

DAMAGE TO THE ARCHITECTURAL IMAGE OF THE FACADE OF A BUILDING

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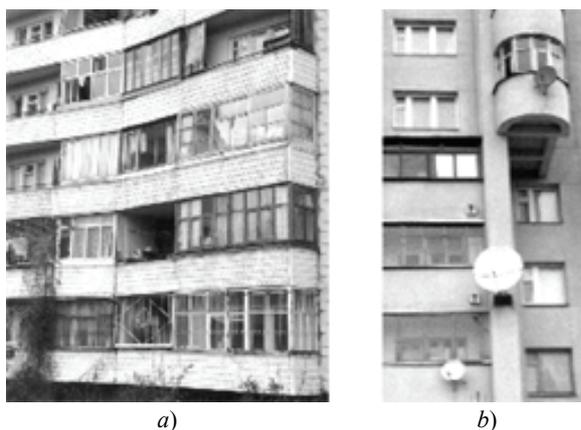
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Key words and phrases: aerials; architectural image; claddings of balconies; alternative designing; elements of the construction; modernisation of fixtures; windows; measures of insulation; facade of a building.

Abstract: The main mistakes, which happen as the result of repairs, replacement or renovation of some parts of buildings and fixtures, which affect the architectural merit of facades are analysed. The classification of the elements of the construction, causing the damage to the architectural image of the facade of a building is made.

Moral and physical deterioration of major parts of buildings make it necessary to perform the repairs, replacements, or in some cases even installation of new elements of the construction of the facade and fixtures. However, numerous mistakes, overlooked during such type of work, cause the deterioration of architectural image of the facade of buildings.

Using Tambov as an example, it was determined that the most frequent mistake is non-co-ordinated glazing of loggias and balconies by the inhabitants in an attempt to improve the insulation of the dwellings and increase the usable floor area of their flats. However, the documents, regulated such alterations in Tambov, do not exist at present time. Based on this, application of various compartmentation and range of colours of muntin for glazing of balconies and loggias on a single façade does not only damage the architectural individuality of facades of old buildings, but also affects the architectural merit of modern buildings (pic. 1, a).



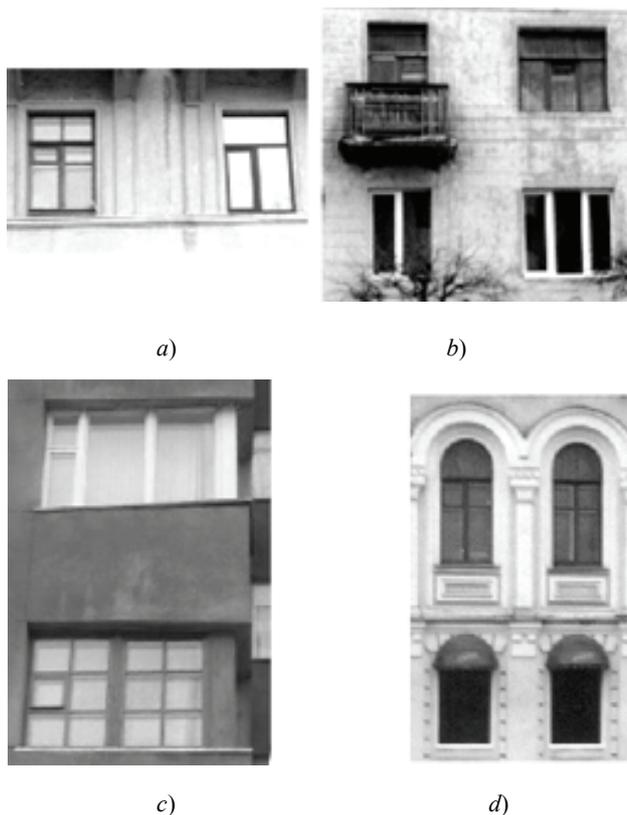
Pic. 1 a – different glazing of loggias, b – placing aerials on the facade of a building

In the near future, there are expected mass changes of externals of the walls and the windows of buildings as a result of accepting the bylaw, 1st September 1995, about amendment №3 SN&P II-3-79** “Building Heat Engineering” [2], which requires to perform the measures of insulation during reconstruction of houses, which will increase resistance to heat transfer of walls by 2...3,5 times, and of windows and claddings of balconies by 1,5 times.

Following this law wisely, it is possible to preserve the facades of the buildings, which have architectural value, and at the same time to improve facades of tract houses. This can be achieved because it becomes possible to place the insulation materials inside the walls as well as outside. Unfortunately, such works are usually performed spontaneously without qualified alternative designing and monitoring by department of architectural supervision.

On the building market of the country, it is possible to buy now the windows produced using the new technology (mainly foreign), which meet the modern requirements and have very good operation qualities. This has given the opportunity to the inhabitants with higher level of income to replace the old windows with new ones. Moreover, because of mass advertising, the prospects of lowering the prices of plastic windows (in the west the cost of PVC windows is lower than the ones made of wood), and of their modern appearance, it is possible to expect the increase in number of windows replaced by some inhabitants.

In many cases, exterior of the replaced windows depends on the wishes of customers, for example, of the inhabitants of some flats, who, using unqualified approach, affect the appearance of facades very much (pic. 2).



Pic. 2 Different style of windows, and frames of different colours deface the facade

The most common mistake made during the replacement of windows is the assumption that every new window has to be “modern”, e.g. to have bigger surface without sashes (pic. 2, *d*). Of course, simplified installation of new “modernised” windows in the old window frame is considered as the quickest and the cheapest way of assembling, which allows saving thermal energy and resources on replacing the windows. Nevertheless, they override the fact that by doing that the windows get very unnatural appearance because the window frame over sills considerably, which worsens the perception of both the windows and the whole facade.

It is necessary to consider the experience of some countries, which have already been faced with similar “window problems”. For example, in the 70-s in FRG the energy crisis led to spontaneous replacing of old windows by new ones. The demand for the windows of new construction abruptly increased in the country, and very soon a lot of old windows with small sashes were replaced by big, so-called “modern” windows with wooden or plastic frames. Whole areas of towns got “quality” windows; they completely changed the appearance of facades, which lost their architectural style. However, shortly after the beginning of extensive modernisation, some architects and experts, guided by various considerations, began to express a different opinion concerning such measures [1].

It is also necessary to note, that the damage to architectural appearance of the buildings are the consequence of irresponsible fixing of fixtures up on facades, because of simplicity of assembling and cheap labour costs. This problem is related to the technical innovation of fixtures, which leads to the replacement of old fixtures by new ones.

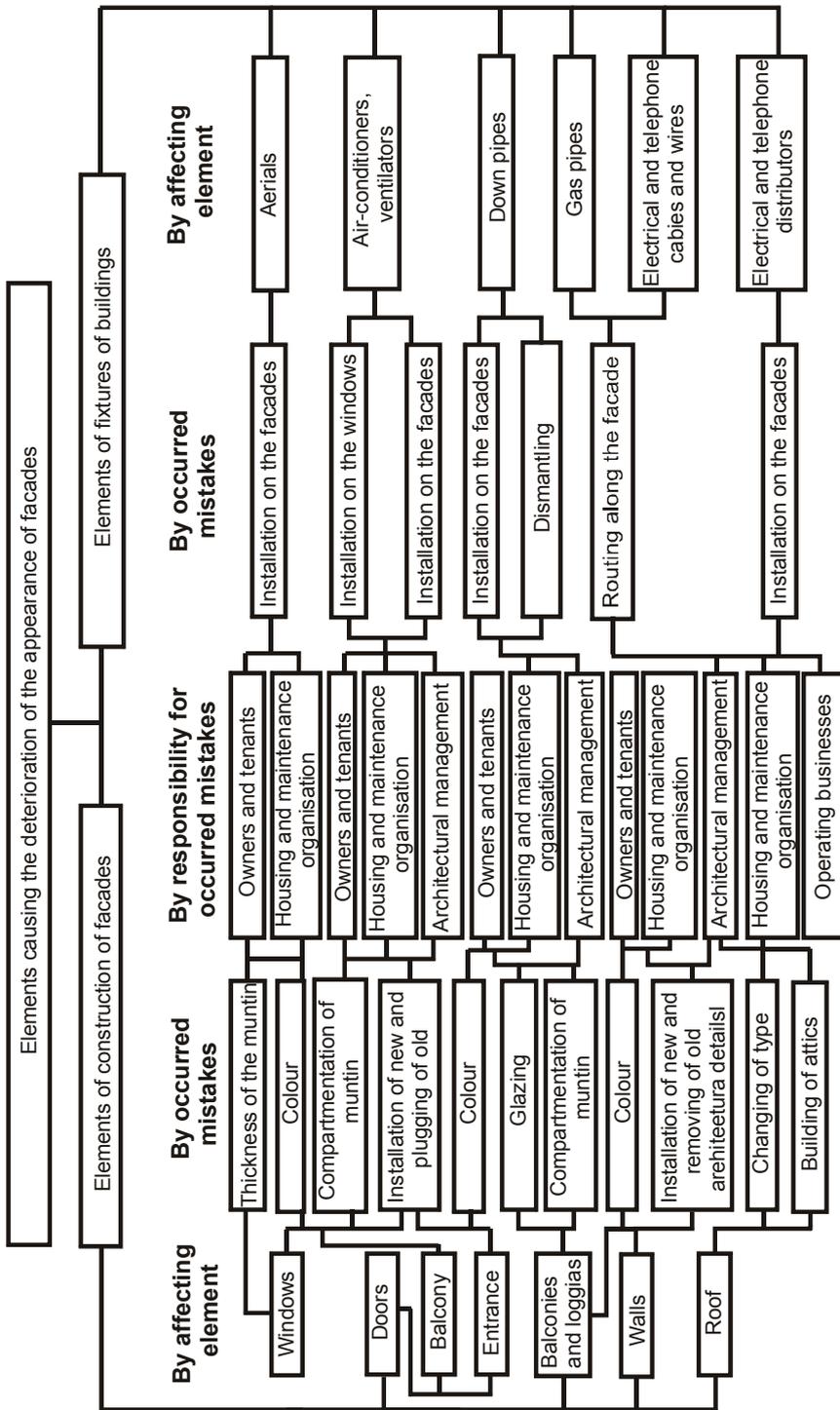
For example, at present the town’s overhead network is being replaced by cable lines in order to improve the system of power supply and telephone communication. In some cases, they are routed using aerial method along the facades of buildings, instead of under ground (pic. 3, *b*). The replacement of cable lines leads to the installation of the distributary units and other fixtures, which are usually positioned without consideration for the façade appearance (pic. 3, *a*).

Talking about building fixtures, it is necessary to mention air-conditioners and aerials (very-high frequency, ultra-high frequency and satellite dishes), as in the most cases house-owners install them on the balconies and the facades (pic. 1, *b*). Of course, every inhabitant wishes to have “quality” picture on their TVs, but it is important to consider appearance of buildings. Besides, these things first have to be considered not by ordinary people, but architectural organisations and services responsible for operation of the buildings.

In order to systematize the mistakes and define the responsibility for them, the classification of the building elements, which cause the deterioration of the appearance of facades, is produced (pic. 4).



Pic. 3 Telephone switchbox (*a*) and laying of cable lines along the facade of a building (*b*)



Pic. 4 Classification of the building elements, which cause the deterioration of the appearance of facades, is produced

Building elements, which cause the deterioration of the appearance of facades can be divided into two main groups - elements of the construction of facades and elements of fixtures of buildings. Both these groups can be classified by three characteristics: 1) affecting element; 2) occurred mistakes; 3) responsibility for occurred mistakes.

Elements of the construction of buildings, causing deterioration of the appearance of facades, are windows, balcony's doors and entrance doors, balconies and loggias, walls and roofs. As occurred mistakes colour scheme of elements, glazing of balconies and loggias, compartmentation and the thickness of muntins, addition of new elements and removing of old ones, changing the type of a roof, and addition of attics can be listed.

As elements of fixtures, changing the appearance of facades: aerials, air-conditioners, ventilators; down pipes, gas pipes; electrical and telephone cables and wires; electrical and telephone distributors can be listed.

Working with fixtures, mistakes occur when these fixtures are installed on facades, on windows, during dismantling and routing along facades.

The following people can be held responsible for mistakes occurred during repairs, replacement or installation of new elements: home owners and tenants (including tenants of flats); housing and maintenance organisations; businesses, using fixtures; architectural management.

To sum up, authors believe in order to preserve the architectural merit of facades, it is necessary to work out documents of performance standards, which regulate the order of measures during repairs, replacement and installation of new elements of the construction, which cause deterioration of the appearance of buildings.

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Разрушение архитектурного облика фасадов зданий

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Ключевые слова и фразы: антенны; архитектурный облик; фасад здания; балконные заполнения; вариантное проектирование; конструктивные элементы; модернизация инженерного оборудования; окна; теплозащитные мероприятия.

Аннотация: Анализируются основные ошибки, допускаемые при проведении ремонтов, замены или реконструкции отдельных элементов зданий и инженерного оборудования, которые влияют на архитектурную целостность фасадов. Проведена классификация конструктивных элементов, влияющих на разрушение архитектурного облика фасада здания.

Zerstörung der architektonischen Gestalt der Vorderseiten der Gebäuden

Zusammenfassung: Es werden die Hauptfehler der Renovierung, Ersetzung oder Rekonstruktion der einigen Elemente der Gebäuden und Ingenieurausrüstung, die

auf die architektonische Ganzheit der Vorderseiten beeinflussen, analysiert. Es ist die Klassifikation der konstruktiven Elemente, die den Einfluß auf die Zerstörung der architektonischen Gestalt der Vorderseite des Gebäudes ausüben, angeführt.

Destruction de l'image architecturale des façades des bâtiments

Résumé: On analyse de principaux dommages causés au cours des réparations, des changements ou bien la reconstruction des éléments des bâtiments et de l'équipement d'ingénieur qui influencent sur l'ensemble architectural des façades. On a fait la classification des éléments de la construction qui influencent sur la destruction de l'image architecturale des façades des bâtiments.
