Piotr Wajszczyk

Politechnika Łódzka, Katedra Technologii Maszyn
e-mail: piotr.wajszczyk@p.lodz.pl

Ethical Development of Professional Image in Professional Codes of Engineering Ethics

Abstract

The article discusses problems of image development in selected professional engineering communities, as expressed in their ethical codes. Specific codified norms are presented and their likely effects discussed on two levels: personal and social.

The findings show, that not all of the codes of ethics solve the development problem identically, with the differences likely to cause some variability in behavioural patterns among members of the professional societies.

The analysis suggests the need for further research and analyses as well as the standardization of codified solutions to this problem among professional engineering societies.

Keywords: professional engineering ethics, codes of ethics, social professional image, management of professional organizations and societies

JEL Classification: A13

1. Introduction

An *image* is an individual and social good. An image of an individual person may be associated with its picture, which can be recorded on optical and electronic media, and it can also be a photo or description of its outlook. It can also be the good name, which usually is associated with social capital, trust and the good reputation of a person in his or her neighbourhood.

A person can have an image of himself, a *personal image*, made of his own perception of himself. It is then combined with the person's own personal affirmation, dignity, reputation and the truth about himself[1]. The personal image is a component of properly formed personality, thereby it becomes reflected in that person's own worth, assertiveness and regulates the person's conduct, behaviour, and communication patterns. For a legal entity, a thing, organization or an abstract object (such as brand or a country) it is not constrained to the physical image or its components in the form of brand name, but it has a much wider meaning.

The subject of analysis in this paper is the professional image of an engineering community and the professional image of its single professional representative – an engineer. Of interest to us will be the relationship of these two terms, the process of how they influence on each other and the ethics of their development, i.e. the ethics of the design, creation and change of a professional image.

2. Components and their hierarchy in the image

An image is the set of beliefs, ideas, and impressions that a person holds of an object[2]. Customer's behaviour and attitudes regarding an object are strongly influenced by the image which the customers have of it. In marketing literature there are generally three types of an image[3]:

(1) *product image* is the way in which buyers perceive a real or potential market offer;

(2) *brand image* is the set of ideas which consumers have about a certain brand in the form of true perceptions of brand attributes, or the effect of selective attention, selective distortion and selective retention;

(3) *firm (corporate) image* is the term corresponding to brand image, but memorized by a customer (or interviewee, not necessarily a customer) developed by the firm's multiple activities. The corporate image can be developed in the course of integrated marketing communication – a coherent, purposeful and convincing message concerning the organization and its products.

Both the change and an improvement of an image require organizational effort and patience. Images are 'sticky', i.e. they remain unchanged even although some changes have already occurred in the organizations, for better or worse. For example, the actual components making up the organizational image might get worse in terms of product reliability or agility but the customers still support the previous image. This phenomenon is based on customers' selective distortion of the data coming from the organization in the light of its previous positive image still harboured

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[1] T. Ślipko, *Zarys etyki szczegółowej. Etyka osobowa*, Wydawnictwo WAM, Kraków, 2005, p. 323 n.

[2] Ibidem, p. 291 n.

[3] L. Cian, *How to Measure Brand Image: a Reasoned Review*, „The Marketing Review" 2011, vol. 11, No. 2, pp. 165-187; Ph. Kotler, G. Armstrong, J. Saunders, V. Wong, *Marketing. Podręcznik europejski*, Polskie Wydawnictwo Ekonomiczne, Warszawa 2002.

in their memory. A strong stimulus is required to make them change it, so as to 'destroy' the previous image and force another one to be developed. It can be concluded then, that images live their own lives, to some extent. This is especially visible when the customers have infrequent contact with the object whose image they have and they verify it equally infrequently. It is therefore important to build and maintain a good image and to take care of its adequacy. The image is also connected with the *identity* of a person, firm or organization[4].

There is voluminous literature in management, entrepreneurship, marketing, and advertising where types, dimensions and the effective influence of an image on the environment are analysed. The development of product or brand images, even of the political candidates[5], are carried out mainly in the organizational interest of the organization, although their existence is also beneficial to the customers and voters. There is little criticism, however, if there are ethical images, i.e. whether there is good that is created in their surroundings during the development of images or their managed change[6].

A few questions should be posed here. How should the personal and social images be ethically shaped in a professional engineering community? And do these images depend on each other in some way or another? If so, which one has priority for the mission fulfilment by an individual engineer and a member of a professional community?

We shall call an image *ethical* whenever it yields the following outcomes:

(1) a good or goods, both individual or social, which the professional society brings to society at large by observing a particular component of the image;

(2) a good which is the degree of consistency of the developed image with the actual experience of members of society at large when they have contact with members of the professional community;

(3) a good which means the degree of consistency of components of a professional community representative's individual image with the image components of the whole professional community maintained in the social perception.

In the case of the above criteria we mean both the personal morality connected with professional image, and the social professional morality which shape the professional social image and personal individual image alike. To make an image ethical all of the above criteria must be met simultaneously.

We might find an example of an ethical image which is representative for criterion (1) in engineering practice. Whenever engineers provide services of social and individual safety maintenance to members of society at large, the duties and goods,

[4] J. Vanhamme, A. Lindgreen, J. Reast, N. van Popering, *To Do Well by Doing Good: Improving Corporate Image Through Cause-Related Marketing,* „Journal of Business Ethics" 2012, No. 109, pp. 259–274; H. Ibarra, *Provisional Selves: Experimenting with Image and Identity in Professional Adaptation*, „Administrative Science Quarterly" 1999, No. 44, pp. 764-791.

[5] F. Guzmán, V. Sierra, *A Political Candidate's Brand Image Scale: Are Political Candidates Brands?* „Journal of Brand Management" 2009, No. 17, pp. 207-217; L. Cian, op. cit.

[6] L.M. Roberts, *Changing Faces: Professional Image Construction in Diverse Organizational Settings,* „Academy of Management Review" 2005, vol. 30, No. 4, pp. 685–711.

both individual and social, which follow these services, increase the private or so-cial sense of security. The very practices of goods provision are processes which do not belong to the sphere of interests of professional ethics, but rather to the specific technical disciplines, such as safety at work, transport safety, geological safety etc. But attitudes like due diligence, high professional sensitivity to the issues mentioned above, as well as the duty of keeping them at a high level all the time in professional practice do belong to the sphere of professional ethics.

Another example of ethical image development, which illustrates the operation of criterion (2) is the confidentiality of a relationship in which we consider the vari-ous situations of a professional community member who provides services to soci-ety. In the focal relationship he fulfils the duties and social obligations pro-mised in the image. If such a duty to maintain the confidentiality promised in the professional image of the individual becomes supported in subsequent experiences which occur during the service provision, then we can conclude that the professional image of such engineers is being developed ethically.

The third case (3) of the image development, which we shall consider as ethi-cal, deals with two levels of the developed image: individual and social. The compo-nents of the social image used to be communicated by the professional community by means of marketing tools which operate on the social level, thereby they develop the social image of an engineer. Yet, apart from the social level the professional im-age also becomes developed on the individual level. To say that the developed pro-fessional image is ethical would require that each of the social level components has its individual level counterpart. For example, whenever the professional community expects that its member should avoid deceptive acts and conflicts of interests, private with public in particular, each of the society members must exhibit such professional attitudes during their professional practice.

However, such attitudes and personality traits from the individual level cannot always be found at the social level in the image of the professional community. Ideas such as compassion, sympathy or personal integrity are hardly found on the social level, as they are components inherent in human beings, rather than in their socie-ties. Even though had they occurred, they would have had to be subscribed into the deeper, personal layer of the professional image (e.g. 'The whole engineering com-munity expressed their compassion for the widow of the deceased president…', 'The engineers are professionally very helpful / charitable'). Quite likely we would have then had *image levels* similar to those found in brand image: a) *features*, b) *utility*, c) *values*, d) *personality*[7]. *An example of such a classification of image components would be the personal image of a professional engineer with having the following image components as perceived by the client: a) features,* conciseness, straightfor-wardness b) *utility*, skills to design a project of a building, construction, or fixture and fittings, competently advise which appliance to choose, c) *values,* of honesty, objectivism, impartiality, d) *personality*, e.g. a reticent and kind man in his forties wearing glasses, full of concern about road transport safety in the city. The issue

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[7] Ph. Kotler et al., op. cit.

of the depth of an image and its dimensions for a professional community would require a separate field research.

The above analysis concerned the *passive* development of a professional image during or 'by the way' of the engineering practice. The image however can also be developed *independently* and *actively* by means of impersonal marketing communication tools: by advertising or public relations. In such cases development of the image does not have to be accompanied by personal engineering practice. Notwithstanding, the very ethics of such an image development is still worth consideration, both for individual as well as for social groups within a professional community.

The practice of such an image development is especially vulnerable to the danger of giving some non-ethical results, since the activities that shape professional image are independent from experience and ongoing social verification of the image components. For example, the advertising may develop an image of engineers who are always concerned with social interests, they are impartial, ho-nest, objective, and always act in good faith. Still, without the instruments of social verification, like experience or a test, the resultant image may have no support in evidence derived from actual engineering practice. The development of such an image would have been unethical.

Unethical would have been an image development inadequate to the properties actually possessed by attributes of an object. Unethical, then, would have been the image development of an engineering firm which misleads the customers (by selling them low reliability or unsafe products) with these components of the image positioned high on the scale relative to those of their competitors.

The proposition of unethical image development can be deduced from the above consistency criteria of the perceived object's attributes and its true ones (with the truth about it). The lack of consistency is an evil, since it is not true. True is the authentic experience of the mutual relationship: the engineer on the one hand and the beneficiary of his professional activities on the other. The result is the good, individual or social (or both). The components of such an image which are inconsistent with the truth about the object are false, therefore they are bad.

Similarly unethical would be the development of an individual engineer's image, whose components were not in concord with the social professional image expressed in the code of ethics. If the code is to have an effective influence and to shape the desirable attitudes and behaviours which bring some good, then the representatives of the professional community bound by this code must comply with it and 'fit' their individual images into the social professional image of the community. The exactness of this fit depends, of course, on the degree of tole-rance which a given community guarantees to its members. Different professional engineering communities can tolerate behaviours with varying degrees of exemptions of the individual images from the social image of the community. Other problems are posed by the mechanisms by which the community executes power to enforce the codified norms and regulate social image components among the individual members' images.

It is important to note the trend to wrongly replace the above criteria of determining the ethical/unethical component of an image with some other kind of

praxeological criterion, which refers to effectiveness, efficiency, throughput or some other type of telic influence by means of the image. Such attempts sometimes occur in marketing management, where images are used instrumentally to achieve goals defined in the firm's general competitive strategy. Similar tendencies in political marketing use an image of the politician, or political party, to effectively influence voters' behaviour, albeit unethically. This difference should be underlined here: the above criteria which determine ethical/unethical image components can yield different results from an image's effectiveness criterion. It may happen that an image is ethical, but ineffective in exerting influence on the surrounding. The reverse can also be true: an image effectively influences the voters' behaviour, but is unethical and violates one or more criteria mentioned above. Eventually, the most desirable situation may occur wherein an image is effective and ethical.

3. Image components of the engineering professional community in select codes of ethics

Codes of engineering ethics suggest certain attitudes, social and individual practices among engineers whenever they encounter certain work situations. These norms may, but do not have to be, the actual components of an image developed of a given professional community as well as images of individual engineers. The duties of our concern are those that specify the obligation of engineers to develop a social and/or individual image by the community members. The components of the social image of engineers may differ from the components suggested in the codes of engineering ethics. Whether it is so and when it so happens would have to be investigated in survey research.

(1) IEEE (International Electrical and Electronics Engineers) Code of Ethics, rev. 2006[8] states in the preamble, that *the members of IEEE* (…) *in accepting a personal obligation to our profession, its members and the community* [they] *serve,* (…), but does not specify the duty of ethical individual image development, nor the social image, nor does it mention their components.

(2) NSPE (National Society of Professional Engineers) Code of Ethics[9] specifies among the fundamental canons in p. 6, that *the engineers while performing their duties shall* (…) *conduct themselves honourably, responsibly, ethically, and lawfully so as to enhance the honour, reputation and usefulness of the profession.*

The Preamble of this code declares, that (…) *engineers are expected to exhibit the highest standards of honesty and integrity.* (…) *the services provided by engineers require honesty, impartiality, fairness and equity and must be dedicated to the protection of public health, safety and welfare.*

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[8] Ch. Fleddermann, *Engineering Ethics*, third Edition, Pearson Prentice Hall, 2008, p. 139.
[9] Ibidem.

Engineers must perform under a standard of professional behaviour that requires adherence to the highest principles of ethical conduct[10]. This is a testimony of due care about personal virtues in the professional conduct. There is no mention however, about the duty of care of the personal image, but only the social image of the professional community.

(3) ASME (American Society of Mechanical Engineers) Code of ethics rev. 2005[11] underlines the importance of personal image as well as the community and mentions this a few times.

(a) In the Fundamental Principles: *Engineers uphold and advance the integrity, honour and dignity of the engineering profession by: i) using their knowledge and skills for the enhancement of human welfare, ii) being honest and impartial, and serving with fidelity the public, their employers and clients, and iii) striving to increase the competence and prestige of the engineering profession*.

(b) In the Fundamental Canons, p. 5, where it demands that: *engineers shall build their professional reputation on merit of their services and shall not compete unfairly with others.*

These provisions clearly show that this society underlines the collective actions aimed at professional social image development as well as an individual one. Among the components singled out in the social image we can find: integrity, dignity, honesty, impartiality, dedication to society, to the employers and their customers, and a drive toward the enhancement of professional competencies and prestige. These features are mentioned here in the plural, without underlining individual duties, which may be inferred therefrom or not.

(4) The ASCE (American Society of Civil Engineers) Code of Ethics, similar to ASME's statements and fundamental principles, repeats them almost verbatim, with one addition in the last point c) (…) *the support of professional and technical societies of their disciplines[12].*

(5) The AICHE (American Institute of Chemical Engineers) Code of Ethics rev. 2003[13] defines the duties of members in the preamble: [that they] *shall uphold and advance the integrity, honour and dignity of the engineering profession by: being honest and impartial and serving with fidelity their employees, their clients, and the public, striving to increase the competence and prestige of the engineering profession; and using their knowledge and skills for the enhancement of human welfare.*

This code, like the previous ones, determines the social professional engineering duties which may be associated with social image, without indicating the personal components of the image.

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[10] Ibidem.
[11] Ibidem.
[12] Ibidem.
[13] Ibidem.

(6) The ABET (Accreditation Board of Engineering and Technology) Code of Ethics[14] in its fundamental principles is identical to ASME.

(7) The FEANI-NOT (Fédération Européenne d'Associations Nationales d'Ingénieurs – Naczelna Organizacja Techniczna) Code of Ethics is supplementary: it does not regulate professional duties or determine social and individual image of an engineer by some superior norms. The individual duties are determined in the chapter 'personal ethics, where the required are: professional integrity, intellectual honesty, display of commitment to the engineering profession, by taking part in the activities of its associations, notably those which promote the prestige of the profession, and qualifications, all these can be accounted both to the personal as well as to the social image.

(8) The SIDiR (Stowarzyszenie Inżynierów Doradców i Rzeczoznawców) Code of Ethics in chapter 1 mentions the features of an engineer, such as honesty, impartiality, righteousness, justice, personal dignity and esteem to others. These image components can be accounted to the social one: its 'bearer', an engineer, strives to provide services *according to moral and civilizational principles*, based on the features mentioned above. The Code does not mention, however, any duties referring to specific individual persons.

4. Conclusion

The above examples of codes of engineering ethics provide evidence that image components in some of them emphasize the social perception by others of the profession, of the individual, or both. There are also codes which do not mention such duties at all. None of the codes, however, specify the mechanisms which guarantee that the code-required duties that regulate social and individual image shall be in close concord with one another.

Such mechanisms may have been regarded as complementary out-of-code activities, which codes do not provide, but only the professional practice of the community and its customs do. Such an out-of-code way of regulating the image development duties, both social as well as individual, may correspond with the first, passive mode of image development. If the community considers that the image is being developed correctly in the course of conscientious execution of codified duties and of observation of professional out-of-code customs, then the professional practice is being developed 'by the way' of regular professional practice and does not require additional active image-creating interventions, nor image corrections. All of the image components fulfil the consistency criteria.

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[14] The ABET Code regulates the forms in which engineers are allowed to advertise: [they] *may use display advertising in recognized dignified business and professional publications, providing it is factual, and relates only to engineering, is free from ostentation, contains no laudatory expressions or implication, is not misleading with respect to the Engineers' extent of participation in the services or projects described.* Suggested Guidelines, rule 5 h.

There can also be a case in which such mechanisms are missing, at least in some professional communities, and there is no required consistency of social image components with individual ones. In particular, this influential link may be missing for individual engineering practice, which itself may be amplifying the link or attenuating it. These mechanisms are founded on some degree of influence, power and control, which professional institutions may exert on their members, or on the professional environment of non-members, so as to secure the necessary compliance with code-provided norms and out-of code customs.

The social image of professional engineers may also contain many of the components unplanned or undesirable by the engineering organizations, some positive, neutral or negative. However, the components of professional image have an influence on attitudes of other professional non-engineering communities, and on the prestige and social status of this profession in a society. Systematic research aimed at determining the relationships between components of professional image discussed in this article would undoubtedly be a valuable contribution to the deeper knowledge of the mechanisms which shape it, and would increase the level of organizational control over this important good to the professional engineering community and society at large.

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