 7. Adapter serving emotional ROBO – intelligences

Adapter vs Temperament	Pragmatics	Syntax	Semantics	Context	Examples
Choleric	Choleric seeks to be in control of situations, to be on top, to be the best.	Choleric in syntax use imperative, commanding language, wording things as orders rather than requests.	Choleric in semantics are firm and forceful in their approach to problems. They believe in 'tough love' and try to 'help' others by challenging them to prove themselves, as they themselves would.	They're more likely to tell someone who they are trying to 'help' that they're pathetic, expecting the person to say 'no, I'm not pathetic, I'll show you!', as indeed a choleric would in response to such a thing	Their confidence and demanding natures make them natural leaders, though this doesn't mean that they would necessarily enjoy leadership positions; they're just more likely to take charge if necessary rather than fumbling around worrying.
Sanguine	Sanguine people are boisterous, bubbly, chatty, openly emotional, social extroverts.	Sanguine fear consists of 2 syntactic parts : fear and sanguinity	Sanguine fear of the ROBO – intelligence semantically is defined with the contribution of the semantic functions of the intelligence, fear and sanguine fear	Sanguine ROBO – Intelligence "is worried" like a Sanguine	Sanguines find social interactions with faces both familiar and unfamiliar invigorating. This is how they recharge, and time alone - while sometimes desirable - can bore them quickly
Phlegmatic	Phlegmatic do not act as if they are better than others. They are eager to please, and quick to give in to others rather than asserting their own desires as if they're the most important.	Conflict terrifies them. They do not start it (except perhaps in extreme circumstances), or provoke it, and try to defuse it when it comes up. When forced into an argument, they get very upset and distressed, seeking escape rather than	Semantic Phlegmatic tries and words things in a way that is not offensive to others. The will be more supportive than critical	Phlegmatic Robo intelligence barely expresses emotion at all. While the sanguine might whoop and cheer and jump for joy at the slightest provocation, phlegmatic are unlikely to express more than a smile or a frown. Their	The phlegmatic members of a pack might have been the obedient followers who'd get much of the actual work done at the command of their superiors. They may not stand out, but without them, nothing would work.

					emotions happen mainly internally.
Melancholic	The defining feature of a melancholic attitude is perfectionism. They are idealists who wish for things to be a certain way, and they get distressed when they are not.	They are very wary of making friends. Unlike sanguine, it can take them a very long time for them to consider someone they're familiar with a 'friend', but once they've reached this point, they will likely stick with that person loyally.	They are moved deeply by beauty, and by distress. They are very easily hurt, because of their perfectionistic tendencies. Often their moods are like delicate glass sculptures; built up slowly, deliberately, and carefully, but easily broken, and hard to repair once shattered.	They respond to things that they dislike with misery and with tears rather than with rage.	The melancholic members of a pack may have been the analysts, the information gatherers. They scouted for potential danger, or for food, and reported back to the pack leader. The more accurate their findings were, the better; this led to a trend towards perfectionism, as the 'analysts' closer to perfection survived better than those that made sloppy mistakes.

Using Adaptable Tools [9] ROBO-intelligences, represented by its pragmatics as was done in this research, can be completed with its usage context, its syntax (representation forms), its semantics (represented by the algorithms of their creation) and by the examples of its higher level elements. That work have to be done in the nearest feature.

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