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**Department of Communication, Journalism and Education Science**

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## **Early education - strategic field of the educational reform**

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### **Abstract**

Nowadays, early education represents the educational area that benefits from a multitude of researches and theoretical and practical contributions, pursuant to acknowledging the necessity in order to holistically approach pre-school pupil's development and to report to education's European dimension. The managerial approach of the early education implies strategic decisions regarding the: a) plan, organization and implementation of the school curriculum, by referring to legislative documents and in the spirit of focusing activities on pre-school pupil's global development; b) institutional development of pre-school educational units, regarding all functional fields and managerial activity's efficiency, for reasons related to optimal organization of the pre-school pupils' learning and development conditions. The article approaches early education issues from multiple perspectives: a) theoretical, legislative and conceptual premises; b) strategic orientations and finalities of the curriculum for early education; c) educational management as part of the early education area. The above mentioned premises, strategies and directions represent elements that supply new reflections and points of view as part of future studies and backgrounds of some empiric researches we foresee as part of early education field.

**Keywords:** early education, early development of the child, curriculum for early education, managerial approach of early education, management of pre-school institutions.

## 1 Conceptual premises in analyzing early education

The semantic evolution of the early education concept has experienced two relatively distinct stages, regarding the delimitation of the age period's scope extension to which it refers and also regarding the specific curricular approaches:

- the stage that includes the last two decades of the last century, when early education aimed the age range from 3 to 6/7 years old;
- the stage that includes present days, foreshadowed by the National Conference from Jomtien (Thailand) - 1990, which promotes the lifelong learning concept and the necessity in order to start the educational process from birth.

Broadening the age period to which early education refers (0-6/7ani) has determined the reconsideration of pedagogical and managerial speech. The concept "early education of the child" has provided a unitary approach as part of the specific curriculum, of the educational, social and sanitary field, and adjustment to managerial functions in order to efficientize the educational process and to achieve high standards of performance with regard to curricular and institutional objectives.

Early education represents the studying field of pre-school pedagogy (as a genetical pedagogical science, in order to study education of the child aged 0 to 6/7 years old, functionally integrated as part of pedagogical sciences), composed of a system of actions, processes, contents, methodologies, situations, international relations, oriented towards accomplishing some finalities specific to pre-school education, guided and conditioned by principles, norms and application rules, managed, monitored and optimized through managerial functions; all these variables are mobilized in order to provide the foundation for free, integral and harmonious development of the child's personality, in accordance with one's own pace and needs.

The studying object of pre-school and primary education pedagogy are holistically approached and aim educational interventions as far as multiple levels are regarded (Stan, 2014):

- early education's role, as part of formal and permanent education;
- early education, as an education available for all children; from this perspective, social and educational policies are based on ensuring equal opportunities for all children, with regard to benefiting from high quality educational services and integrating as part of the formal education of children coming from economically and socially disadvantaged

- backgrounds, ethnic minorities, geographically isolated areas;
- pedagogical approach of small school age as part of the postmodern society's contemporary issue;
  - curriculum's characteristics with respect to early education and primary education, based on psycho-pedagogy data of the pre-scholar and small scholar's integral development, around which curricular elements are being adapted.

## **2 Strategic principles and directions of the curriculum regarding early education**

The psycho-pedagogical and sociological researches of cognitive and social development have revealed the high significance of storages while being a child, as a basic stage in building personality. Educating the child as an individual with specific development needs (not as an adult in miniature), while being aged 0-3 years old, has constituted an essential argument in order to elaborate a curriculum for early education, structured on two age levels, having a unitary vision and a coherence of the process:

- curriculum for early education, children being aged 0-3 years old (ante-pre-scholars);
- curriculum for early education, children being aged 3-6/7 years old (pre-scholars).

Internationally, trends in educational policies regarding concerns, investments and educational strategies with respect to this level of age, have been adopted by our country, too. Lately, if we analyze the percentage of the legislative framework and pedagogical speeches, we notice the field of early education as being a strategic one, belonging to the Romanian curricular reform and benefiting from a *convergent strategy regarding child's early education*, elaborated by the ministry with support from UNICEF Romania. The elaboration and implementation process of the curriculum for early education is oriented by a series of principles and requests, whose unitary compliance ensures the educational process' coherence for the entire pre-school period (The Ministry of Education, Research and Youth, Curriculum for early education of children aged 0-6/7 years old, 2008):

- *the holistic approach of child's development*, by unitary accomplishing objectives belonging to multiple fields, as part of curricular contents and by adapting the training strategies: physical development, health, language

and communication development, cognitive development and socio-emotional development;

- *promoting education focused on child, on his global development*, by capitalizing educational effects of interacting with natural and social environment;
- *adequating the educational process to age and individual characteristics*, by providing equal conditions and opportunities in order to play, learn and develop, in accordance with each and every child's potential;
- *avoiding expressions and prejudices of any type* by didactic staff, non-didactic staff, parents and children, which could injure child's dignity;
- *applying the principles of social inclusion*, having the effect of accepting and capitalizing children regardless of their culture, ethnic group, sex, religion, mother tongue, family environment, disabilities regarding their capacities, satisfying their individual educational needs;
- *integrating as part of the curriculum diversity principles*, by playing games, learning situations in order to capitalize child's cultural and educational experience earned as part of the family and community;
- *taking into consideration families' needs* as part of the process in order to configure educational approaches and involve parents in organizing and deploying educational partnership activities;
- *respecting the principles of genuine learning*, characterized by challenging the child to become the author of his own learning by being active and interacting with the environment;
- *ensuring curriculum's coherence and continuity*, through a unitary vision upon the entire period of early education and by ensuring link elements with the curriculum, as far as the primary education is regarded;
- *respecting European and international standards concerning early education.*

The finalities of early education are defined having in consideration early education's principles and values, in accordance with the psycho-pedagogical characteristics of pre-scholars' integral development and with education's European Dimension and Romanian education's values. The educational finalities that head and regulate all curricular elements of the early education are (The Ministry of Education, Research and Youth, Curriculum for early education of children aged 3-6/7 years old):

1. „Free, integral and harmonious development of the child's personality, in accordance with his own pace and needs, supporting his autonomous and

- creative training.
2. Developing capacities in order to interact with other children, with adults and the environment in order to achieve new knowledge, skills, attitudes and behaviors.
  3. Encouraging explorations, exercises, attempts and experiments, as autonomous learning experiences.
  4. Discovering by each child his own identity, autonomy and development of a positive self-image.
  5. Supporting the child in achieving knowledge, capacities, skills and attitudes necessary when attending the first year of school and for the rest of his life.”

### **3 Managerial approach of the early education**

#### **3.1 Conceptual analyses of the educational management; implications as part of the early education**

Managerial approach of the educational system and process is based on:

- ensuring educational process' rationality, by applying and adequating general management's principles and functions to school activity's specific;
- asserting contextual creativity of school managers and educators, as part of situations specific to institutional managerial process and also as part of the class;
- using all types and channels of intra- and inter-institutional communication, informational system, planning methods and procedures, in order to efficientize the organization, management and coordination of activities and resources, to provide evaluation with a motivational character, to highly accomplish objectives of the educational system, school institution, educational process;
- promoting school organization's stability, through transactional modalities of action and respect regarding the rules ascertained, but also promoting change, through transforming modalities and expressive behaviors;
- promoting managerial research, in order to efficientize the managerial practice as part of specific organisational context, to generalize results in one of a kind theories and methodologies;
- managerial professionalization, by achieving the managerial culture,

developing managerial competences in order to divide this culture in managerial approaches adequate to the organisational context, capacities and attitudes necessary for the managerial self-improving process (self-management), responsibility regarding the institutional development and children's development.

A review of the educational management definitions reveals the following options:

- interdisciplinary pedagogical science, engaged as part of the „study of experiments involved in making a decision in order to organize a given pedagogical activity and to manage educational programs” (De Landsheere, 1992);
- „a modality of superior management – global, optimal, strategic – planned and accomplished as far as all its working levels are concerned” (Cristea, 2002, 224). Regarding the author quoted, the above mentioned managerial activities present the following characteristics: a) global management, of primary system, implies approaching the ensemble of the issues, given their functional and structural inter-dependency; b) optimal management, pilot type, implies maximally capitalizing functional and structural resources; c) strategic management aims system's innovative evolution as far as all levels of organization are regarded;
- „theory and practice, science and the art of planning, organizing, coordinating, evaluating, adjusting educational activity's elements (not only those of the resources), as an activity of permanent free, integral and harmonious development of human being, in order to autonomously and creatively assert one's personality, given the ideal of the educational policy” (Joița, 2000, p. 25).

Beside specific elements brought to the fore, each and every of the four options represents definitions in terms of management of the educational process, by mentioning the managerial functions and activities applied as part of the educational activity.

As far as early education is regarded, the educational management represents adequating general principles, functions, strategies and means of the school management to the characteristics of the institutional system and early education's process, in order to efficiently accomplish multiple categories of activities with respect to strategic, tactical and operative levels (of the system's management and pre-school education's process): strategic planning,

programming, organizing, coordinating, monitoring, evaluating, meta-evaluating and adjusting.

### **3.2 Management of pre-school institution - strategic field of the managerial reform**

As part of the educational reform, in general, and as as part of the early education reform, especially, the management of the pre-school institution represents a strategic field, because pre-school institutions present priority when it comes to significant investments, in order to synchronize this level with international demands and especially with those as part of the European Union, with respect to educational infrastructure, ensuring a qualified staff in order to achieve strategic projects, as well as with respect to those ensuring educational processes' quality.

The strategic targets of the reform as part of pre-school institution management, are:

- facilitating a qualitative education as part of pre-school education, by implementing managerial strategies and tools specific to the institutional management of pre-scholars;
- providing conditions in order to assert pre-school institution's identity as a decentralized unity, having a specific vision, strategic projects of institutional development, able to achieve resources, community's support for educational programs;
- developing the managerial competences of pre-school institutions' managers, attesting them as professional managers;
- professionally develop the didactic staff in the spirit of new pedagogical and managerial orientations;
- favouring some attitudes open in order to develop partnership based programs.

As far as pre-school institution is concerned, the educational management consists in applying all general functions of the management in order to highly accomplish the curricular reform's objectives as part of early education field, the pre-school institutions' strategic objectives, in order to satisfy children and parents' needs, taking the shape of managerial activities, actions, operations specific to the institutional management (which represent the competence and responsibility of the managerial team) and class management (case in which the educator fulfills specific managerial roles). The managerial activities as far as the early education is regarded and the specific roles are grouped on the following

categories, resulting:

- management of projects and educational programs;
- curriculum's management;
- management of tensional conditions as part of pre-school institutions;
- (self)management of the professional development programs;
- management of community relations.

All these categories of the managerial activity are unitary and coherently integrated as part of the institutional development project, implying an involved management with responsibilities belonging to the managerial team, as well as belonging to the didactic staff, who assert their competences specific to multiple sub-fields: communication management, resources management (human, temporal, material, ergonomic), quality management, informational system management, change management.

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## **Semantic equivalences in Romanian medical terminology**

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### **Abstract**

The present paper aims to underline some aspects concerning the presence of synonymy semantic relationship in specialized medical terminology, having as object of study Romanian medical terms. For this study we use a descriptive, conceptual and lexical semantic research method to provide the understanding of different couples, groups or synonymic series where medical terms have several variations: specialized/common terms, syntagms and patronyms of French or different origin. We propose a classification scheme of synonyms of medical lexicon, terms or synonymic syntagms, total and partial, in order to meet the accessibility needs in scientific communication.

**Keywords:** synonymy, Romanian medical terms, synonymic series, typology.

### **1 Introduction**

The use of "specialized denominations" (Lerat 1995: 21) is one of the elements that differentiates common language and specialty languages. Theoretically, each field or domain of activity has its own terminology, but in practice sometimes it proves difficult to claim that a term belongs to a single domain. Taking into account that many words exist simultaneously in the common language and in terminology of one or more specialized languages, the existence of lexical-semantic relationships is an obvious reality in linguistics, as in many scientific disciplines.

Although the concept of specialized language seems from the outset to exclude the idea of synonyms, the semantic similarity is present in terminologies

of different scientific fields, where the postulate of the monoreferentiality, unanimously agreed, the precision and the unequivocal nature of the terms are only an ideal characteristic.

*Objectives of the study*

Our paper aims to highlight the presence of synonymy relationship in medical terminology, namely identify the sources, inventory the typology and highlight different synonymic couples or series of medical terms that have multiple variations as a result of combining different functional-stylistic variants of the communication in medical terminology. The article also aims to clarify certain specific features of medical terms, to present and characterize their "potential" of meaning out of context, as an inventory conducted according to dictionaries.

The analysis of aspects related to the presence of synonymy in medical terminology is part of a relationship between the description of the language and its practical application to the exploration of specialized corpus for educational purposes, as teaching FSP (French for specific purposes) - medical field.

*Method of analysis and corpus*

Our approach uses a descriptive, semantic and conceptual method, in order to provide the features of various synonymic constructions in medical terminology. The phenomenon of synonymy, very common despite the requirement of terminology to work on the principle of unanimity, is presented, in accordance with the dictionaries, as ways of expressing the same linguistic content.

The corpus included medical terms extracted from general and specialty dictionaries, used to determine the meaning of the terms submitted to analysis: *Dictionar Medical (Valeriu Rusu, Editura Medicala, 2010)*; *Dictionarul ortografic, ortoepic si morfologic al limbii romane (Editia a II-a, 2010)*; *Marele dictionar de neologisme (Florin Marcu, Editura Saeculum Vizual, 2008)*; *Mic Dictionar Academic (Bucuresti, Univers Enciclopedic Gold, 2010)*.

## **2 The concept of synonymy**

“Are called synonymous, both entities whose values are exactly the same. These two entities have the same meaning and strictly identical terms of use. They are thus substitutable each other” (Gouadec 1993: 69). Also, Otman (1996: 111) argued that “two names are synonymous when they refer to the same notion and

may be described by the same definition”.

To define synonyms, we must follow two directions: a semantic one and structural other. From a semantic point of view, synonyms are two words or groups of words with different form, but having the same meaning (Ducrot et al. 1996: 310). Regarding the definition of synonymy from a structural point of view, the principle of commutability is taken into account.

General linguistics defines the synonyms as lexical units with identical or nearly identical meaning and interchangeable in some contexts, without losing sight of the identity of designated object. According to Dubois et al. (1994) in the *Dictionary of linguistics and Language Sciences*, the synonyms are different lexical units having the same signified and that can be used in place each other. We consider this statement the most appropriate to define the synonyms as rationally as possible.

### **3 Synonymy sources**

The presence of synonyms reflects the lexical richness of the language. To fully understand the various nuances expressed by the terms of a series of synonyms, the wide variety sources of synonymy must be considered:

1) multilingual or bilingual dictionaries (Pavel-Rucăreanu 2001: 77), as terms enter into the terminology system of a language through the translations of "dictionary";

2) the invention of new terms; we come to designate a single concept with two or even several terms which is a quite serious drawback if the use of new terms makes text comprehension more difficult;

3) the borrowings from other languages;

4) the layers;

5) low standardization;

6) ad-hoc inventions owed to translators.

### **4 Synonyms types**

Starting from the definition of synonyms mentioned above, there are therefore different degrees of synonymy and also several types of synonyms. Synonyms perform generally two functions: clarifying the concepts, uses and nuances; expressive enrichment of communication.

According to these criteria and sources of synonymy, the causes and factors contributing to their appearance, we present a classification of synonyms

of medical language, following:

- full (total) or perfect synonyms;
- partial synonyms (quasi-synonyms);
- synonymic syntagms.

***Total synonyms:***

That is the case of the synonymic doublets. Those are usually neologisms with exact meaning, their use being limited in certain contexts. The following pairs (acronyms –terminological syntagms) are considered synonyms of “necessity”:

NMR - Nuclear Magnetic Resonance;  
AV block – Atrioventricular Block;  
DNA - deoxyribonucleic acid.

***Perfect synonyms:***

Examples:

*ultrasonography - echography;*  
*antispasmodic - spasmolytic;*  
*brain - encephalon;*  
*tumor - neoplasm;*  
*uremia - azotemia;*  
*zymogen - proenzyme, etc.*

***Synonymic series (synonymic term or syntagm):***

*frontal lobe – forebrain;*  
*hindbrain – rhombencephalon;*  
*subcutaneous tissue – hypodermis;*  
*glial cells – neuroglia – glia;*  
*beta-blocker – adrenergic antagonist, etc.*

***Synonymic syntagms:***

These are syntactic units very numerous in medical terminology, sometimes highly specialized, some of them untranslatable or difficult to translate by non-specialists.

*cardionector structures – cardionector system;*  
*anastomotic ulcer - peptic ulcer;*  
*leg ulcer - varicose ulcer;*  
*outer ear – auricle – external ear;*  
*Marie - Strümpell arthritis/disease - ankylosing spondylitis*  
*Lagrange’s operation - sclérecto-iridectomy;*

*Vidal's disease - circumscribed neurodermatitis;*  
*Pignet index – body build index etc.*

Synonymy, regardless of type, is an important part of the linguistic notion of equivalence, which includes “any syntactic construction, single (syntagm) or complex (sequence of a sentence, entire sentence or context), making within the surface structure the same notional content of the deep structure” (Zugun 2000: 232). In his “*Encyclopedic Dictionary of the Sciences of Language*” (1972), Ducrot overlaps the definition of synonymy with that of the linguistic equivalence: “two expressions (words, groups of words, statements) are called synonyms if they have the same meaning, while being materially different” (Ducrot et al. 1972 : 302).

## 5 Conclusions

The medical field represents a privileged field for the synonymy relationship, providing even perfect models. The abundance of synonyms is a characteristic of specialized medical language, their large number being also a characteristic of a dynamic language, with rapidly expanding and continuously developing. The analysis allows us to illustrate the typological connection between the common lexicon and the specialized medical one and confirms the dynamic nature of the medical terminology. The synonymy in medical terminology confirms thereby the interference and the evolution of specialized language closely related to the common language. The study proves useful for the enrichment of linguistic resources with associative resource (similarity, hierarchy, lexical semantic structuring) and also for the “exploration” of specialized corpus, authentic documents, strictly specialized resources for educational purposes.

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## **Logistic paradigm for industrial solid waste treatment processes**

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### **Abstract**

Due to the fact that industrial waste are a growing problem, both economic and environmental as their number is increasing every year, it is important to take measures to correctly dealing with industrial waste. This article presents the descriptive model of logistics processes concerning the management of industrial waste. In this model the flow of waste begins in the place of production and ends at their disposal. The article presents the concept of logistics model in graphical form together with an analysis of individual processes and their linkages, and opportunities to improve flow of industrial waste streams. Furthermore, the model allows for justification of the relevance of use logistics and its processes for waste management.

**Keywords:** logistics, logistics processes, descriptive model, industrial waste

### **1 Introduction**

Logistics management of waste streams is primarily used as a tool for management in an appropriate manner all kinds of waste. Waste, and the consequences associated with their presence in the environment in recent years become a major problem in the environmental field. Hence, interest in the subject comes to waste management increasingly wider scale. Significant progress is observed in advanced technologies that not only enable the minimization of pollutants generated, but also allow for redevelopment or disposal of waste.

The Waste Act defines it as: all items, and solids and liquids other than water management resulting from business activities or human existence and unsuitable in a place or time, which they arise; as waste is also considered sludge. In addition, has been clarified that it referred to municipal waste, which are solid and liquid wastes generated by households, in public buildings and public services, including rubbish collected in cesspools, abandoned motor vehicle wrecks and street waste, and industrial waste as any waste arising from the business (Toktay, Wein & Zenios, 2000). Municipal waste is an integral part of society, but industrial waste require special attention in the field of waste management, because they have far more negative impact on the environment.

So ecological purpose stresses the relationship between logistics and the environment, which is to protect natural resources and reducing pollution arising from the presence of waste and the economic objective is clear from the essence of logistics and to reduce logistics costs while improving service levels of logistics management of waste streams.

Logistics management of waste streams is primarily used as a tool for management in an appropriate manner all kinds of waste. Processes related to waste management permanently etched into the scope of logistics, together with still increasing amounts of waste, by-products and consumer goods have already useless after a period of use. Their integration in the logistics management of waste streams is seen as a source of significant improvement of this issue. At the same time a continuous reduction of resource materials and materials in the world requires increasingly attach importance to issues related to the acquisition of recycling, recovery and processing of used articles (Daniel, Tsoufias, Pappis & Rachaniotis, 2004; Dima et al.). Logistic management of waste streams is the creation of logistic chains merging of waste disposal sites. It comprises the following steps: sorting of waste and their transport and storage, waste treatment, provision of secondary raw materials.

## **2 Waste and their logistics models in supply chains**

Traditional supply chains relate to flows that begin at a point to acquire raw materials for production and ending at the point of manufacture of the finished product (Koo, Shin & Yoo, 1991; Vlăduțescu, 2014). Such a supply chain will focus on manufacturing processes while ignoring the issues of waste that result from these processes. However, due to the increasing demands of customers who are increasingly demanding a greater diversity of product range and shortening product life cycles are more often can be observed the increasing

flow of valuable feedback, but useless in a given period (season) or morally older. In addition, the amount of waste groups and problems with their increasingly destructive impact on the environment noted theorists and practitioners of business on the waste chain, placed in the context of the concept of sustainable development. In this context, it is also speak of sustainable logistics chains, i.e. chains spring up on the basis of the concept of logistics ecological imperative. This concept comes to the treatment of logistics chains as *systems of several or a dozen other incorporated supply chains and marketing processing matter and / or energy, thus enabling the needs of individual cells in the logistics chain (the chain as a whole), which is linked to also need to remove the effects of the implementation of these needs* (Nowicka-Skowron & Man, 2010).

The waste chain is a supply chain with opposite direction of material flow to the basic supply chain. Constructing chains of waste consists different areas of the economy and is made by different rules, with the result that we find in practice variations of the waste chains.

In the municipal waste management the supply chain consists of four elements. The first is a resident who uses the product changes (decreases) its useful properties up to the moment at which the product becomes unusable. The second is the entity organizing the collection of waste from residents. It may also provide them with suitable containers, collect waste and transport it to the next chain. The third link is the person who deals with the segregation of waste, and so receives them and uses for own purposes. However, the last link is a landfill. The essence of this string is a sequence of events occurring in a particular order.

In the case of industrial waste, there is a number of possibilities to configure the chains of waste, so we can distinguish the following models here: primary one (including traditional supply chain and reverse logistics independent), closed production cycles for high-tech products (which contain dependent basic supply chain integrated with reverse logistics); closed production cycles of standard products (processed below, containing the basic independent supply chain integrated with reverse logistics), and customer oriented closed production cycles.

In Poland, the most common is the traditional model in which we deal with the flows of already unsuitable materials and products (e.g., phrases, or regarded as waste and their disposal in any predetermined way) from the existing users to a designated place (e.g., landfills or containers). This place is the beginning of the creation of a reverse supply chain functioning independently of the basic chain, which is a "supplier" of materials and products already useless (or

waste). In this model, waste management is organized and operated by independent operator (operators) that have appropriate infrastructure and technology.

The presented models can fully describe the market situations. All can be applied in Poland, depending on the nature of the market and products. Some of them (first model) will have universal application and should be interesting to government authorities and off-road. In this regard, it is to decide who and what is carrying out the logistics management of waste streams.

The problem with this type of models is the need to cooperate with the relatively large amounts of waste producers, because they include households pooled and producers in the areas of municipalities. The quantity and volume of waste is growing so rapidly that possibilities for their landfilling are more and more limited. Waste segregation and recovery of recyclable materials are carried on a very small scale. Lack of system solutions and low level of ecological education of society mean that the problem of waste is still increasing, posing a risk to the environment in the municipalities.

Other described models (from second to fourth) may be fundamental to creating a more effective and efficient operations, combining the knowledge and skills of the logistical issues in sustainable economy and ecology.

The second model is ideal for building chains turning professional in the field of electronic systems, warranties and post-high-tech, like the chain of efficient management of used mobile phones and waste voids peripheral hardware such as printers.

The third model can be applied to organizations of manufacturer or distributor of chain-back used for example for a smooth withdrawal of the distribution network, networks operating in the exclusive product (after-warranty and warranty) in cases where support is one of the key competitive advantage.

The fourth model, in principle, the organization of the market of spare parts and warranty support, where the role of guarantor of retailers, and they take over - provided with a power of attorney-producers decide how to consider the complaint. It should be noted that all the presented models can operate simultaneously on a given market, and this part of the market may be only a fragment of another, larger market.

Thus, experiences with the organization and functioning of traditional supply chains are fully applicable to the opposite chains - which were the essence of logistics management of waste streams.

Since the processing industry, waste management and in particular the

logistics management of waste streams in Poland is not yet popular, there are few companies that use these concepts in their activities. Meanwhile, in a world increasingly common trend is the "Design for environment", which means the creation of such products, which are generated in the form of environmentally friendly both in terms of used the material, as well as the procedure of usage and after use.

An important aspect here is the recovery of the value held by the original product through processing, which is complex and difficult process. Even more complicated is the supply chain management which has already processed products, and market capacity against these products, which currently poses many problems because of the lack of such information.

### **3 Descriptive model of industrial waste management processes**

Waste management is a fundamental task of logistical management of waste streams. Its processes mainly concern the appropriate organizations how to deal with waste (Beullens, 2004; Bloemhof-Ruwaard, Fleischmann , & van Nunen, 1998; Jahre, 1995; Ślusarczyk, 2007). Waste management can be viewed in terms of process and the object. Objects of control in the process term are (Kroon & Vrijens, 1995):

- Prevention of waste, including became obvious by the rationalization of production and consumption;

- Generation of waste, including the design of products taking into account the rest mass of recycled after use;

  - Separate collection, mainly by the segregation of waste at source;

  - Recovery of value and energy contained in waste (Skowrońska, 2007), or waste recycling in whole or in part, or recovery from waste substances, materials or energy and their application;

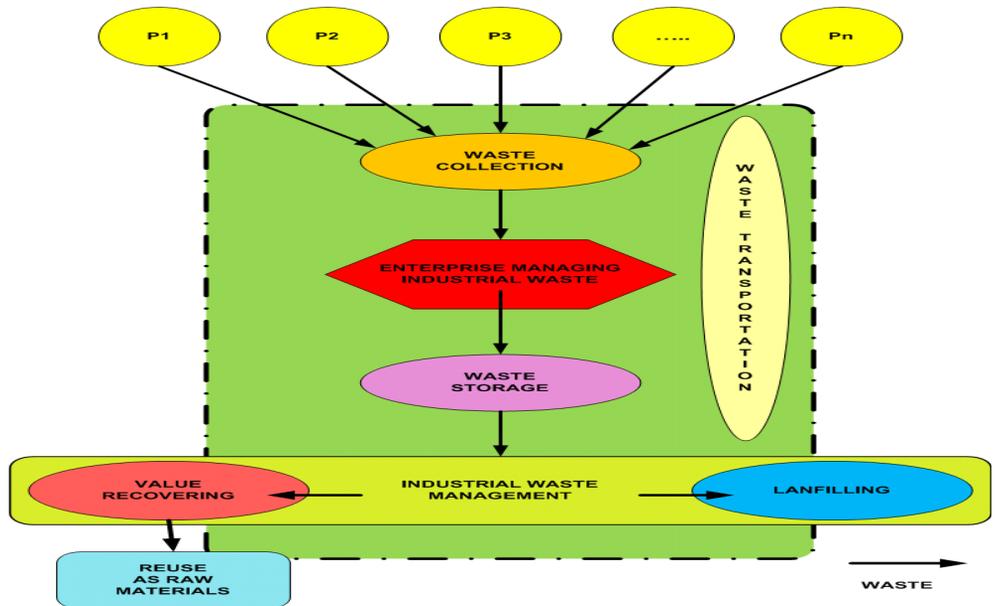
  - Recycling of substances or materials from waste in the production process in order to obtain the substances or original material or other purposes;

  - Disposal of waste consisting of being subjected to processes of biological, physical or chemical treatment to bring about a state that does not pose a risk to human life, health or the environment.

In terms of the preferred process is to prevent waste, became obvious in the rationalization of production and consumption, and became obvious the least desirable waste disposal. But on the other hand there is still so much industrial waste need to be proper disposed that this last activity is the most important one

in strategic management of enterprises. What is more, most of production enterprises do not have own possibilities (i.e. techniques and technologies, resources) for waste management according to the law orders. If they will not organize that kind of activity, it might cost them very expensive in the form of high monetary punishments for causing negative effects in natural environment. This states a big incentive for companies to look for alternative solutions at this field. Such searching are resulting in higher demand on specialized industrial waste managing services, and the market's answer on this demand are enterprises managing industrial waste.

These entities are operating on the second market and their main goal is to take care of industrial waste produced by their customers. For better illustration on the figure 1 is presented descriptive model Carter & Ellram, 1998; Gołemska, 2007; Hu, Sheu & Huang, 2002; Kleineidam, Lambert, Blansjaar, Kok & Van Heijningen, 2000; Kot, 2008; Smarandache & Vlăduțescu, 2014) of processes realized by enterprises managing industrial waste.



P1, P2, P3...Pn – customers (enterprises generating industrial waste)

**Figure 1.** Processes of proper waste disposal realized by enterprise managing industrial waste. (Source: Authors own elaboration.)

On this basis it is possible to build a general descriptive model of the performance of businesses using the concept of logistics management of waste streams (fig. 1). It should be noted that, since the logistics management of waste

streams is not a widespread concept that requires specific knowledge of waste management, and is relatively expensive, in practice it is usually implemented partially and in a few companies, and most are not implemented at all. Therefore, companies that produce waste, outsource managing them to specialized bodies. These bodies are enterprises managing industrial waste. The model is the effect of research which objects were processes of logistics management of waste streams in enterprises managing industrial waste in Poland.

Waste management in enterprises managing industrial waste is based on a logistics management of waste streams system and is composed of four main processes: collection, storage, waste management and waste transport.

The process of industrial waste collection involves waste collection, segregation, and the development of relevant documentation relating to them. It consists of residue unification movements designed to improve their purity, together with a simultaneous reduction of their quantity. Hence the importance of proper organization this process. In addition, no less important are the regulations on proper identification and documenting the flow of collected industrial waste.

Storage of industrial waste is focused on providing sufficient space for waste and the appropriate treatment of them in due time to the most efficient possible reuse or disposal. Warehouses in the logistics processes of industrial waste streams management are used to concentrate waste from various sources, dividing them according to their use decisions, facilitate the formation of transport chains, as well as provide security for the disposal of waste, taking into account the requirements of the law (Voinea, 2011; Vlăduțescu, 2013).

Waste management is the process having a close connection with the types of waste held. The decision about their managing is not dependent on the holder of the waste, because all the issues involved are governed by the law. At the discretion of the waste holder in this regard is only to decide the ultimate point to which the waste would be send, or decide what plant provide equipment suitable for recycling industrial waste, and waste of special type transfer to landfill for disposal. In addition, the industrial waste holder is obliged to provide managing for recovery or disposal of hazardous waste must first be subjected to processes that remove their hazardous properties, as well as pre-treatment processes to effectively reduce weight and density of waste above all those that provide storage, which aims to minimize negative impacts on the environment.

Specificity of transport processes in the logistics management of waste streams system is the heterogeneity of transport facilities, high risk of

environmental pollution in case of failure and eliminating empty carriage. These features cause a high degree of transport services complexity for industrial waste, which has a significant impact on transport costs. In addition, the transport of waste requires appropriate marking of vehicles, training drivers in the safe transport of waste and methods of action in the event of an accident. In the carriage of industrial waste are required also relevant evidence documents (Bunăiașu, 2014; Okwiet, Țenescu & Nicolescu, 2014).

By usage of presented descriptive model it is possible to systematization of information relating to industrial waste management in accordance with the processes of logistics management of waste streams and more accurate picture of the activities associated with industrial waste management in enterprises managing them, what allows for setting more precise strategy goals in strategic management. Also, consistent execution of these processes favors to received by the companies stable and competitive market positions in their area of activity. Moreover, activity of enterprises managing industrial waste should be focused on the most effective their reuse in terms of environmental protection while striving to minimize costs associated with this (Nicolescu, 2014; Bosun, Tenescu & Dima, 2014).

#### **4 Final remarks**

It should be noted that the formation processes of logistics management of waste streams is carried out through the course of its various activities, depending on the expected value of the recovery of a specific product. Admission application of the principles of logistics management in waste management is the existence of adequate logistics system. The system approach is key to understanding the principles of logistics and can be viewed spatially, organizationally and IT.

Logistically integrated waste management system can be identified and constructed in terms of functional areas. Functional areas stands out due to the activity which is related to real sphere, i.e. the formation of waste being transported to waste facilities, storage, use and destruction of economic and regulatory realm, that is, activities related to regulating and controlling the system.

The main components of logistically integrated waste management system may include subsystems: waste collection, export of waste, and commercial use, processing or disposal of waste, according to a presentation hierarchy of values in the recovery of waste, including reuse, re-manufacturing, recycling and landfilling.

The main determinants of the functioning of an integrated logistics system of waste management are: the number, nature and spatial distribution of waste; degree, regularity and dynamics of the generation of waste, adopted rules for the implementation of environmental protection, urban spatial factors: the structure and shape the region's settlement network, the possibility of the location of system objects, routes communication, the spatial structure of economic activity, etc., overall standards and local (regional and local) requirements for allowable loads of the environment (Vlăduțescu, Negrea & Voinea, 2014; Bunăiașu, Vlăduțescu & Strungă, 2014).

Expression of the structure of the system to adapt to the implementation of tasks falling to its efficiency, reliability, availability to users, the operating bandwidth (the frequency corresponding export and processing of waste from the area), vulnerability to changes in the system, the degree of compliance with regulatory requirements and the impact of system objects on the environment.

Logistics in the field of waste management primarily emphasizes the ecological aspects. It is however foreseen that the development of logistics systems in the area of treatment will stimulate factors of marketing. Observed among customers because more and more inclined to buy a product, which is dominated by elements coming from the recovery and suitable for reprocessing. It can therefore be concluded that the logistics management of waste streams will be more widely and readily used by various operators. This will be the result of an increase public awareness of environmental issues and were forcing from the competitive market, which should be an ever larger scale appear in products and other goods produced with a focus on re-use or recover the value resulting from the use of waste future.

## **5 Conclusion**

Summarize, it is necessary to notice how important in present time proper waste management and its processes are. Such effective tool as logistics management of waste streams gives a big support for companies and entities producing waste. It has a very positive impact on environment because that kind of activity allow for its protection. Even if the processes of waste management and logistics management of waste streams are still quite complicated, it is very important to spread such good solutions in literature, and also imply into practice.

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## **Objectivity between illusions and professional standards in today's journalism**

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### **Abstract**

In this paper we approached the problem of objectivity in Romanian press. We presented the newest and also the most pertinent definitions of the subject and we have found that the researchers' opinions are divergent. As a case study we chose a newspaper known in the Romanian media market as having a very high level of subjectivity and partisanship. We analyzed this publication during the parliamentary election in 2012 and we identified the manners in which the journalists express their subjectivity.

**Keywords:** Journalism, objectivity, fairness, Romanian Press, elections

In the contemporary society, dominated by the postmodern principles, it's very difficult to find concepts with absolute value such as "truth" or "objectivity" and it's even more difficult to find them in journalism. The recipient of journalistic messages is nowadays at the command of many sources of information. As Ignacio Ramonet (Ramonet, 2011) noticed, not only is this new type of public better informed, but it is also "an advised witness" (Ramonet, 2011, p. 37) of the journalistic communication process and, implicitly, of the release and interpretation errors. This kind of communication "on sight" also reveals the fact that behind the text there is an employer who is usually involved in other types of financial and economic relations and, thus, he has personal expectations from the publication he finances. This transparency also feeds the readers' mistrust concerning the quality of the information received. The receiver will always

approach the journalistic text knowing he assists at what Ignacio Ramone names the politics – press cohabitation. This observation obliterates at some degree the idea that the Internet is a way to insure objectivity.

By analyzing objectivity through the eyes of the sender, this time we find together with Elisabeth StabryŁa-Thiel (1973) that any kind of interaction with reality includes contiguity, adaptability of the real to the type of subjective perception. StabryŁa-Thiel (1973) calls this state “collaboration”, meaning that “any knowledge is creation which gives a new aspect to the object” (p. 13). The subject recreates the object. On this line, we may speak more frequently about objectivity for and through the “I”, and less about objectivity for or through “he” or “she” (p. 54). We find the same idea with Richard Keeble (2006), who shows, following Umberto Eco, that the personal cultural luggage of every reporter influences the perception of the event he witnesses (Harcup, 2009, p. 81). We speak, hence, in Wittgenstein’s terms (1998, 1953), about a press article as a reflection of exteroception, a reflection of the intersection between the interior and the objective surrounding world.

Primarily, objectivity referred to “journalistic excellence” (Lévêque, Ruellan, 2010, p. 14). As a journalistic professional standard, objectivity includes/included separation of facts from opinion elements deriving from subjectivity (Harcup, p. 82). Objectivity is most of the times understood as fidelity for the facts with the famous irony “*facts are sacred*”.

Gaye Tuchman had established in 1972 (pp. 660-679) some “strategic rituals”, i.e. four procedures by means of which one could build objective journalistic information materials. The researcher considers objectivity not in the epistemic value of the material (in truth), but in “the set of procedures which the reporter uses in the order to produce those contents objectively true”. Tuchman describes four procedures reporters must follow so as to achieve objective news. According to him, objectivity means first of all the use of sources in (concurrently) verbalizing the truth, quotes, deep details, as well as the use of the reversed pyramid. Only one year later, Elisabeth StabryŁa-Thiel argued on the one hand that objectivity meant writing in accordance with the facts, but also the acceptance on the journalist’s point of view. Following Jean Daniel, the researcher believed that objectivity “is also set up according to the socio/cultural standards, but also by convention” (p. 207).

Between the writing ritual and the result of a convention, objectivity has lost its meanings in the vortex of experience. Thus, many researchers **deny the existence of objectivity itself**. The French theoretician Benoît Grevisse, author

of many studies and manuals which are very important in journalism, even said that the famous expression „facts only facts” – is “naturally an intellectual imposture”. The French theoretician believes that the journalistic message is built exactly on this tensional point between the desire to render and the awareness of the impossibility to reach the Truth (2008, p. 42).

Just as vehement is Erik Neveu, as well, who believes that objectivity is “a coarse illusion”. But objectivity became a professional standard which should generate a “cloned description” of the event, a speech which establishes the comment as “blather” (Neveu, p. 11). Neveu understands objectivity as the claim of a verified and neutral story of the facts and the separation of facts from the comment (p. 64).

Patrick Imbert talks about the myth of “objectivity”. The researcher believes that no one can credit the idea of objectivity as long as it is undertaken from the perspective of a monopole over the act of communication, and as long as there is only one perspective over the presented facts and as long as this perspective accepts only a ”primary” antagonist view” (1989, p. 14).

Objectivity was then explained by a number of concepts such as accuracy, impartiality, honesty (Elisabeth StabryŁa-Thiel, 1973, p. 38), even resemblance. Tony Harcup himself distinguished between *impartiality* and *objectivity*, meaning impartiality implies neutrality and objectivity only a checking of the facts (2009, p. 83).

The concept is also found with Denis McQuail () for whom impartiality means “balance in the selection and use of sources (...) separation of facts from opinions, avoiding value judgments or emotional language or emotive images” (Harcup, p. 83). For Frost, impartial journalism means that the journalist aims for the truth while true objectivity involves creating an entire picture - an impossible task for a journalist (analogy created by Harcup) as it is for the cartographer. This is because, as in the case of the map, news is also a mediate and selective representation of reality rather than reality itself.

Ben it Gr visse believes it would be fairer to speak of a principle of *fairness* (*fairness*, apud *Washington Post*). The concept conditions fairness on completeness, on coherence, meaning that in the material there are placed “elements that have nothing to do with the subject, in the detriment of significant facts”. Also in order to define the principle of fairness, Gr visse speaks about the *imperative of honesty*, namely about the need for journalists not to mislead the reader. Likewise, the theoretician also warns on the “expression subtleties” (p. 49), which could conceal the journalist’s involvement in the object of his

communication.

These, and others, are concepts created to cover a media reality incompatible with the ideal of objectivity. It is incompatible in several respects. The journalist's impossibility to abandon his own perception is an axiom.

In our opinion, each of these concepts transfers the concept of objectivity. The recipient should receive the journalistic text framed by convention: the text is unbiased, the text is fair. Both principles require the recipient to accept the journalist's decision regarding the selection of sources (the first case) and of the facts believed as important (in the last case). Both principles meet in the concept of "non-reducible subjectivity to partisanship" (Brin, Charron, Bonville, in Neveu, 2004, p. 98). Therefore, the paradigm of the communicational journalism is/ was opened. That means the rating will come first rather than the judicious presentation of the facts.

Capture actions take place in the framework of an ego-centric system, not of a media-centric one (Ramonet, p. 21). The recipient chooses his sources, information, platforms, chooses the rhythm and type of reception. He can combine and order them, can waive or may gather, according to the rhythm of his own subjectivity. This recipient who is located in the centre of the information waves is no longer available to grant the promise of objectivity, impartiality, neutrality. Therefore, we suggest to move out of the recipient's motivations for reading, which cannot be controlled, towards the sender's motivations to write, especially regarding the possibilities to confer believability to the journalistic text.

In this new context, objectivity cannot be the cause but the effect at the most. For example, the journalist Jean Quatremer believes that "the Internet is the guarantor for the freedom of the journalistic act" (Quatremer, 2012, 179-180) in the meaning that the sender has the acknowledgement of communication transparency. If we were to carry on with this reasoning, the Internet can also be the guarantor of the objectivity effect, as long as the reader can decide his text while advancing in information, can confront, can contradict etc. But the recipient will not have time to also decide on the objectivity of the text. He will believe it or not. On the other hand, Ignacio Ramonet believes that the Internet generates an "informational insecurity" in the vortex of what Neil Thrumman called "paradox of plent" (p. 125).

## **evz.ro**

The publication observes the stellar layout of the information and hypertext, and the favourite structure is antitheses. Elements of opinion are very

present and they vary from the opinion genres to the graphic, syntactic, lexical, and semantic signals. Almost all items converge in a single theme: fraud. In its narration, the USL is the aggressor, and the PDL, the assaulted. The latter has a defensive attitude against incoming attacks, usually being presented while making complaints. Materials are legitimate, most often, from one communicator, PDL and the Romanian President Traian Basescu.

The portal takes by storm the aggressor's figure through the same processes: ambiguity, lack of assignment, absolute control over the information: "Several hundred fanatic supporters of the USL will force a diversion which could degenerate into violence. Therefore, the secret services are on alert (...) The goal is to create a scandal that would take effect on public opinion in the very day of the vote" (Marinescu, Teodorescu, 14<sup>th</sup> of October 2012 evz.ro). Ambiguity is geminated and supported here by words with great power of evocation (e.g. miners' march): "Dragnea is not a stranger to this scenario either. And he took the responsibility of bringing to the capital, from several counties, groups of 'discontent citizens'. If serious events occur, the USL will transfer the responsibility over the acts of violence to the suspended president. The action from Villa Dante can turn into a mini-miners' march, the beginning of a long series of street protests" (Marinescu & all, evz.ro). On other occasions, Ion Iliescu's personality is being evoked: "Ion Iliescu votes in the company of Dana Năstase". From a title like this we can understand that those two were together to vote. Moreover, their names evoke strong feelings in a part of society. Their negativity is aimed to be doubled in this context: "Former President Ion Iliescu voted at 'Jean Monnet' High school in the capital where he forgathered with Dana Nastase, former Prime Minister Adrian Năstase's wife" (evz.ro).

Many materials poach from the rumour rhetoric, mostly built on the indeterminacy. No kind of source (official or not) is mentioned for statements such as: "In mobile networks there have been and still are being sent messages to urge voters to vote. (...) A reader pointed us at the editor's office..." (Vintila, 14<sup>th</sup> of October 2012, evz.ro) or "Another incident was reported at Brad, (...) an employer if he were to threaten his employees" (Iancu, 14<sup>th</sup> of October, evz.ro). No source supports these facts: "PDL representatives also identified four vehicles that entered Craiova several times" (14<sup>th</sup> of October, evz.ro).

The sender seeks to give a direction to clear interpretation. In this respect, public interventions of USL are qualified as electoral campaign, while those of the PDL are taken as such, press releases.

## Conclusions

The analysed publication subsumes the speech of an idea in the support of which the journalists intended to bring linguistic, logical, factual argument. Almost no material achieves requirements of objectivity as it is defined in textbooks and in other works quoted above. The strategy each undertakes is related to catch the attention by building a tension and by unmasking of a bad thing.

The temporary conclusion we phrase for now includes the need to catch the attention, necessity on which contemporary journalism everywhere is built on. In our opinion, this law of catching the attention found the Romanian journalism at the beginning of its reconstruction. Hence the euphoria style we identified, the enthusiasm with which one theme or another is being supported and which moves the journalistic speech from the reed of a cold, detached tone, controlled by the inflexibility of facts, to an emotional speech that overcomes the events by means of expressiveness.

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## **Football and Spanish Cultural Life; Some contemporary perspectives and observations**

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### **Abstract**

How can the cultural life and identity of a nation state be articulated and expressed when the existence of that nation state is contested and challenged? If history has any capacity to repeat itself, current cultural and political issues in Spanish society provide much evidence for the continued presence of the struggles between centre and region, unity and division which have permeated constructions and representations of Spain since medieval times.

**Keywords:** cultural life, identity, football

In 2014, these debates and tensions resonate as potently as ever. Following the death of Franco in 1975 and the subsequent uneasy transition from autocracy to democracy, the constitutional settlement of 1978, built as it was on the consensus of the 'Pact of Forgetting' ( Encarnacion,2008) set the blueprint for the classic compromise between the forces of unity and the emergent Spain of seventeen autonomous regions. A modern democracy based on competitive party politics was couched against the backdrop of the turbulence of Spain's political history in the twentieth century, which had embraced monarchy, republic, civil war and dictatorship. Decentralisation and devolved power gave special status to the historic communities of the Basque Country, Catalonia and Galicia, embedded in the cultural and political renaissance following the collapse and retreat of imperial Spain in the late nineteenth century (Junco and Schuster, 2005). Membership of the European Community in 1986 consolidated the democratic credentials of the Spanish state and confirmed the shift from isolationism to internationalism. Yet, in spite of these carefully wrought

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compromises recognising the parity of Spain's diverse languages, ethnicities and cultural mores, constructions of Spanish nationhood remained complex and fluid. Once the manufactured consent and political control underpinning the Franco regime's representation and iconography of national identity had gradually eroded, traditional conflicts and cleavages began to be played out once more, reframed and recast within the distinctive hue of the contemporary landscape. Since the economic meltdown of 2008, the divisions at the heart of Spanish society have resurfaced in the form of direct political protest with frequent marches of the loose affiliation making up the 'indignados' crystallising the economic, political and cultural tensions within the Spanish psyche. The campaigns for increased autonomy, separation and independence have gained momentum, especially in the historic regions of the Basque Country and Catalonia. At the end of 2014, the Spanish state is once again at a seminal crossroads, with the potential to implode and fragment into a cluster of self-governing sovereign nations. The forces of disunity and division currently outweigh centrifugal forces. From this perspective, of divergent constructions, symbols and images of competing nationalisms and ethnicities, how can Spanish cultural identity be currently defined? What forces of cohesion exist to reflect contemporary Spain? In a time of political uncertainty and economic depression, how are more positive landscapes of national identity framed?

Football is deeply rooted in the Spanish psyche and is a seminal factor in defining sporting, cultural and political patterns of alliance and rivalry. From its folkloric genesis in the Andalusian mining town of Huelva in the 1870s to its burgeoning development in the urban and industrial heartlands of the Basque Country and Catalonia in the 1890s, the game is historically rooted in the ideological, political, socio-economic and cultural factors which shaped the pivotal features of twentieth century Spain (Ball, 2011). The parallel histories of Spanish club football, founded on locality, region, language and cultural diversity and *La Selección*, the Spanish national side, based on repeated attempts to manufacture and galvanise a coherent sense of national pride and identity since 1920 and the birth of the symbolic ritualism of *La Furia Española*, have witnessed an interlocking synthesis of values, images and representations to reflect and define the divided sensibilities of the game's lexicon. From the Franco regime's exploitation and manipulation of football's increased mediatisation in the 1950s to become the social drug of distraction and mass spectacle at the core of the apparatus of *No-Do* (Relano, 2014), to its crucial role as a force of both continuity and change during the transition to democracy in the late 1970s and

early 1980s, the Spanish game was a barometer of cultural and ethnic cohesion and diversity, and embellished the key forces of historical and political rivalry between Madrid, Barcelona and Bilbao. Spanish club football's transformation since the mid-1990s into a global spectacle of mass consumption and the evolution of the fabled *La Furia Espanola* into *La Roja's* glittering success on the international stage have underscored the notion that football remains a vital element in the dichotomy of contemporary Spanish culture. Whilst the myths and folklore of tradition retain the power of legacy and legend, critical changes and developments have altered the prism in which Spanish football is contextualised. These changes are interwoven within wider political themes to shed considerable light on 'Spanishness' in the early years of the twenty-first century.

Since the mid-1990s Spanish club football has become increasingly globalised, particularly at its elite levels. The global economy of the game, allied to the implications of the 1995 Bosman Ruling has changed the composition of the Spanish game, the ebb and flow of the constant migration of players creating a more fluid cultural dynamic. This has challenged the old orthodoxies which defined the traditional constructs of locality, region and ethnicity surrounding the quasi- sacred folkloric identities of Spanish football and has produced a number of paradoxes. The influx of galaticos such as Zidane, Beckham, Ronaldo and Bale into Real Madrid since 2001 has both maintained the club's tradition of importing international stars as a basis for its success since the era of Puskas and Di Stefano in the 1950s and pushed it to new levels of exposure and consumption. This has made the concept of '*Madridista*' more difficult to define, with only the historic legacy of being framed as Franco's team , representing the centre and the regime, to fuse tradition with post modernity to create a sense of cultural and political identity. The identity of FC Barcelona, on the other hand, deeply embedded as it is in the dissident regionalism of Catalonia, crafted its contemporary identity on the bedrock of *La Cantera*, which produced a galaxy of star players such as Xavi, Iniesta, Messi and Busquets from 2004, developing the specific tiki- taka style of play with great success to celebrate and promote Catalanism and Catalonia to a global audience (Burns, 2012). The rich tapestry of the Spanish football mosaic maintains the tradition of Athletic Bilbao's Basques only policy as the embodiment of the club's football and ethnic identity, though its ability to engender success on the field has been compromised by the global composition of *La Liga* (O'Brien, 2014). Within these nuances of diversity, the pattern is one of *La Liga* becoming more homogenised through football's global

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market- place, with an incumbent loss of the constituent components of 'Spanishness'. The Spanish game has also become ever more globalised in respect of its mediatisation and representation to global audiences across a plethora of global media platforms. Spanish football, especially through the distorted lens of the excessive and hyperbolic coverage of *'El Clasico'* between Real Madrid and FC Barcelona as the global mega spectacle, has become a focal element within football's mass consumption as a global entertainment. Television determines the scheduling, wealth and presentation of the Spanish game at saturation levels to both domestic and global audiences. *'El Clasico'* is framed as the dominant duopoly defining the essence of Spanish football, illustrating cultural conformity and narrowness, for the most part ignoring the rich political and ethnic textures which have shaped the history of football in Spain. The globalisation of Spanish football mirrors the wider demise of identity which has left its mark on both the Spanish economy and the current political context. Its impact has been to accentuate inequality, promote spiralling debt, eroding tradition to catapult the game into the global entertainment industry.

The transformation of *La Seleccion* from perennial failure in international competition ( Ball, 2011) to the success of *La Roja* in winning three successive tournaments between 2008 and 2012 has impacted on Spanish cultural life in a number of ways. Once again this reveals certain paradoxes. In football terms, *La Roja* banished the ghosts of *La Furia* and *El Fatalismo* from the historic associations of the game (Burns). Prior to winning the Euros in 2008, the national team had previously won only one international tournament, the European Nations Cup of 1964, when the Franco regime exploited the ideological propaganda of victory over the Soviet Union in Madrid, utilising the values of *La Furia* to embody the spirit, courage and hard work at the centre of the dictatorship's representations of Spain's cultural heritage and identity. The fluent elegance of *La Roja's* tactical approach rejected the dourness of *La Furia* and laid to rest the curse of *El Fatalismo*, the perceived misfortune of *La Seleccion* in international competition. The wider cultural dynamic underpinning *La Roja* centred around both a rebranding of the national team to stimulate marketing and publicity, but also to engender support so that the contemporary incarnation of the side was no longer tainted by association to the Franco era, especially amongst the young and within the regions of Spain. The fact that *La Roja* was composed of players drawn mostly from FC Barcelona and adopted a similar style of play to the Catalan club assisted this metamorphosis and suggested that at least in football terms, Spain could reconcile the traditional regional antipathy towards

*La Seleccion* under the seductive drug of success pulling the nation together. Indeed, the images of the team returning from South Africa in triumph after winning the World Cup in 2010 struck a rare moment of harmony and cohesion in the midst of discord and disintegration. Del Bosque's success as coach was founded on defusing the hostility between Mourinho's Real Madrid and Guardiola's FC Barcelona to bridge the *Madridista* – Catalan divide to foster a cohesive identity for *La Seleccion*, best exemplified by the enduring friendship which developed between Real's Casillas and Barcelona's Xavi. By 2014 and the Brazil World Cup, the golden period of *La Roja* success was abruptly eclipsed with the side's 5- 1 humbling by the Netherlands. Questions resurfaced as to the extent to which football was able to paper over the complexities surrounding contested nationalisms and identities to foster a sense of national consensus without the coercive hand of a dictatorship to maintain unity. For all the success of *La Roja*, old issues remain central to football's capacity to define cultural life at the level of the nation state in Spain; club football is still at the core of the myriad constructions of Spanish cultural identity.

As we have noted, representations of *El Clasico* form the central tenet of Spanish Club football's globalisation. FC Barcelona was welded to Catalanism from the club's foundation in 1899, just after the cultural and political renaissance of Barcelona itself in the later years of that decade. In a similar vein, the genesis of Athletic Bilbao in 1898 was foreshadowed by the foundation of the Basque Nationalist Party (PNV) in 1894. Thus football, politics and culture were intertwined in Spain's historic regions. Football in Madrid developed more slowly and drew on both Catalan and Basque influences before forging its own distinctive dichotomy in the 1920s, when the political and class centred rivalry between Real Madrid and Atletico Madrid became more sharply articulated. In Catalonia, the Basque Country, Galicia, Andalusia and in the capital itself, the roots of Spanish football are local. In 2014, these local roots are still at the core of the symbols, folklore and images which create the distinctive history of the Spanish game. Traditions of fandom, *La Cantera*, language and the physical terrain of the Spanish landscape combine to ensure this hegemony. But this tradition of locality is challenged by changes in the fabric of Spanish football, in the shift from national and regional identity to corporate identity. As football became part of the business and entertainment vortex from 2000 onwards, traditional patterns of ownership and control have been compromised. The majority of Spanish clubs in the top two tiers are run as private companies, albeit with sporadic state intervention to regulate them and limit excessive financial

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debt. But the distinctive tradition remains intact of member owned clubs, of which currently four exist (Real Madrid, FC Barcelona, Athletic Bilbao and CF Osasuna). This tradition is much lauded and celebrated, but it has been increasingly scrutinised and challenged in recent years. It constitutes a symbolic democracy which maintains a bond between governance, ownership and the club's wider community and support. It carves a distinctive niche in Spanish cultural life. But the contemporary reality is rather more mixed. The controversial relationship between FC Barcelona and the Qatar Foundation since 2006 raises key questions about identity, ownership and corporate involvement. On the one hand the club has defended its links with the Qatar Foundation on the grounds of enabling FC Barcelona to compete with its key rivals by securing the financial backing required to retain its elite position in global football. Critics have castigated the move as not only a sell-out of the clubs traditions but also in respect of a decline in ethical values at the altar of global capitalism. In this sense Catalaniism and the club's folklore have been hi - jacked and re- packaged to frame the contemporary rivalry with Real Madrid for mass global consumption. The stratospheric transfer fees paid by Real in pursuit of the latest galactico demonstrate the Spanish game's contemporary values, and the controversial foreign investment in FC Malaga and FC Santander in recent years pinpoints a deeper malaise in Spanish football itself, serving as a wider metaphor for Spanish cultural life based on the secular pursuit of conspicuous consumerism. Within this rather pessimistic scenario, there are vestiges of hope. The miracle of FC Eibar in progressing from the third level of Spanish football to nestle comfortably within its elite represents localism at its best, suggesting that the romance of the Spanish game is not entirely lost. The combination of small town, tiny stadium, with all of the team's players residing in Eibar itself seems to buck the contemporary trend. When the club hosted Real Madrid in November 2014 at its 5,500 capacity ground, the stark contrast between the teams was clearly visible. The starting eleven of Real cost 400 million euros to assemble, whilst the Eibar side cost just £162,000! In a wider cultural context, the match appealed to the imagination because it evokes the diversity and roots of the Spanish nation itself. Eibar, deep in the Basque Country, owed its creation to 1940 post civil war Spain and the need for industrial regeneration - competing in the same competition against the global city of Madrid, current Champions League holders.

The Spanish Sporting press is obsessed with football. On one level this respects a long tradition of a specialist sporting press, with *El Mundo Deportivo* dating back to 1906 and *Marca* to 1938. Football still operates as that social drug,

continuing to seduce readers with sensationalism, speculation, propaganda and a highly developed sense of cultural stereotyping which reinforces and recycles the traditional political rivalry between Madrid and Barcelona, Spain and Catalonia (Vincent, 2010). Whilst this is frequently at the expense of analysis and objectivity, it further reinforces the politicisation of football in Spanish cultural life. Since 2008, this has become a benchmark for political populism, in which the game has been at the forefront of both the projection and expression of the symbols and rituals of banal nationalism (Billig, 2004). This has given publicity to mass global audiences of many of the contemporary tensions around unity, separation, autonomy and independence which divide Spanish politics. In recent years the Camp Nou has witnessed frequent incidents of this type of political populism to promote Catalan nationalism and antipathy towards Madrid. In 2010, when FC Barcelona played Arsenal in the Champions League, a banner was unfurled opposite the media centre, proclaiming in English that 'Catalonia is not Spain'. Moreover, at every home match the events of 1714 are celebrated with chants of '*Independencia*'. Football reflects wider political and cultural concerns, fusing the game's own history and rivalries with contemporary events. On November 9<sup>th</sup> 2014, the day of the unofficial independence referendum in Catalonia, Valencia played Athletic Bilbao at *La Mestalla*. Throughout the match, Valencia supporters sang '*Viva Espana!*' in clear reference to this event. The stadium is well known for its support of the national team, with *La Seleccion* frequently playing matches there. Are these incidents merely reflective of the banal nationalism of gesture politics or do they suggest a deeper cultural significance? At a time of protest and demands for change, is football a key site of political and cultural dissemination, utilising its rich political and cultural history to promote and project messages which demonstrate the pulse of the Spanish psyche?

In contemporary Spanish cultural life, football is a fulcrum and nexus which encapsulates many of the key issues impacting upon the divergent strands of identity. It still acts as a vehicle for cohesion; *La Liga* and *La Segunda* are national competitions which link Coruna with Almeria, Las Palmas with Girona. The success of *La Roja* caused national celebration, and however briefly brought the nation together under the Spanish flag, thus suggesting that the phenomenon of 'Dual Identity' may indeed link football with divergent aspects of regional and national sentiment (Quiroga, 2013). It also showed the game's capacity to be in the vanguard of change. As was the case in the early 1980s when the successes of Real Sociedad, Athletic Bilbao and FC Barcelona symbolised resurgent

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regionalism, the continued capacity of football to fuel and represent political aspirations in the Basque Country and Catalonia, juxtaposed with the campaigns for recognition by the national teams of these regions put further pressure on the central Spanish state to hold together as a unified nation. Spanish football exhibits consensus and dissent in its contemporary cultural composition - the national structure of the elite levels of club football are likely to retain their function as a focal point of cohesion in which regional rivalries can be defused and contained, however the political debate develops pertaining to Spain's future in the next few years.

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## **Communicative universal convertibility Matter-Energy- Information**

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### **Abstract**

The research aims to reveal and prove the thesis of the neutral and convertibility relationship between constituent constructive elements of the universe: matter, energy and information. The approach perspective is a computationally-communicative-neutrosophic one. We configure a coherent and cohesive ideation line. Matter, energy and information are fundamental elements of the world. Among them, there is an inextricable multiple, elastic and evolutionary connection. The elements are defined by the connections between them. Our hypothesis is that the relationship between matter, energy and information is a neutral one. This relationship is not required by the evidence. At this level, it does not give up in front of the evidence intelligibility. Neutral relationship is revealed as a law connection. First, the premise that matter, energy and information never come into contradiction is taken as strong evidence. Their law-like-reciprocal obligations are non contradictory. Being beyond the contrary, matter, energy and information maintain a neutral relationship. Therefore, on the basis of the establishment and functioning of the universe or multi-verse, there is neutrality. Matter, energy and information are primary-founder neutralities. Matter, energy and information are neutral because they are related to inexorable legitimate. They are neutral because they are perfectly bound to one another. Regularity and uniformity are the primary forms of neutrality. The study further radiographies the relational connections, and it highlights and renders visible the attributes and characteristics of the elements (attributes are essential features of elements and characteristics are their specific features). It explains the bilateral relationships matter-energy, information-matter and energy-information.

Extension method of Cai Wen (1999) is utilized to clarify relationships between Matter, Energy and Information. It finally results that reality is an ongoing and complex process of bilateral and multi-lateral convertibility. Thus, it is formulated the neutrosophic principle of Interconvertibility Matter-Energy-Information (NPI\_MEI).

**Keywords:** matter, energy, information, convertibility Matter-Energy-Information

## **1 Introduction: properties, constituents, elements or ontological principles**

In the last half of past century, there has been issued and acknowledged the idea that the world would be made of matter, energy and information. The axiom of foundation of the world issued by Norbert Wiener has already become canonical. Wiener's axiom states that "Information is information, not matter or energy" (Wiener, 1965, p. 132). Everything in the universe/multiverse is based on matter, energy and information. The relative coherence reality permits to utilize extension method of Cai Wen (1999).

The material of "construction" of the universe is matter and energy. In Big Bang, the amorphous matter, the vortex, unstructured and volatile was brought to a form by the energy. In other words, since the birth of the universe/ multiverse, there have existed matter, energy, and "construction", the "form" - information. The energy put the matter into the form "in formae" (in Latin), i.e. energy generated "informatio" (in Latin) - information. The movement of the matter to form is performed by energy. The initial impulse of the universe/multiverse is given by power. (D. Deutsch shows that "the physical world is a multiverse" (Deutsch, 2011, p. 304); D. Wallace states that is an "emergent multiverse" (Wallace, 2012, p. 6).

Tom Stonier's point of view expressed in "Towards a new theory of information" (1991) is that "information is a basic property of the universe. That is, like matter and energy, information has physical reality. Any system that exhibits organization contains information. Changes in entropy represent changes in the organizational states of systems and, as such, quantify changes in the information content of such systems. Information, like energy, exists in many forms. These are interconvertible. Likewise, energy and information are readily interconverted" (Stonier, 1991). In his turn, Anthony Reading noticed the

information as "fundamental property of organized matter" (Reading, 2011, p. 5).

In the article "Information in the Structure of the World" (2011), Mark Burgin deals with the place of information in the world; he believes that there are four "basic constituents of the World" (...) "matter, energy, mentality and knowledge". He points out that some researchers "relate information only to society", others "include the level of individual human beings", "many presume that information is everywhere in nature". His opinion is that the information is "in the structure of the world" and that the "structure of information processes, as well as relations between information and basic constituents of the world, such as matter, energy, mentality and knowledge" (Burgin, 2011) should be taken into account (Bawden & Robinson, 2012).

Mark Burgin and Gordana Dodig-Crnkovic believe that "Information is a basic essence of the world" (Burgin & Dodig-Crnkovic, 2011, p. XIII). On the other hand, they postulate the universality of information: "Information is related to everything and everything is related to information" (Burgin & Dodig-Crnkovic, 2011, p. VIII) (Burgin & Dodig-Crnkovic, 2011, p. 460). David Bawden and Lyn Robinson emphasize that „information is now becoming accepted as a fundamental constituent of the physical universe" (Bawden & Robinson, 2013).

In our opinion, the world is composed of three fundamental elements: element 1-matter, element 2 - energy and element 3 - information. Ontologically, matter and energy are primary natural elements, and information is a secondary element. The Matter and energy are constituent elements. In epistemological order, information is superior, being a constructive element. Information is the computational element of the world.

Hans Christian von Baeyer believes that this three are elements (von Baeyer, 2003). The internal computational principle of information is linked to Wheeler's principle (Wheeler, 1977): "It from bit", as the Cover-Thomas axiom states: "computation is communication limited, and communication is computation limited" (Cover & Thomas, 2012). Information is the computational principle of the world. Information is the first element and then the onto-computational principle. Rafael Capurro appreciates that that there are not elements, there are not properties, but ontological principles aside others; he lists as ontological principles "energy, matter, spirit, subjectivity, substance, or information" (Hofkirchner, 1999, p. 9). Without the existence of a direct connection between these principled categories, R. Capurro reveals exponential capacity of information to represent the world: "We would then say: whatever

exists can be digitalized. Being is computation" (Hofkirchner, 1999, p. 9) (Capurro & Hjørland, 2003). (Pinchevski, 2005), (Hofkirchner, 2014). As ontological principle, information is computational. S. Lloyd emphasizes that "universe is computational" (Lloyd, 2010).

## **2 Convertive relationship between matter-energy**

The first two elements of the triad are those of the Einstein physical formula of mass-energy equivalence. We are interested, first, in the matter connection (mass)-energy. In principle, this relationship was clarified by Albert Einstein.

On the depth axis of Einsteinian thought, the determination of mass-energy relationship is a synthesis of the major ideas launched in the four articles published in 1905. 1905 is known as the miraculous year "Wunderjahr" (German) or "Miracle Year". In Latin it was called "Annus Mirabilis" and the articles published in *Annalen der Physik* were called "Annus Mirabilis Papers" (Baracca, 2005; Gribbin & Gribbin, 2005; Topper, 2013). They are considered to have significantly contributed to the foundation of modern physics. We could say more: 1905 is the most important year in the history of physics hitherto.

The first article published on the June 9<sup>th</sup> 1905 introduced the concept of "energy quanta": „Energy, during the propagation of a ray of light, is not continuously distributed over steadily increasing spaces, but it consists of a finite number of energy quanta localized at points in space, moving without diving and capable of being absorbed or generated only as entities". Albert Einstein notes that "energy quanta" is converted "at least partially into kinetic energy of the electrons". Thus he reveals "photoelectric effect", discovery for which he would win, in 1921, the Nobel Prize for physics. Note that from here, the concern for energy is evident.

The second article, published on July (1905), is a specification of Brownian motion: In this paper, shows A. Einstein, according to the molecular Kinetic theory of heat, "bodies of a microscopically visible size suspended in liquids must, as a result of thermal molecular motion, perform motions of such magnitudes that they can be easily observed with a microscope". The article reveals a high consciousness of scientific honesty: "It is possible that the motions to be discussed here are identical with the so-called Brownian molecular motion; however, the information available to me on regarding the latter is so lacking in precision that I form no judgment in the matter". We notice that in this article

the orientation is on matter: liquid, molecules (Dunkel & Hänggi, 2009).

On September 1905, there is published a study that will be the core of what would later be called the "Special Theory of Relativity" (Strauman, Robert & Kennedy, 2012). However, a strong emphasis is placed on the speed of light. Entitled "On the electrodynamics of Moving Bodies", the study analyzes, in context of electricity and magnetism, the major changes that occur in "mechanics", when the speeds are close to the speed of light. A. Einstein shows that the "speed of light" is constant in "all inertial frames of references". Then, he "also introduces another postulate (...) that light is always propagated in empty space with a defined velocity  $c$  which is independent of the state of motion of the emitting body" (Einstein, 1905). We are interested in the fact that this study is concerned about the speed of light as a constant and that this would be the maximum speed in the universe. In this context it is shown that K. Y. Tang, C. C. Hua, W. Wen et al give arguments for the thesis that "the speed of gravity is the same as the speed of light (Tang, Hua, Wen et al, 2013). We interpret this discover as an evidence that convertibility matter-energy has uniformity: the same speed of gravity and light show a organization; we know that uniformity is a sign of organization, and that information means organization. So, same speed of gravity and light is a sign of internal presence of information.

The fourth article of "Wundejahr" - 1905 emerges as convergence of the others. Energy, light and matter are brought within a formula. The article is called „Ist die Trägheit eines Körpers von seinem Energieinhalt abhängig?“ "Does the inertia of a body depend upon its energy-content?" (Einstein, 1905). It was sent on September 27<sup>th</sup> 1905 and published on November 21<sup>st</sup> 1905 (Janssen, 2013). Because in this article we find the phrase "the principle of energy", we consider that the most famous formula in physics and, perhaps, of human knowledge ( $E = mc^2$ ) formulation may be called "the principle of energy". In the article, for energy there are used three symbolic notations, L, H and E, according to the system and measurement. Strictly, the formula itself, in mathematical language ( $E = mc^2$ ) does not appear, it is presented linguistically: „If a body gives off the energy in the form of radiation, its mass diminishes by  $L/c^2$ . The fact that the energy withdraws from the body and becomes energy of radiation evidently makes no difference, so that we are led to the more general conclusion that the mass of a body is a measure of its energy-content; if the energy changes by L, the mass changes in the same sense by  $L/9 \times 10^{20}$ , the energy being measured in ergs, and the mass in grams”.

It should result, we show,  $m = L/c^2 \leftrightarrow L = mc^2$ .

Even if the formula was not canonically marked from the beginning,

Albert Einstein underlines the energy equation. Contributions to finalize the formula are also brought, through symbolic using, by Max Planck, Johannes Stark and Louis de Broglie.

In 1946, Albert Einstein published the article "E = mc<sup>2</sup>: the most urgent problem of our time", accrediting the formula for history. The internal subject of the formula is the relationship between "mass" and "its energy-content". The mass of a body and the energy contained by it are defined mutually and are mutual dependent. The formula E = mc<sup>2</sup> is neither mass, nor energy. The formula E = mc<sup>2</sup> is information. More precisely, it constitutes scientific information: law-like information, grounded, indisputable in terms of a strengthened conceptual reference system.

Mass and energy are inseparable and mutually convertible. There is no mass without energy and no energy without any mass. All energy has a mass. Energy can be kinetic, chemical, thermal energy given by the position in a field of forces, and so on. When there is added energy to an object, this leads to a gain of mass. While it may seem strange in comparison with common sense, scientifically, the body temperature increase causes the increase of its mass. The mass increases insignificantly, but it increases, because any energy has a mass. The body is a complex mass plus energy.

Einstein's formula is available for any type of mass and energy.

Albert Einstein also proved that motion is crucial in the destiny of the world. As far as matter and bodies are concerned, to speak about the "rest mass" and relative mass (motion mass), E = mc<sup>2</sup> shows, subsequently, two specific variables.

If we deal with a body at rest E = mc<sup>2</sup> becomes E = m<sub>0</sub>c<sup>2</sup> (m<sub>0</sub> = rest mass). For the rest, the speed is zero. A body has energy also when it is stationary. A solid body, has obviously, at least, one thermal energy.

When the body is in motion, with speed v, E = mc<sup>2</sup> becomes E = m<sub>rel</sub>c<sup>2</sup> (where

$$m_{\text{rel}} = \frac{m_0}{\sqrt{1 - \frac{v^2}{c^2}}}$$

m<sub>rel</sub> is relative mass,

Another case is the variation of matter and energy: ΔE = Δm<sub>0</sub>c<sup>2</sup>. The formula is valid not only in terms of any type of energy and matter, it is valid in any system. When it is a closed system, there appears a feature: closed systems do not lose mass. On the other hand, in closed systems, the energies are additive, they are cumulative. That means that in closed systems, energy and mass are controlled by each other. Progressively, mass becomes energy and energy becomes mass.

Matter, as it is well known, is defined as something that has mass and volume. Taking into consideration that the mass has as reference system the Earth, and on the planet Earth, the objects are considered in rest, the mass is regularly identified by the rest mass or invariant mass. The volume is measured as the three-dimensional amplitude of the occupied space. Sometimes, the concept of substance is used for the "matter". Mark Burgin observes that "the matter is the name of all substances" (Burgin, 2011).

In relationship with the substance, matter is taken as the substance of which the observed physical objects are constituted. The idea of matter as observed matter is important, because it cannot talk about substance in the case of detected matter only as presence in the fields of forces. In some force fields, besides effects of some visible material elements, there are observed effects of forces due to some objects-matter yet directly unnoticed, even still unknown. Martin H. Krieger states that "matter is matter that is observed" (Krieger, 1998, p. 104). Scientific discoveries have shown that objects are composed of molecules, atoms, subatomic particles (protons, neutrons, electrons, etc.). At rest, the relationship of matter with energy is measurable, as Martin H. Krieger has demonstrated; at rest, the "matter is energetically stable" (Krieger, 1998, p. 20).

Taking into consideration that in the Universe there are two primary natural elements, element 1 (matter) and element 2 (energy), as we call them, they can be defined, also by one another. Such an understanding of the matter is shown by S. M. Carroll when he asserts that "matter" "contributes to energy" (Carroll, 2004). We observe that the corollary is also true, because energy also "contributes to matter". S. M. Carroll admits that "energy sources are a combination of matter and radiation" (Carroll, 2004, p. 236). It is generally considered that the radiation is a form of energy. Gary T. Horowitz expresses a similar point of view, contending that "the black hole radiates energy" (Horowitz, 2012). Matter and energy are "purely natural elements" fundamental to the universe. They are created and are controlled by each other. It is interesting that  $E = mc^2$  has generated along the time no discussion concerning demonstrability, but it has generated debate concerning the positioning. Luce Irigaray shows that  $E = mc^2$ , as it would favour "the speed of light over the other speeds that is vitally necessary to us", constitutes a "sexed equation" (Irigaray, 1987).

### **3 The convert relationship information-energy**

Rolf Landauer observed a conversion information-energy: Landauer's Principle shows that erasure of one bit of information augments physical entropy,

and generates heat (Landauer, 1961). As regards the relations between the elements of the fundamental triad, Mark Burgin and Gordana Dodig-Crnkovic believe that "the most intimate relations exist between information and energy. (...) Energy is a kind of information in the broad sense" (Burgin & Dodig-Crnkovic, 2011, p. VIII).

The formulation of the "second law of thermodynamics" by Ludwig Boltzmann was one of the great intellectual challenges of the nineteenth century; the law says that entropy in an isolated system should not decrease (Boltzmann, 1974). James Clerk Maxwell, Scottish physicist and mathematician, tested foundations of the law, including the foundations of statistical mechanics and thermodynamics. He thought of an event of physical nature that would contradict the content of the law. He imagined a box with two compartments communicating between them through a hatch. In the box there is a gas at a particular temperature. In relation to the average temperature some molecules are cooler and some molecules are hotter. The hotter molecules are moving faster, and the cooler molecules are moving slower. The hatch is activated by a being who decides when the molecules move from a side to other side. After a certain interval and a number of openings of the hatch, the hot molecules will gather in a compartment, cold molecules, in the other. By opening the hatch the being separated the cold molecules from the warm molecules and modified the thermodynamic entropy. That is, initially the gas was a mixture of hot and cold molecules; it was in a state of disorder, it had a higher entropy. Once the molecules were separated and thus a state of order was introduced, it generated a lower entropy. In other words, the entropy of an isolated system was modified. It was proved that, against the law provisions, entropy in an isolated system should decrease. Furthermore, this being was called demon, Maxwell's demon. What we observe today is that the demon decreased the entropy, i.e. it produced information. Apparently the demon contradicts the law, because the functioning of the law compulsorily implies that there is not and there cannot be built a perfect heat engine which can extract energy from an isolated system and use it almost entirely; such a heat engine is not possible because the container itself containing the gas consumes heat to heat as container. The demon has knowledge of the idea of temperature and, without introducing energy into the box, it separates the molecules. The temperature was used as a separator engine, as the perfect heat engine. That is the demon that "seems" to turn information into energy, violating the rules induced by law.

In 1929, in the study "On the reduction of entropy in a thermodynamic

system by the intervention of intelligent beings", Leo Szilard proves that the law is not violated. He describes the demon as "intelligent being". He laid aside the qualitative contribution of the demon and put in quantitative terms its activity (intervention of intelligent being). He pointed out that the demon (being) turns the knowledge in thermodynamic energy (Szilard, 1990). Our remark is that Szilard makes from even the intelligence of the demon a consumer of energy: to determine which of molecules are hot and which molecules are cold, the demon exerts some energy. He showed that the law would not be violated if the entropy  $S$  of a system increased by an amount  $\Delta S = k \ln 2$ ;  $k$  is Boltzmann's constant =  $1,38 \times 10^{-23}$  joules per degree Kelvin. On the other hand, it is known that the information is the inverse of the entropy. This implies that  $\Delta I = \Delta S = -k \ln 2$  (Weiberg, 1992). By the description that is made of a dynamic system, a certain observer intervenes in the evolution of the system. The intervention consists in the description of the induced instantaneous dynamics and irreversible discontinuity; intervention generates a change. In fact, by its description, the observer selects a certain state of the system. The number of unknown states of the system is reduced by choice and the stream of possibilities of the system decreases. So a reduction of entropy takes place. Leo Szilard notes in the observer action "how entropy in a thermodynamic system can be reduced by the intervention of intelligent beings" (Szilard, 1990). With a point of view related to the content of Szilard's article, L. Brown, B. Pippard and A. Pais assert that "the decrease of entropy caused through the observation of a thermodynamic system (by an intelligent being) must be compensated by an increase of entropy imposed on the observed system through the procedure of measurement" (Brown, Pais & Pippard, 1995, pp. 225-228). Through this demonstration, Leo Szilard formulated a law of relation energy-information, called Szilard's engine or "information heat engine" (Singer, Norbistrath & Lewandowski, 2013).

Today, we say that the law is not violated, since intelligence constitutes energy consumption. Our thesis is that intelligence always converts information into energy and energy into information.

In "A Mathematical Theory of Communication" (published study in numbers 3 and 4, 1948, of the Bell System Technical Journal), Claude E. Shannon defines information based on entropy. The second of the 23 theorems formulated contains one of the most important and most cited formulas in the history of science. It is comparable to Einsteinian  $E = mc^2$  or formula of entropy given by L. Boltzmann (and the latter has engraved it on his grave from Vienna). In its development, Shannon starts from the question: „Can we find a measure of

how much 'choice' is involved in the selection of the event or of how uncertain we are of the outcome?" (Shannon, 1948, p. 392). From here, he formulates „theorem 2”: (...)  $H = -K\sum p_i \log p_i$  (Shannon, 1948, p. 393);  $H$  is entropy. Shannon explains: „Quantities of the form  $H = -K\sum p_i \log p_i$  (the constant  $K$  merely amounts to a choice of a unit of measure) play a central role in information theory as measures of information, choice and uncertainty. The form of  $H$  will be recognized as that of entropy, as defined in certain formulations of statistical mechanics where  $p_i$  is the probability of a system being in cell of its phase space.  $H$  is then, for example, the  $H$  of Boltzmann's famous theorem. We shall call  $H = -K\sum p_i \log p_i$  the entropy of the set of possibilities  $p_1, \dots, p_n$ ” (Shannon, 1948, p. 393).

Generally, entropy represents the disorder of a system. As we observe  $H$  (entropy) is the minus of the information measure - that is information is the reverse of entropy, minus entropy, as such, as we'll later see with Louis Brillouin. "Entropy" goes in the same direction with "uncertainty": „this quantity measures how uncertain we are” (...) „entropy (or uncertainty)” (Shannon, 1948, p. 395-396). In relation to channel time (continuous, discrete, mixed), "continuous and discrete entropies" are registered: “In the discrete case, the entropy measures in an absolute way the randomness of the chance variable. In the continuous case, the measurement is relative to the coordinate of system” (Shannon, 1948, p. 632).

Later, in 1962, Leon Brillouin (1962) notes that information is "minus entropy", that information is negative entropy, and information means "entropy", i.e. "negentropy" (Brillouin, 1962). He formulated the Negentropy Principle of Information, designating the idea that aggregation of information associated to states of a system is directly proportional to the decrease of entropy. Also, he stated that in this situation there is no violation of the second law of thermodynamics; that there is a reduction of the thermodynamic entropy in an area of a system and an increase of entropy in another area of it that do not constitute a violation of the second law of thermodynamics.

On the line of L. Brillouin, S. P. Mahulikar and H. Herwig (2009) consolidated Negentropy Principle of Information. They observed that the reduction of entropy may be understood as a deficiency of entropy; thereby reduction of entropy of a sub-system is a deficiency of entropy in relation to surrounding sub-systems (Mahulikar & Herwig, 2009). Further researches cleared the doubts demon entered. Even more, it was demonstrated the possibility of converting information into energy (Jarzynski, 1997; Maruyama, Nori & Vedral, 2009; Sagawa & Ueda, 2009; Toyabe et al, 2010). Starting from Szilárd-type

information-to-energy conversion and the Jarzynski equality, S. Toyabe, M. Sagawa, E. Ueda, E. and M. Sano Muneyuki sketched “a new fundamental principle of an ‘information-to-heat engine’ that converts information into energy by feedback control” Toyabe, Sagawa, Ueda, Muneyuki & Sano, 2010).

Mihaela Colhon and N. Tandareanu speak about “sentential form”, referring to those forms which include propositional information formulated in a natural language (Colhon & Tandareanu, 2010). Thought has several forms: language thought, geometric thought, thought, digital thought, pictorial thought, musical thought etc. Each type of thought has one type of efficiency called intelligence. Efficiency is effectiveness in unit or time interval. Howard Gardner asserts that there are 9 types of intelligence: naturalist intelligence (nature smart), musical intelligence (musical smart), logical-mathematical intelligence (number/reasoning smart), existential intelligence, interpersonal intelligence (people smart), bodily-kinesthetic intelligence (body smart), linguistic intelligence (word smart), intra-personal intelligence (self smart), spatial intelligence (picture smart) (Gardner, 1993, p. 56-71).

On conditions in which the informational process consists mainly of computation, there is easy to deduce that man is a “computer” that converts energy into information. It is the most efficient converter of the blue planet: “Man is the most complex information-processing system existing on the earth. By some estimates, the total number of bits processed in the human body every second is  $3.4 \times 10^{19}$ , but it uses only 20 watts power” (Henno, 2013, p. 278). The man is a part of the universe and the most known convertor matter-energy-information. His memory is essential in conversion. The neutral relation Matter-Energy-Information influences positively the remembering. Q. Li, Y. Qi, X. Liu and J. Luo emphasized, in Chinese Science Bulletin, “that personal memories that are important to individuals and contain emotional information are better remembered than neutral events” (Li, Qi, Liu & Luo, 2013).

Information means computation (Burgin, 2011, pp. 145-149; Nielsen & Chuang; Piccinini & Scarantino, 2011; Tetlow, 2012; Fresco, 2014). Intelligence is a computational quality of information converting into energy. Information-energy converters can operate on the principles of computational intelligence.

#### **4 The relationship matter-information**

Forms, patterns of the information core are the materials, are material nature. That is in the information core lies matter. Immanent relationship between matter and information is represented by the forms, by patterns. Matter

has form, it has information. Rolf Landauer shows that „information is physical” (Landauer, 1991); on the same idea, V. Vedral argues that material, physical „universe” is „quantum information” (Vedral, 2010).

Formula  $E = mc^2$  is twice impregnated informationally. The first impregnation consists of the fact that the formula which contains the principle is an equation information. Any equation is a piece of information. A second informational impregnation of the formula consists of that  $c^2$  is information. The relationship between energy and matter is informationally mediated.

Information has a quantitative dimension and a qualitative dimension. On the quantitative dimension, information is a function of probability (Maior, 2009; Maior, 2010). On the qualitative dimension, information is a function of meaning.

We associate to our opinion about internal form, the position expressed by Anthony Reading related to "intrinsic information". This shows that he caught up Norbert Wiener's concept and "intrinsic information" is "the way the various particles, atoms, molecules, and objects in the universe are organized and arranged" (Reading, 2011, p. 10; Drăgulescu, 2005; Craia, 2008; Floridi, 2010).

The cognitive organization of the matter, energy and information itself takes place through information. The modelling core of information is represented by the form. The forms are concepts that bring in convergence the observing of the informational object and its structural thought. They are places of objective finding meeting with subjective internal computation. The forms are active patterns. The computation takes place by the designing of forms on informational objectives apparently amorphous and through their structural magnetization. Through information, the mental forms find their modelling resonance in the informational medium (Rad, 2007; Rad, 2009; Zins, 2007; Burgin, 2010; Hjørland, 2012; Moring & Lloyd, 2013; Bratosin, 2001; Ionescu & Bratosin, 2009).

"Intrinsic information" is the finding of a way of organization for the matter, energy and information itself. Like world itself, the informational medium has an intrinsic structure, irrespective of the relation to the informational subject. This objective configuration creates the internal form of the informational object (Bates, 2006).

On the other hand, in its projective approach, the radiant, radiographic, resonator and infusive, informational subject designs on medium of interest the external forms. The external conceptual forms can resonate with the internal forms of informational object or they may not resonate. When the informational

medium is structured, the forms resonate and the subject objectifies them. When the informational medium is not structured, the external forms do not find resonance in the amorphous medium. Then the external forms magnetize the amorphous medium and structure it informationally. The subjective is charging the objective. The informational subject infuses itself with forms, the subject "pattern-izes". In the first case, the extrinsic information is brought within range of the intrinsic information. In the second case, the extrinsic information is required as modeller and intrinsic information.

If in the intrinsic information core stands the objective organization discovery of the informational medium, in the centre of extrinsic information there is meaningful structure induced from exterior, an external form. Intrinsic information means discovery of meanings. Extrinsic information is assigning of meanings.

As critical informational tools, forms are active nuclear structure, radiant. Forms are previous informational constructions with which the informational medium is exploring and exploiting. As attested models, the forms are themselves seeking the informational space.

In fact, the forms are forms because they form (form-s). They are inserted in "amorphous and disorganized pyrite" and formally structure it. Like language, information is the discourser of computational process of commensuration with conceptual forms. Information is a putting *in discourse on putting in order*.

In the intrinsic information, putting in order is noticeable, because organization belongs to inventory domains. In the extrinsic information, putting in order is infused-modelling, because the organization belongs to the implementation order, it is induced by the informational subject. The extrinsic information is of the impression type. The impression-able form is found as impression. In these cases, the forms bring and radiate meanings. Intrinsic information deals with a recognition of meanings-forms. The difference between intrinsic information and extrinsic information comes from central computational operation: recognition, through forms, of meanings organization *vs.* assigning, through forms, of meanings (Țenescu, 2009, p. 11; Coman, 1999; Wang, He, Song & Rui, 2013) . The extrinsic information is more visible and meaningfully marked. Therefore, it is reasonably thought that they could also be called "meaningful information". Anthony Reading shows that besides intrinsic information there is also meaningful information. He states: "Meaningful information is defined as a detectable pattern of matter or energy that generates a response in a recipient" (Reading, 2011, p. 1). The detectable pattern is a "form".

## 5 Conclusion

Relationally, the neutral relationship between matter, energy and information is not primary, but secondary. The fact that the three elements of the Universe/Multi-verse do not contradict results in a liminal manner from interconvertibility. The primary relationship, principled, law-like, liminal, fundamental to the world is the Interconvertibility of Matter-Energy-Information (I\_MEI). The Matter-Energy-Information interconvertibility renders the world permanent and dense, more and more dense inter-elements emerging in the conversion process. The unavoidable law that controls any process that takes place in the world is the law of the permanent conversion Matter-Energy-Information. Each process has an index of interconvertibility and a formula of existence, of reality.

The reality is the reality of interconvertibility. Man is the main instrument of conversion and computability. We got to illuminate some of the bilateral and non-contextual (in the absence of the third element) conversions. Reality is the place of the permanent interconversion, simultaneous and multiphase of M-E-I. What happens today contains all the history of interconversion at the beginning of the world. There remains to be investigated how to convert M into I in presence of I (in the context of I), a M in I in the presence of E (in the context of E) and an E in I in the presence of M (in the context of M). Furthermore, there is yet to be clarified how to convert M to E in the presence of I, a M "in the presence of E (in the context of E) and an E in I in the presence of M (in the context of M)" and so on. However, any presence and any context light and shadow the neutral war of the convertibilities.

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## **A demographic portrait of Romanian immigrants In California**

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### **Abstract**

The most numerous Romanian community in the United States of America is in the “Golden State”, California – a state that is a traditional immigration state since the beginning of the gold rush. Officially, there are currently over 60.000 people of Romanian origin established in California, although that number might be much higher because of two factors: undocumented migration and the loss of gradual loss of identity through each generation. Starting from as little as 15-16 families back in 1912 (Alecse, n.d.), Romanians established in California make up 14.5% of the 449,928 immigrants of Romanian origin living in the the United States of America (Voinea, 2014, 62). The aim of this paper is to analyze the current demographic portrait of Romanian immigrants in California, using data from the 2013 American Community Survey.

**Keywords:** immigration, Romanian diaspora, Romanians in the United States of America, demography, immigrant communities

### **1 Introduction**

For the purpose of this study we will be using information from the American Community Survey 2011 – 2013, a mandatory statistical survey conducted by the U.S. Census Bureau, with over 3 million respondents every year ([census.gov](http://census.gov)), with a focus on communities. We have chosen California as a geographical area of study for two reasons: there is a very large Romanian presence in this state, the largest in the United States of American, and the number of Romanian immigrants is significant in the whole population, even if California

has a large number of immigrants. According to the Centers for Disease Control (CDC, 2007), Romanian is the 12<sup>th</sup> most spoken language in Riverside County, California, and ranks in the top 20 in most counties in the Golden State. The most important part of the population of Romanian immigrants live in southern California (Datciuc et. al, 2014)

## 2 Demographic data

*“The demographic approach aims at describing and explaining the process of continuous change experienced by a population with the passing of time.”*. (Vilquin, 2009). For this study, the point in time is the 2011 – 2013 period in which the data for current ACS was collected, and the point in space is the state of California. Our analyzed target group is defined by residents of California who define themselves as Romanian or of Romanian origin.

The total number of Romanians that live in California is 65,434. 47.0% are male and 53.0% are female, while in the general californian population the ratio being 49.7% to 50.3%. A higher percentage of female is common in areas of modern migration.

The median age in our selected group is 42.3 years, much higher then the one in the general population – 35.6 years. 6.2% of Romanians in California are under 5 years old and 12.8% are between 5 and 17 years. The adult population is composed of 7.5% 18 to 24 years old, 12.3% are 25 to 34 years old and 16.1% are 35 to 44 years old. 12.4% of our selected immigrants are between 45 and 54 years old, while 16.3% are 55 to 64 years old.

**Table 1. Age**

Under 5 years	6.2%
5 to 17 years	12.8%
18 to 24 years	7.5%
25 to 34 years	12.3%
35 to 44 years	16.1%
45 to 54 years	12.4%
55 to 64 years	16.3%
65 to 74 years	9.1%
75 years and over	7.4%

Source: U.S. Census Bureau (2013). *American Community Survey 2011-2013 S0201: SELECTED POPULATION PROFILE IN THE UNITED STATES – Romanians ( 144-147) in California.*

While immigration is usually considered a solution to the ageing problem of developed nations (Muysken et al, 2008), this is not the case for the Romanians in California, mainly because the Romanian immigration process to the USA is ongoing since the 1880s. In California, there at the beginning of the twentieth century, there are only 16 known romanian families, forming later one of the first romanian organizations in America – a fraternal society called the Romanian Future, with a purpose of mutual help.

In 2013, there is a large number of elderly persons – 9.1% are 65 to 74 years old, while 7.4% ar 75 years and over.

The average household size is composed of 2.54 persons, while the average family has 3.10 members. According to the ACS, the immigrants live in 28,160 households – 64.1% are family households, while 35.9% are nonfamily households. 52.3% are married-couple families, while only 8.7% are female householders families with no husband present. There is a larger number of living alone femle householders – 16.4%, compared to 11.7% male householders.

The marital status is another important demographic statistic – 55.1% of the romanian immigrants in California that are 15 years and older are now married, while 5.5% are widowed, 11.4% divorced and 1.7% separated. Just 26.3% have never bene married. There’s a larger percentage of currently married males – 60.5% out of the 25,286, compared to 50.5% out of the 29,638 females, but also a larger percentage of never married males – 27.9% compared to 24.9% in the female population. Females are more likely to be divorced – 14.2%, compared to 8.2% for males.

**Table 2. School enrollment**

<b>Population 3 years and over enrolled in school</b>	<b>14,789</b>
Nursery school, preschool	6.8%
Kindergarten	6.5%
Elementary school (grades 1-8)	33.0%
High school (grades 9-12)	16.9%
College or graduate school	36.7%

Source: U.S. Census Bureau (2013). *American Community Survey 2011-2013 S0201: SELECTED POPULATION PROFILE IN THE UNITED STATES – Romanians ( 144-147) in California.*

School enrollment in the children of romanian immigrants is pretty high compared to the normal population at college or graduate level – 36.7% of

immigrants 3 years that are enrolled in school are working on their college education, compared to 30.2% in the general population. We can find 16.9% to be enrolled in high school (grades 9-12), and 33.0% in elementary school (grades 1-8). Just 6.5% are going to kindergarten and 6.8% are in preschool or in a nursery school. There's a significant gender difference in college enrollment – 44.7% of the 7,780 women who are currently ongoing formal education are enrolled in college or grad school, compared to just 27.8% of men.

**Table 3. Educational attainment**

<b>Population 25 years and over</b>	<b>48,092</b>
Less than high school diploma	6.4%
High school graduate (includes equivalency)	16.6%
Some college or associate's degree	26.0%
Bachelor's degree	24.8%
Graduate or professional degree	26.2%

Source: U.S. Census Bureau (2013). *American Community Survey 2011-2013 S0201: SELECTED POPULATION PROFILE IN THE UNITED STATES – Romanians ( 144-147) in California.*

Educational attainment is the term frequently used by statisticians to determine the highest level of education a certain person has completed, therefore the data will not include ongoing studies. Out of the 48,092 persons that are 25 years and over (an age at most adults have already finished their education), only 5.4% of our group have less than a high school diploma. 16.6% are high school graduate, while 26.0% have some college or an associate's degree. The Romanians are a very qualified group – 24.8% have a bachelor's degree, while 26.2% have a graduate or professional degree – much higher than the average in California, where 19.5% have a bachelor's degree and just 11.3% a graduate degree.

We have found two possible theories for this - "*migrants tend to be more educated than those who stay in the place of origin*" (Feliciano, 2005), mostly because emigration is a very selective process, the ones that manage to move to a new country are not random but share similar goals and problems and the second – that immigrants and their children are more likely to develop their education, due to their need to compensate for the lack of social knowledge, capital and networks in their new home.

**Table 4. Place of birth, citizenship status and year of entry**

<b>Native</b>	<b>38,917</b>
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Male	48.3%
Female	51.7%
<b>Foreign born</b>	<b>26,517</b>
Male	45.2%
Female	54.8%
<b>Foreign born; naturalized U.S. citizen</b>	<b>18,836</b>
Male	44.0%
Female	56.0%
<b>Foreign born; not a U.S. citizen</b>	<b>7,681</b>
Male	48.2%
Female	51.8%
<b>Population born outside the United States</b>	<b>26,517</b>
Entered 2010 or later	<b>5.1%</b>
Entered 2000 to 2009	<b>26.4%</b>
Entered before 2000	<b>68.5%</b>

Source: U.S. Census Bureau (2013). *American Community Survey 2011-2013 S0201: SELECTED POPULATION PROFILE IN THE UNITED STATES – Romanians ( 144-147) in California.*

The place of birth, citizenship status and year of entry in the United States of America for the Romanians in California can give us more information about their migratory process – 38,917 of the persons in the selected group are native, or born in the US, and 48.3% of those are male while 51.7% are female. Of the 26,517 that are foreign born, 45.2% are male and 54.8% are female – we can see here the process of feminization of migration. “*More and more women have started to follow the path of migration, making the career a priority, instead of choosing a family life*” (Quffa, 2014) or even chose to have a family in a new country. Out of the 25,517 that are foreign born, 18,836 have managed to become U.S. citizens through the process of naturalization, while just 7,681 are not yet US citizens. 68.5% of foreign born have entered the United States before the year 2000, while just 26.4% came between 2000 and 2009 and 5.1% in 2010 or later.

The language spoken by them at home is proof that we are talking about two different groups of citizens – those that are native, of romanian origin, but born in the US and those that are foreign born. 53.2% of the 61,361 who are 5

years and older speak only English at home, while 46.8% speak a language other than English (in most cases, Romanian). Autoreference ego is sometimes dependent of language (Vlăduțescu, 2014), and the language spoken at home is very important in defining the individual self.

**Table 5. Employment status**

<b>Population 16 years and over</b>	<b>54,194</b>
In labor force	65.0%
Employed	57.8%
Unemployed	7.2%
Percent of civilian labor force	11.1%
Not in labor force	35.0%

Source: U.S. Census Bureau (2013). *American Community Survey 2011-2013 S0201: SELECTED POPULATION PROFILE IN THE UNITED STATES – Romanians ( 144-147) in California.*

We determined earlier that we are studying a group of highly educated persons and this also reflects in the employment status and occupation of Californian Romanians - 65.0% of the population 16 years and older are in the labor force, while just 35.0% are have not yet held a job. Out of these, 57.8% are employed and only 7.2% unemployed, all data within two percents of the general population.

**Table 6. Occupation**

<b>Civilian employed population 16 years and over</b>	<b>31,314</b>
Management, business, science, and arts occupations	56.8%
Service occupations	13.2%
Sales and office occupations	19.4%
Natural resources, construction, and maintenance occupations	6.8%
Production, transportation, and material moving occupations	3.8%

Source: U.S. Census Bureau (2013). *American Community Survey 2011-2013 S0201: SELECTED POPULATION PROFILE IN THE UNITED STATES – Romanians ( 144-147) in California.*

The high education shows its effect even more when analysing occupation. Just 3.8% of the 31,314 civilian employed population 16 years and over of our selected group work in production, transportation and material moving occupations, compared to 11.0% in the general golden state population.

Natural resources, construction, and maintenance occupations are chosen by 6.8% of our group, much lower when compared to 9.2% in the general population. 19.4% of Romanians choose a sales and office occupation, while 13.2% a service occupation. Management, business, science, and arts occupations, the ones that usually require the highest level of education, are the most common in our group – 56.8%, compared to a very little 36.8% in the Californian population.

When analysing industry, very few Romanians in California work in agriculture, forestry, fishing, hunting and mining – 0.3%, while 6.6% work in construction and 7.6% in manufacturing. Wholesale trade jobs are also very rare in our group, being held by 2.1% of respondents, while 8.5% work in retail trade. Transportation and warehousing, and utilities, give jobs to 2.1% of our immigrant group and 4.4% work in information. A larger percentage, 9.3%, is employed in finance and insurance, and real estate and rental and leasing. Professional, scientific, and management, and administrative and waste management services, one of the highest skilled but also best paid industries, is the workplace of 13.9% of our group. Educational services, and health care and social assistance manage to employ 27.4% of the working population, while arts, entertainment, and recreation, and accommodation and food services give income to 7.4%. Other services (except public administration) provide a workplace for 5.4% of our selected group and just 4.9% are in public administration.

The high level of education, normal employment status and good distribution in the occupational field and industries lead to very good economic outcomes for immigrants of romanian origin that are established in California – the median household income was in the past 12 months much higher than the one in the median California household - \$75,282 compared to just \$59,645. If we only take those with earnings into account, the difference is even higher - \$112,112 for the median romanian immigrant household against \$84,902 for the median californian household.

The median family income is at \$94,543, while the median for a married-couple family is at \$105,713. The per capita income is at \$45,104, compared to \$29,103 of a californian.

Both mean and median earnings in full-time, year-round workers, are higher for males than females - \$108,476 mean for males, \$74,319 for females, and \$78,626 median for males with a \$58,037 median for females. Even with this difference, a female romanian immigrant earns more than a male californian, who have a mean earning of \$70,835 and a median earning of \$50,438.

### 3 CONCLUSIONS

The number of romanian immigrants that have established in California is significant, both when compared to other immigrants in California and to the Romanian communities in the United States of America. We found a slightly aged, highly educated group, that was mostly born in the USA. They have adjusted very well to their new country, holding highly skilled jobs in all sectors of industry, but especially in the tertiary sector of the economy.

Their incomes are significantly higher then those of the average californian, proving that they are well integrated both socially and economically.

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## **Book review. Sandu Frunză: Comunicare simbolică și seducție (2014)**

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### **Abstract**

According to the book "Comunicare simbolică și seducție", published at Tritonic Publishing House by Professor Sandu Frunză, the life of an individual living in the postmodern society is based on communication, and symbolic communication plays a major role in his life. We reckon that the author seeks to demonstrate the way in which communication and mass media build reality in a postmodern context.

**Keywords:** communicative construction of reality, myth, seduction, symbolic communication, religion

### **1 Contents and method**

The author, Sandu Frunză, is currently a professor PhD at Babeș-Bolyai University (Cluj-Napoca, Romania), within the Department of Communication, Public Relations and Advertising of the Faculty of Political, Administrative and Communication Sciences, and editor of the *Journal for the Study of Religions and Ideologies*. His areas of interest and numerous significant contributions to the development of research cover topics such as philosophy of religions, religion and politics, relational ethics, ethics in advertising, religious imagery in advertisements, religious pluralism and fundamentalism, Jewish philosophy.

"Comunicare simbolică și seducție" [*Symbolic communication and seduction*] is a book which has been included in the collection called "Studies on communication, seduction, ritual behaviour and religion", in the field of Social

Sciences, and was published by Tritonic publishing house, in the year 2014. The book consists of 5 chapters, each divided into several subchapters.

Since the beginning of the book, the author clearly states that the volume brings into discussion some aspects that support the importance of symbolic communication, as an essential dimension of human life, for the individuals who are part of the postmodern society, where symbolism is understood as a set of cultural products, such as the art of seduction, religion, myth, language, by which individuals act upon reality.

In the chapter “The relational individual in a communication built society. Towards a new philosophy of communication”, the author emphasizes the theories of Aurel Codoban, one of the most representative philosophers of Romania. In his view, philosophy becomes “an effective communication practice, a tool for the communication process” because he believes that the masses prevail in postmodern society, which is shaped by the media, that mediates access to culture and, at the same time, helps to achieve it.

Communication is seen as a force that shapes behaviours and builds reality. Among the means through which communication constructs reality, Aurel Codoban mentions seduction, manipulation and ideology. Given the fact that the present is seen as a world built on communication, the author suggests that instead of using traditional phrases, we should use specific phrases. For example, instead of using the “get to know yourself” phrase, we should use and engrave in the collective memory of individuals the words “make sure you have a good communication with yourself”.

The emergence of symbolic communication and ritual behaviour is facilitated by the idea that the modern world is seen as the keeper of a mythical background, and the media plays an important role in terms of the political culture, the spiritual culture of a community, and is seen as a symbolic tool for building reality.

The book “Comunicare simbolică și seducție” is a theoretical analysis of several research works in areas such as communication, advertising, religion and philosophy, which includes specialised knowledge, examples and information that can support professional activities. Through its rich and complex content, the paper addresses an audience of “professionals” in the field of social sciences, but also researchers who are curious about or interested in this field.

The book takes specialised literature, which covers more than 10 pages, into consideration, and includes numerous references to Romanian researchers

whose contributions have been extremely relevant in the field of social sciences.

## 2 Conclusion

Over time, we have been able to observe and we are currently witnessing the process of continuous development of communication techniques and technologies that influence and shape modern society, which enable communication to build reality.

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**Book Review: Rolf Arnold - Assisted Learning: A  
Workbook, Landau: Bildungstransfer Verlag (2010)**

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**Abstract**

The current review aims to make a short overview of Professor Rolf Arnold's book on assisted learning highlighting the notions that are at the core of author's enabling didactics: self-determination and self-control in learning, educational leadership and emotional competences, in the context of postmodern pedagogy.

**Keywords:** Assisted learning, self-determination, self-control, educational leadership, emotional competences, Rolf Arnold

Professor Rolf Arnold, born in 1952, got his PhD at the University of Heidelberg, worked after that in an International Adult Education Centre, conducted his postdoctoral studies at the Distance University of Hagen, Germany, in 1987, and has been working since 1990 at the Department of Pedagogy (particularly Vocational, Distance and Adult Education) at the Technical University of Kaiserslautern, Germany. He is also Scientific Director and Chairman of the Board for the Distance and International Studies Centre (DISC), and the Speaker of the Virtual Campus Rhineland-Palatinate (VCRP). Few specialists in Education Sciences are more prolific in the field of pedagogy than Professor Rolf Arnold: author of over 50 books, he recently published *How to Lead without Domineering: 29 Smart Leadership Rules* (also available on Amazon Kindle, in e-book format) and *Independent Learning* (in collaboration with Markus Lermen).

According to the author, the pedagogical concepts that stand at the foundation of these book are: a) self-determination and self-control in learning, b) educational leadership and c) the notion of emotional competence. All these three concepts reflect current preoccupations in postmodern pedagogy, and they are

integrated by Professor Arnold in the operational and intriguing notion of *assisted learning* respectively an *enabling didactics*.

The book is structured in 8 chapters that progressively introduce the reader in the topic of assisted learning, starting from the analysis of uncertainty in education (Chapter 2), a postmodern presentation of learning and learning theories (Chapter 3) respectively the principle of leadership and guidance (Chapter 4). The concept of assisted learning is further developed in a separate section (Chapter 5), in which the author expands his ideas of the shifting from teaching culture to learning culture, the issue of innovating the pedagogical methodology, the importance of e-learning and of guided self-study. The book is continued in Chapter 6 by a pertinent study of pedagogical leadership as a subsidiary leadership, highlighting the importance of self-leadership, self-reflection and trust in teacher – student relationships. One of the most important contribution of the book, in our opinion, is concentrated in the last two chapters: The Systemics of Emotions (Chapter 7) and Emotional Competence as a core competence of school leadership (Chapter 8). The author, reflecting a deep understanding of the importance of emotional dimension in education, with obvious influences from humanistic psychology, underlines the necessity of encouraging the development of emotional competences, particularly at the level of educational leadership.

We strongly recommend *Assisted Learning: A Workbook* by Professor Rolf Arnold to: teachers (particularly from primary and preschool education), teacher trainers and university professors, school managers and leaders, adult education providers, and to education sciences students interested to understand more about the current trends in postmodern pedagogy, particularly in Europe.

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