THE MONEY IS SOLID METAPHOR IN ECONOMIC AND BUSINESS TERMINOLOGY IN ENGLISH*

Nadežda SILAŠKI, Annamaria KILYENI
University of Belgrade, Serbia; *Politehnica* University of Timișoara, Romania

Abstract: Within the framework of Conceptual Metaphor Theory, as propounded by cognitive linguists (e.g. Lakoff and Johnson 1980, Kövecses 2002), in this paper we deal with the MONEY IS SOLID metaphor as linguistically instantiated in English economic terminology. Whereas money in its physical form comes in the shape of notes and coins that are tangible, visible and solid, we show that money in its more general and more abstract meaning is frequently structured conceptually by means of the MONEY IS SOLID metaphor, which is firmly grounded in our knowledge of the behaviour of solid matter. Based on a corpus of money-related terms collected mainly from several English dictionaries of economics and finance, the aim of our research is to determine and examine the various conceptual mappings the metaphor under discussion rests on.

Keywords: Conceptual Metaphor Theory, MONEY IS SOLID, economic terminology, English, ESP

1. Introduction

Money as well as other closely related financial concepts is often conceptualised metaphorically in terms of the three states of matter (liquid, solid, gas), as manifest in economic and business terminology in various languages (cf. O'Connor 1998, Henderson 2000, Silaški and Kilyeni 2011, etc.). In this paper we deal with the MONEY IS SOLID metaphor used for the conceptualisation of money and finance in English, since this particular metaphor has been paid little attention to by linguists as far as English economic and business terminology is concerned. Basing our analysis on metaphorical terms which illustrate the MONEY IS SOLID metaphor taken primarily from several English dictionaries of business and economics, an attempt will be made to determine and examine the various conceptual mappings the metaphor under discussion rests on.

In addition to now conventionalised dead metaphors, whose metaphorical etymology is not immediately obvious, we also deal with some relatively new MONEY IS SOLID metaphorical terms, which emerged in English relatively recently, together with the latest developments in the financial and business world, especially as a consequence of the global financial crisis that began in 2008.

The paper is set within the framework of Conceptual Metaphor Theory, as propounded by cognitive linguists (e.g. Lakoff & Johnson 1980, Kövecses 2002), according to which metaphor is a set of cross-domain mappings between two conceptual domains called the *target* and the *source* domain. Unlike traditional views of metaphor, in which metaphor was a matter of language only, cognitive linguists point out that metaphors are conceptual structures and not merely linguistic in nature, although they are predominantly realized linguistically. Metaphor, therefore, according to this cognitive view, has now emerged as an essential conceptual tool, and a key tenet of Conceptual Metaphor Theory is that metaphor is primarily a matter of thought, not merely of language. Our language is based on the way we conceive of things, being grounded in our bodily experience and culture – "our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature" (Lakoff & Johnson 1980: 3). A convenient shortcut for a set of mappings that exists between elements of one conceptual domain and elements of another conceptual domain is TARGET DOMAIN IS SOURCE DOMAIN (e.g. THE ECONOMY IS A LIVING ORGANISM), which is the basic formula for presenting conceptual metaphors in Cognitive Linguistics. Unlike conceptual metaphors, "[t]he metaphorical expressions that characterize *A IS B* formulas are regarded as the linguistic realizations or manifestations of underlying conceptual metaphors" (Kövecses 2002: 29). Thus, for example, in THE ECONOMY IS A LIVING ORGANISM metaphor, the economy is understood and talked about in terms of an organism, which can grow, decay, be healthy, sick, etc. This conceptual metaphor is linguistically realized by numerous metaphorical expressions, which are the result of the conceptual mappings between the source and the target domains. Some of the metaphorical expressions belonging to THE ECONOMY IS A LIVING ORGANISM metaphor are the following: the US economy would *catch flu*, continental Europe might escape with just *a cold*, a record budget to revitalize Japan's *anaemic* economy, the *growth* of the economy, economic *nerve centres*, the financial sector is the *life blood* of any economy, etc. In the next section we deal with metaphor in economics and business - fields whose underlying discourses have been found to be replete with metaphors.

2. Metaphor in Business and Economics

Bearing in mind the fact that metaphor typically serves the purpose of explaining abstract concepts in terms of concrete ones, it should come as no surprise that relatively abstract disciplines such as business and economics, and especially economics, which is based on a hypothetical world and economic modelling, make extensive use of metaphors in order to explain often hardly comprehensible concepts. Metaphors in business and economics range from those which are, according to Henderson (2000: 172), more "theory laden", such as *inflation*, *circular flow*, *human capital*, *invisible hand*, *equilibrium*, etc. to those of a more popular strand, such as BUSINESS IS WAR (e.g. firms *are* constantly *fighting* for their share of the market), THE ECONOMY IS A PLANT (e.g. the *growth* of the economy), COMPANIES ARE PEOPLE (e.g. corporate *raider*, *sister* company), ECONOMIC PROBLEMS ARE NATURAL DISASTERS (e.g. mortgage market *meltdown* crisis), THE ECONOMY IS A SICK PERSON (e.g. to *revive* a *moribund* economy), TRADERS ARE ANIMALS (e.g. *stag*, *predator*), etc. (cf. Charteris-Black 2000, 2004). Boers (2000: 138) claims that "[d]iverse figurative expressions encountered in economic discourse can often be traced back to a single source domain" and identifies typical source domains in the process of metaphorisation in economics: MECHANISMS AND MACHINES (e.g. *tightening the screws* on the economy), ANIMALS (e.g. *bear* market, *bull* market), PLANTS AND GARDENING (*flourishing* economy, to *prune* the workforce), HEALTH AND FITNESS (e.g. financial markets *are healing*, economic *virus*), FIGHTING AND WARFARE (economic *arm-twisting*, *price war*), SHIPS AND SAILING (a sense of *drift* in our policies, to *steer* the company in the right direction), and SPORTS (*level playing field*, rat *race*).

Originally, "the idea that specialized and technical texts could admit polysemous terms or definitions was rather unwelcome", whereas accuracy, objectivism and precision used to be regarded as "essential elements of technical and scientific languages in order to attain informational accuracy" (Siqueira et al. 2009: 158). Metaphor, therefore, was considered "an undesirable element pertaining to figurative language that, as such, should be replaced by a literal equivalent" (Siqueira et al. 2009: 158). However, it is now widely recognized that metaphor is an inseparable component of all discourses, economic and business discourse (as well as terminology) being no exception (cf. McCloskey 1986, Henderson 1994, Smith 1995, Velasco Sacristán 2004, etc.).

3. Corpus of terms and methodology

The terms that we used for the analysis of the MONEY IS SOLID metaphor were collected from several English dictionaries of business and economics as well as those of General English; the list of consulted dictionaries is provided at the end of the paper. At the beginning of the corpus collection process, when we manually inspected the entries of the dictionaries, we relied on our own intuition about what is metaphorical. However, "due to the vagueness and the open-ended character of metaphors, to subjectivity in determining what is really metaphorical and to a lack of established parameters that could apply to the identification of metaphors" (Siqueira et al. 2009: 162), the method for metaphor identification (MIP – *Metaphor Identification Procedure*, Pragglejaz Group 2007) was used to check the metaphoricity of the dictionary terms that illustrate the MONEY IS SOLID metaphor as well as to establish their basic and contextual meaning, where the contextual meaning (having in mind that we analyzed terms) was established according to the definition of each entry. MIP is "an explicit, reliable, and flexible method for identifying metaphorically used words in spoken and written language" (Pragglejaz Group 2007: 2). Therefore, it eliminates any subjective criteria and enables a clearer and more objective identification of the metaphorical instantiations in the dictionaries. Only those terms and expressions which both of us judged to be metaphorical were selected for the analysis. After compiling 55 terms and expressions that linguistically realize the MONEY IS SOLID metaphor, we then categorized them according to the conceptual mappings they rest on, which we will discuss in greater detail in the following section.

4. Money as solid matter

In its real, physical form, money comes in the shape of notes and coins that are tangible, visible and solid. However, money in its more general and more abstract meaning is frequently structured conceptually by means of the MONEY IS SOLID metaphor. This particular metaphor is a type of ontological metaphor that gives shape to abstract concepts and helps us view them in terms of entities, allowing us to speak of them as objects or bounded spaces. According to O'Connor (1998): 141), who deals with those financial and business terms in Spanish which rest on the STATE OF MATTER metaphor, "[t]he lexical evidence shows that there is an underlying prevalence to talk of money in terms of solid when it is grouped together with a larger quantity of money, unavailable for subdivision" O'Connor (1998: 141).

Basically, the MONEY IS SOLID metaphor rests on our knowledge that solid matter is three-dimensional, has volume (which it tends to retain), weight, texture, and shape (which may be definite or indefinite and which can primarily change by force, as when broken or cut). These are “[t]he defining features of solid” that “can be attributed to money and finance” (O’Connor 1998: 142), as illustrated by the following metaphorical expressions in the field of economics and finance: *round* sum, *lump* sum, capital *mass*, money *aggregate*, money *stock*, to *accumulate* / *deposit* / *hoard* / *share* / *stash away* / *squander* / *throw away* money, a *large* / *tight* budget, and (*non*-)*malleable* money. Thus, although in the real, physical world, money comes in the form of coins or banknotes made of metal and paper, or even exists only as digits on a computer screen, we may conceptualise it metaphorically in an utterly different manner – as a uniform mass of solid matter which is attributed a certain value.

In the next sub-sections, we shall deal with several conceptual mappings on which the MONEY IS SOLID metaphor relies; that is, we shall examine “a set of systematic correspondences between the source and the target in the sense that constituent conceptual elements of B correspond to constituent elements of A” (Kövecses 2002: 7).

4.1. DIVIDING THE MONEY IS DIVIDING THE SOLID MATTER

As evidenced by O’Connor (1998), generally speaking, when state of matter metaphors are used for the conceptualisation of money, capital or costs, “[s]olids are associated with long-term security and indivisibility” (O’Connor 1998: 141). However, in addition to having a stable and relatively fixed shape and volume, solid matter is also characterised by divisibility, so that economics and business terminology in English uses a number of terms resting on the conceptual mapping DIVIDING MONEY IS DIVIDING THE SOLID MATTER. This is illustrated by the following terms: *fractional shares*, *split payroll*, *stock split*, etc. Thus, for example, the term *stock split* refers to a corporate action in which a company's existing shares are divided into multiple shares. This metaphorical term rests on the perception of company stocks as solid material which may be divided into smaller units (companies often split shares of their stock to try to make them more affordable to individual investors). The resulting shares are called *fractional shares*, which are obtained via the process of breaking or dividing. Similarly, a method of compensation to an employee working abroad, according to which part of the employee's salary is made in the home country currency and another part is made on the host country's currency, is called a *split payroll*. The money that a person receives for the work they do is thus metaphorically structured as a solid material that may be divided into parts, according to the agreement between the employer and the employee.

4.2. DIMINISHING THE AMOUNT OF MONEY IS ERODING / CUTTING THE SOLID MATTER

It is interesting to note that although the conceptualisation of money as realized by the MONEY IS SOLID metaphor is that of a mass of a (usually) fixed shape and volume, several terms that instantiate the conceptual mapping DIMINISHING THE AMOUNT OF MONEY IS ERODING / CUTTING THE SOLID MATTER indicate that money, conceptualised as a solid, may gradually lose its volume, thus losing its value or depreciating as well. For example, the terms *erosion of capital* or *erosion of profit* are metaphorical expressions that “correspond[s] to the geological phenomenon that occurs when a solid (in the geological sense, the earth’s crust) loses the superficial layer of its total mass over time due to corrosive external conditions” (O’Connor 1998: 143). In these terms, capital and profit are likened to a solid: when capital or profit diminishes, the process is similar to erosion, the mechanical process of wearing or grinding something down, a gradual decline of something. Likewise, the terms *budget cut* and *to cut* / *trim* / *prune the budget* / *costs* / *debt* indicate that an amount of money, in general, and budgets, costs and debt, in particular, may also diminish, metaphorically speaking, as a result of (human) intervention upon a solid with a sharp-edged instrument, so as to adjust its size by removing excess.

4.3. AUGMENTING THE AMOUNT OF MONEY IS BUILDING / CONSTRUCTION

Conversely, the mapping that indicates the opposite process, AUGMENTING THE AMOUNT OF MONEY IS BUILDING / CONSTRUCTION, likens the increase of an amount of money to building or construction work. Thus, it is possible to say that one *builds one’s assets* / *savings* / *wealth*, meaning that the amount of money increases by adding new layers of a solid matter in order to augment it. These building, construction or architectural metaphors are linguistically realized by means of several metaphorical expressions, such as *wall of money* (defined as a large amount of money ready to be invested on the stock market), *to build an investment portfolio*, *to lay a solid foundation* (for an investment plan), and *capital stack*. All these expressions confirm that, in English, money is often metaphorically understood as a solid matter when the intention is to emphasize the wish to increase the sum or the amount already available by investing, diversifying or reinvesting the return.

4.4. AN INVESTMENT IS A TANGIBLE HARD / SOFT MATTER

Other examples of terms resting on the metaphor in which money and finance are conceptualised as a solid include *hard cash* / *currency* / *loan* / *credit check*, (*rock-)solid currency* / *investment* and respectively, *soft currency* / *loan* / *credit check*. These linguistic realizations of the conceptual mapping AN INVESTMENT IS A TANGIBLE HARD / SOFT MATTER suffice to illustrate that, when money is conceptualised as solid in English, that solid may be characterised by an additional property – a degree of its firmness. Contrary to our expectations, the high or low level of solidity does not always point to the high or low degree of stability, reliability or safety of the money in question (be it in the form of an investment, currency, cash, repayment of a loan, etc.), where the former is obviously perceived as a desirable quality, while the latter, as an undesirable one. Thus, it is only when the terms refer to currency, cash and investments that a high level of solidity metaphorically stands for stability, reliability or safety, whereas softness metaphorically corresponds to risk and uncertainty. For instance, the term *hard cash*, i.e. money in the form of coins or notes but not cheques or a credit card, illustrates the correlation between a high degree of solidity and a high degree of reliability. The fact that this money is tangible and visible somehow adds not only to its reliability and safety but also to its availability, as the access to it is easy and instant. Similarly, *hard currency* is a term denoting a globally traded currency, usually from a highly industrialized country, which is widely accepted around the world as a form of payment, and much more importantly, which can serve as a reliable and stable store of value. Conversely, the softness of a *soft currency*, a currency which is not acceptable in exchange for currency of other countries due to unrealistic exchange rates, refers to its frequent and unpredictable fluctuation in value, which indicates a high level of risk involved. The softness of *soft loans* and *soft credit* *checks*, however, does not involve risk or unreliability; it implies more lenient terms of repayment, usually at below-market interest rates.

4.5. BEING IN DEBT IS BEING BURDENED

As mentioned at the beginning of this section, if money is conceptualised as a solid matter, it has weight, which may at times cause an amount of money to be metaphorically structured as rather heavy. This is illustrated by the terms *debt / tax burden* and *to be saddled with debt*, in which the amount of money that is owed to a person or to an institution is understood as a heavy load. The MONEY IS SOLID metaphor is, in these particular cases, combined with another conceptual metaphor, namely RESPONSIBILITIES ARE WEIGHTS, in which debt is conceptualised as a source of great worry or stress, a heavy duty or responsibility. As far as a *tax burden* is concerned, the amount of money that someone needs to pay in taxes is considered an obligation and as O'Connor (1998: 144) claims, “[r]eferring to tax as related to gravity conveys an idea that it is to be considered as natural law that must be obeyed, notwithstanding the volition of the taxpayer.”

Another expression, albeit fairly colloquial, but still illustrative of the conceptualisation of money as a solid, is the adjective *loaded*, meaning affluent, having an abundant supply of money or possessions of value. In this particular expression, money is perhaps humorously understood as a burden which needs to be unloaded, since the amount of money that a loaded person has is reminiscent of a heavy load, even a burden, which other people wish but are unable to have.

4.6. LOSING MONEY IS SINKING

Similarly to 4.5., this particular metaphorical conceptualisation of money rests on our perception of money as being a rather heavy solid object. As noted by Henderson (2000: 159) in his discussion of the MONEY IS A LIQUID metaphor, when objects become too heavy, they may sink and may not be retrieved. This is nicely illustrated by the English terms *sunk costs* and *sinking fund*, which utilise the conceptual mapping LOSING MONEY IS SINKING and which refer to past costs that have already been incurred and cannot be recovered, and respectively, to the assets that are set aside for the redemption of stock, the retirement of debt, or the replacement of fixed assets.

It is worth mentioning that we initially examined the terms instantiating this conceptual mapping as well as the following two (cf. 4.7. and 4.8.) as linguistic realizations of the generic MONEY IS A LIQUID metaphor (cf. Silaški and Kilyeni 2011). However, on closer inspection, we concluded that the conceptual metaphor underlying these terms was MONEY IS SOLID. This confusion was primarily caused by the fact that the concept LIQUID, coupled with the CONTAINER and the FLOWING MOVEMENT image schemas (cf. Richardt 2003: 269), plays an important role not only in the metaphorical conceptualisation of money, in general, but also of money as solid matter, in particular. If we compare, for instance, terms such as *cash flow*, *inflow*, *cash leakages*, *money injection*, *liquidation* and *flood of money* (cf. Silaški and Kilyeni 2011) to the terms examined in this paper, in subsections 4.6., 4.7. and 4.8., it becomes obvious that the former rest on our metaphorical understanding of money as liquid matter, while the latter, on our perception of money as a solid object coming in contact with liquids.

4.7. MAKING MONEY UNAVAILABLE IS TURNING INTO SOLID

Solidification may occur when a liquid turns into a solid, that is, when the temperature is lowered below the freezing point. When applied to money, funds or credits, this means that these financial means "are temporary unavailable for circulation" (O'Connor 1998: 143). Thus, for example, the term *frozen assets* refers to assets that the owner may not sell or use because of a debt that has not been paid. This term rests on the conceptual mapping MONEY WHICH CANNOT BE ACCESSED IS FROZEN. Along the same lines, the term *frozen bank account implies that the money is temporary unavailable, it is "frozen", it cannot "flow" from a bank into one's wallet, because it has stopped being a liquid due, for example, to* an outstanding credit card balance*.* The terms *pay / wage / salary freeze* and *price freeze* similarly connote a temporary fixing of value, which results in the impossibility of making more money, and which, in the real world, equals solidification through freezing.

4.8. CHANGING THE AMOUNT OF MONEY IS FLOATING

Floating as well as drifting refers to the process of being carried along by currents of water, implying movement, fluctuation and change in the position and the motion (among others) of an object, i.e. of some solid matter. The following terms clearly illustrate that the variable nature of money, in terms of quantity, circulation and/or destination, is likened in English economic terminology to the (relatively) dynamic, fluctuating behaviour of solids on the surface of a fluid: *floating capital* / *interest rate* / *debt*, *flotation cost*, *wage drift*.

5. Concluding remarks

The findings presented in this paper have hopefully proved that metaphor is part and parcel of our understanding of financial concepts and that the conceptualisation of money by means of the MONEY IS SOLID metaphor is systematic in English economic terminology. As discussed in section 4, we have identified eight salient conceptual mappings that the metaphor under analysis rests on, each of these mappings being instantiated by various linguistic expressions. In particular, we have shown that a number of characteristics specific to solid matter are metaphorically mapped onto the domain MONEY. To sum up, money is perceived as solid when it becomes unavailable (e.g. a *frozen* account), when it undergoes certain (fluctuating) changes in quantity or destination (e.g. *floating* debt, *to build* one's assets), and when it is owed (e.g. tax *burden*), divided (e.g. stock *split*), or assessed according to its quality (*hard* currency).

Finally and somewhat surprisingly, our analysis of the MONEY IS SOLID metaphor suggests that, despite some indication to the contrary (cf. Henderson 1994, O'Connor 1998, Goatly 2007, Silaški and Kilyeni 2011), the conceptualisation of money as solid matter may display a higher degree of productivity than the conceptualisation of money as liquid matter, in terms of metaphorical mappings. We hope that further research into the use of state-of-matter metaphors in economic and business terminology will eventually confirm this tentative conclusion.

Note

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