



‘Pathodevelopment’ on the Residential Market in Poland

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Abstract: *Building, housing, and urban pathology have been discussed in the literature worldwide. In recent years, the Polish residential market has seen the emergence of extremely small and non-functional dwellings, very dense residential projects with limited access to sunlight and small playgrounds, and even projects built in the middle of nowhere. The media show more and more outrageous cases of what has come to be called ‘pathodevelopment’. The problem is real and it has economic, social, and legal dimensions and consequences. Using desk research and case study methods, this article attempts to create a holistic definition of ‘pathodevelopment’, classifies its forms, and considers the reasons for this phenomenon. According to the author, ‘pathodevelopment’ is related to various unethical actions taken by developers trying to maximise their profits, while acting to the detriment of future residents, the owners of neighbouring properties, and sometimes even municipalities. These actions can be institutional, urban, infrastructural, architecture, construction, or marketing in nature.*

Keywords: housing investment; pathology; property development; unethical practices.



Introduction

Since 2015, developer activity in Poland has increased dynamically thanks to the high demand generated by the demographic boom of the 1980s and the good economic situation. According to the Local Data Bank of the Central Statistical Office (CSO 2025), the total number of dwellings completed by developers between 2015 and 2024 exceeded 1.2 million. Many individuals with financial surpluses decided to invest in real estate during this period, viewing it as a safe and profitable asset, which further fuelled the demand. However, rising construction costs (from 4,461.25 PLN/m² in 2019 to 6,995.75 PLN/m² in 2024, according to the CSO), growing demand for properties for investment purposes (with some investors paying little attention to the quality of dwellings), rising dwelling prices (from 5,752 PLN/m² in 2019 to 9,616 PLN/m² in 2024, according to the CSO), and the desire for quick profits have caused some developers to engage in unethical practices, resulting in substandard investment developments. This phenomenon is called 'pathodevelopment'.

The term 'pathology' comes from the Greek word 'pathos', meaning 'to experience' or 'to suffer' (Gross 2014). Thus, it refers to pain or disease. Today, the term is primarily used in medical science (cf. Popper 1976; Mireskandari and Peterseni 2014; Funkhouser Jr. 2017), though many scientific studies also focus on construction-related pathologies (Watt 2025; Thomsen 2014b; Duncan and Ward 2017; de Brito and Pereira 2020; Sitzia et al. 2021). First, we have 'building pathology', which generally refers to knowledge about 'building diseases' (Duncan and Ward 2017; Rilatupa 2014), their identification, causes, consequences, and remedial measures (Peixoto de Freitas 2013). Some approaches emphasise that these defects result from wear and tear on buildings, due to the interaction between building materials and environmental conditions (Charola 2003), while others emphasise that many problems arise during construction or even the design stage (cf. Thomsen 2014b).

The second concept is urban pathology (see Furdell and Wolman 2006; Sully 2007; Mahdi and Motlak 2020; Liu et al. 2021). According to Pitcher (1997), it is an imbalance in the urban environment caused by rapid urban growth affecting its spatial, social and economic structures. This phenomenon is also evident in Poland, particularly in post-industrial cities. However, the term 'spatial pathology' is often used with a slightly different meaning. According to Wodz (1994), it refers to space being used in unexpected ways due to ineffective planning policies. It is therefore associated with the unauthorised appropriation of space, which is typical of real socialism, as well as social degradation and associated phenomena such as increased crime and poverty.

Housing pathology is defined similarly to building pathology, but with a slightly broader scope. According to Thomsen (2012: 550), it is a 'holistic approach to understand the nature and life cycle of residential buildings and their environment in order to identify, investigate, and diagnose deficiencies, specify preventive measures and remedial interventions, and evaluate their effects'. A dwelling must provide adequate shelter for users. Therefore, it should be of good quality, functional, and economically efficient for residents and owners (Thomsen 2014a). Pathology can also be discussed in the context of housing policy, particularly the state's failure to meet the housing needs of low-income people (cf. Zarghamfard et al. 2019; Teymur 1988).

A phenomenon called 'pathodevelopment' first appeared in Poland a few years ago. It lacks a single definition. Social activist Jan Śpiewak first used the term to describe a dwelling in which nearly half of the area is occupied by a corridor (Bachowski 2020a). Since then, it has been used in various contexts. For instance, the Polish Economic Institute employed the term in reference to the sale or rental of micro-studios measuring less than 25 m² (Lubasiński and Mądry 2023). The practice of investors converting large apartments in tenement houses or apartment blocks into smaller units is also considered 'pathodevelopment' (Kruzel and Kaim 2023). Wojtkun



(2021) coined the term 'pathodevelopment' to describe dysfunctional housing construction. Its manifestations include a reduction in usable area per person and the adoption of increasingly primitive functional and spatial solutions. Adamska (2024) also speaks of the low standard of the housing environment, especially in situations where we are dealing with small dwelling areas, reduced access to sunlight, insufficient parking spaces, significant distance from green or recreational areas, and maximisation of development on a small area. These substandard developments are the result of developers' deliberate actions, which can be referred to as 'pathodevelopment'. A definition of 'pathodevelopment' also appears on the website of the Polish government (GOV.pl 2023a), where it is said to encompass 'the activities of commercial investors who seek to maximise profits at the expense of good manners, common sense, and sometimes regulatory requirements'.

The media has blown this phenomenon out of proportion. Today, any action taken by a developer that seems inappropriate is treated as 'pathodevelopment'. This approach is incorrect and harms the development industry as well as other participants in the real estate market (Czerniak et al. 2024).

Therefore, the aim of this article is to provide a comprehensive definition of 'pathodevelopment', outlining the various forms it can take and distinguishing it from other housing-related issues identified in the literature.

Literature Review

To define 'pathodevelopment', we must consider the legality and ethics of developers' actions. While legality can be defined as compliance with applicable laws, ethics is a more ambiguous concept. Ethics is sometimes defined as a tool for distinguishing between good and bad or right and wrong (Clegg et al. 2007), while others point to it as the basis for making choices and judgements about what constitutes acceptable behaviour (Erondu et al. 2004). In the real estate market, ethics refers to the principles that guide practitioners to provide services honestly and with integrity and responsibility (Ayodele et al. 2025; cf. Stephen 1999; Gupta 2010). Onyeneke and Ekenta (2018) argue that the absence of consistent ethical standards can lead to conflict, professional misconduct, substandard services, and confusion between who are qualified and unqualified professionals within the service sector.

The topic of ethics in the real estate market has been widely discussed in relation to property brokerage and valuation (Allmon and Grant 1990; Agboola et al. 2012; Ayodele et al. 2025; Piasecka 2012; Tesfom et al. 2013; Tichaona and Nyaruwata 2014; McAllister 2020; Kanniyapan et al. 2025;). A significant body of literature also exists on unethical behaviour in the construction industry (Adnan et al. 2012; Maseko 2017; Shah and Alotaibi 2017; Abdulazeez et al. 2021; Kuoribo 2021; Fang et al. 2024; Niroula 2025). Construction is one of the sectors most vulnerable to corruption (Shah and Alotaibi 2017; Maseko 2017). Bid rigging is frequently cited as a key issue, leading to artificially inflated prices (Adnan et al. 2012). Other frequently mentioned unethical behaviours in this sector include fraud and dishonesty, negligence, conflicts of interest (Maseko 2017; Niroula 2025; Kuoribo 2021), discrimination, and nepotism (Fang et al. 2025). Unethical behaviour in the construction industry has been attributed to a variety of factors, including the complexity of construction projects, financial and economic conditions (the pressure to secure work, maximise profits, fierce competition), cultural and systemic factors (legal loopholes, political influence and pressure), personal and professional motivations (greed, lack of discipline, education, competence), or relations with stakeholders (exploitative relationships, poor communication) (Maseko, 2017; Abdulazeez et al. 2021; Niroula 2025). The cited studies primarily focus on the behaviour of construction contractors. Meanwhile, developers are often simply project owners who commission



construction work from an external company. To date, there have been few publications on this topic.

Maseko (2017) identifies various manifestations of unethical behaviour on the part of clients (here, the developer is the contractor's client). These include negotiating prices using offers from other contractors, delaying payments, expanding projects during implementation, setting unrealistic deadlines and budgets, and unfair contract terms. Benfield (1998) also addresses unethical behaviour by developers in the context of bending the planning regulations.

In Poland, some issues concerning the developer-client relationship are regulated by the 2021 Act on the Protection of the Rights of Purchasers of Residential Premises or Single-Family Houses. While this legislation primarily ensures the protection of purchasers' funds, additional provisions have been introduced in recent years in response to unethical practices by developers. Nevertheless, the question arises as to the extent to which economic activity can be regulated to ensure ethical behaviour while also ensuring free competition. The Polish Association of Developers has also adopted a Code of Best Practice for developers, but this only applies to its members.

It is also worth considering how the phenomenon discussed corresponds to other widely recognised issues in the international literature, such as vulnerability, precarity, nanoflats, microapartments, shrinking homes, and poor housing quality. This section defines these terms, but their connections with 'pathodevelopment' are discussed in the section on the definition of this phenomenon.

There is no uniform definition of nanoflats (Sing, Mak and Yi 2020; Shulman and Honey-Rosés 2024) or micro-apartments (Stępnik 2021; Alfrević and Alfrević 2022). Instead, each country has its own regulations and standards for acceptable apartment sizes (cf. Alfrević and Simonović Alfrević 2022; Preece et al. 2023). For example, an apartment measuring less than 40 m² would be considered a micro-apartment in Hong Kong (Lau and Wei 2018) but a standard apartment in Poland. Generally, these types of apartments are not always considered pathological. In fact, they are sometimes proposed as solutions to the housing crisis – for example, as housing for people with lower incomes or as a means of reducing the environmental impact of housing (cf. Ford and Gomez-Lanier 2017, Carlin 2014; Lage 2024; Gazdag and Torlegård 2018; Soub and Memikoğlu 2020; Szczegielniak 2021; Alfrević and Alfrević 2023). The problem arises with the smallest apartments, where limited living space negatively impacts health and quality of life (cf. Harris and Nowicki 2020). According to the literature, apartment and house sizes have generally decreased in recent years (Shulman and Honey-Rosés 2024; Hubbard 2025). This phenomenon is known as 'shrinking homes'. It is due to demographic changes, limited land availability, ecological challenges, high housing prices, and other factors (Hubbard 2025).

International literature has also studied low-quality housing (Garg et al. 2022; Anokye et al. 2026; Nhi 2022). Research indicates that housing quality encompasses technical, economic, sociocultural, and environmental criteria that make an apartment and its surroundings acceptable to people (Opoko and Oluwatayo 2016). Thus, when evaluating housing quality, it is important to consider not only whether the apartment is small and in good technical condition (Garg et al. 2022), but also whether it has the necessary amenities (Lelkes and Zólyomi 2010; Shirazawa and Simões 2021). Furthermore, the design and construction of a building should be assessed (Liu et al. 2019), as well as the infrastructure in the surrounding area (Strossmayer 2017).

People classified as vulnerable or precarious often inhabit low-quality housing. Vulnerability (cf. Tran et al. 2012; Mundra and Oyelere 2022; Barreca et al. 2018) is the opposite of housing security. However, there is no unique definition of this phenomenon. Canada's National



Housing Strategy (NHS) identifies twelve vulnerable social groups (Zhu et al. 2021). These groups differ in terms of cultural context, age, household type, income, and ethnicity. Their diversity leads to specific housing needs, relating, for instance, to the number of rooms and indoor temperature. Consequently, this diversity is reflected in the housing policies of many countries (Zhu et al. 2024). ‘Precarity’ (cf. Bolt and Czirfusz 2022; Waldron and Wijburg 2026) is a multidimensional phenomenon encompassing housing affordability, tenure security, housing satisfaction, neighbourhood quality, and community cohesion. Housing insecurity is a condition that increases the actual or perceived likelihood of unfavourable outcomes. The literature indicates that certain groups of people are more likely to be perceived as precarious (low-income individuals, large families, and ethnic minorities) (Debrunner et al. 2024).

Taking the above into account, this study aims to address several research gaps. Firstly, while the scientific literature mostly concerns the relationships between developers, contractors, and the government, few articles discuss the unethical behaviour of developers in relation to clients, as is the case with ‘pathodevelopment’. Secondly, while the literature usually discusses individual phenomena or manifestations of ‘pathodevelopment’, it lacks a holistic approach to demonstrate the diversity of the problem. This article therefore attempts to address this issue.

Research Methods

To achieve the goal stated in the introduction, the author used desk research and a case study method.

‘Desk research is a compilation of several different methods, namely the empirical method of literature review and theoretical methods for processing previously collected empirical material ...’ (Topolewski et al. 2024: 283). The literature review does not concern the discussed phenomenon of ‘pathodevelopment’ to a large extent, so it was mainly discussed based on journalistic literature and internet sources, such as press articles and news portals. However, definitions of related phenomena were presented (see Saunders and Rojon 2011) to provide a basis for defining ‘pathodevelopment’ in this study.

A case study requires in-depth research on an individual, group, or event to understand the phenomenon. Case studies can be divided into three types:

- instrumental case studies, in which the researcher focuses on a problem and then selects one limited case to illustrate the problem;
- collective case studies, in which multiple cases are compared to identify common patterns, connections, or similarities; this is used when the phenomenon being studied is rare or difficult to observe;
- internal case studies, which emphasise the case itself with the goal of developing an in-depth understanding (Coombs 2022).

In this case, a collective case study was used.

The study was conducted in three stages:

1. first, a classification of forms of the phenomenon discussed was created based on examples of ‘pathodevelopment’ found on the Internet and in the literature;
2. then, a definition of ‘pathodevelopment’ was proposed and explained in the context of other housing-related problems;
3. next the causes of this phenomenon were explored, and these are presented in the discussion section below.



The study has an unlimited scope of time but it is limited to the territory of Poland.

Pathodevelopment in Poland – Research Results

Based on the examples cited in Internet sources, ‘pathodevelopment’ can be divided into the following forms:

- institutional,
- urban and infrastructural,
- architectural,
- construction, and
- marketing.

Because of the significant number of problems concealed within the concept of ‘pathodevelopment’, only some examples are discussed below.

The institutional form of pathodevelopment

The first form of ‘pathodevelopment’ involves exploiting loopholes in the law or bypassing various national and local legal provisions. Problems can arise during the selection and analysis of land properties (see Józefiak 2023). This is partly due to the defective spatial planning system. In Poland, the local spatial development plan is the basic planning document for investors. It specifies the purpose of real estate and development parameters (Act of 27 March 2003). According to CSO data, only 32.5% of the country was covered by local plans in 2024. If a developer wants to start a project on a property without a local plan, he/she must apply for a decision on building conditions. In this case, the developer specifies what he/she would like to build, and the local authorities then grant or refuse permission. Many decisions are ‘discretionary’, meaning that there is room for different interpretations of the legal requirements (Radziwon-Kamińska 2022). Sometimes developers buy plots in less urbanised areas without local plans, hoping to pressure local authorities to agree to the project (cf. Woliński 2023).

Another example of ‘pathodevelopment’ is building parking lots very close to residential windows to maximise the usable area of a development. According to the Regulation of the Minister of Infrastructure on Technical Requirements to Be Met by Buildings and Their Location from 12 April 2002, the distance between parking spaces and the windows of residences should be at least 7 m for parking lots with 10 spaces and 20 m for large lots with more than 60 spaces. However, the regulation also states that in the case of parking spaces for disabled people, this rule is not obligatory. Therefore, it has already happened that a developer has designed and built a project with the majority of parking spaces for disabled people and are located right next to the windows of the building, and just a small number of parking spaces for healthy people (see Image 1; Barański 2024). There is now an amendment to this provision stating that number of parking spaces for disabled people cannot exceed 6% of all spaces in a given investment.

Image 1: An example of developments exploiting legal loopholes



Development with a parking spaces only for disabled people.

Source: *Geoportal.gov.pl*



A balcony next to balcony (distance below 2 m).

Source: *<https://msip-isdp.um.krakow.pl/gpt4/> and photo by the author.*

Another example of institutional ‘pathodevelopment’ related to the aforementioned regulation was the construction of balconies in close proximity to one another. The current amendment includes a provision that balconies on one slab must be separated by a permanent partition. Furthermore, the distance between balconies in neighbouring buildings should be at least 3 m from the plot boundary. However, the legislation does not regulate the distance between balconies within one building (when the building is U-shaped or just irregular in shape and the balconies are opposite each other). Some developers have exploited the absence of regulations in this area by building dwellings with balconies next to each other and only about two metres apart (see Image 1; Bochenek 2022).

Another form of institutional ‘pathodevelopment’ involves creating above-mentioned micro-apartments. There would be nothing wrong with them if not for the extremely small dwellings, some of which have an area of only 2.5 m² (see Napierała, 2022; Gomułka, 2025). According to Polish law, premises with an area of less than 25 m² are not considered dwellings. They are commercial premises and are taxed at a higher goods and services tax rate. Such premises

should not be used as permanent residences (Krupa-Dąbrowska 2021). Meanwhile, developers mostly build such facilities for investors, who purchase them to rent out as temporary residences.

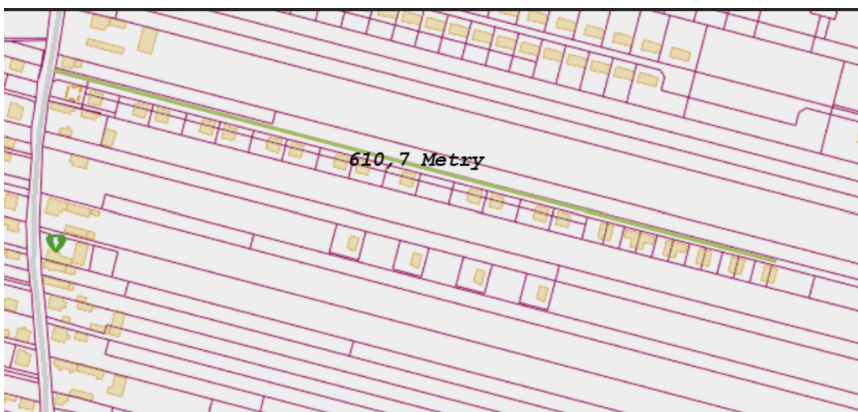
The Urban and Infrastructural Nature of Pathodevelopment

Some developers want to buy land as cheaply as possible to increase their profits. Such activities carry a risk of 'pathodevelopment'. Plots in former agricultural areas tend to be elongated and have limited access to technical, communication, social, and service infrastructure. This shape encourages single-family housing, also known as strip-field developments (see Nowak and Haupt 2024). These developments are sometimes built in the middle of nowhere. Examples of such estates are shown in Image 2.

Image 2: Examples of strip-field developments and non-functional infrastructure



Development in the middle of nowhere.
Source: InterSIT of Lodz Geodesy Centre.



The distance of the last house from the public road is approximately 610 m.
Source: InterSIT of Lodz Geodesy Centre.



Insufficient playground (2.9 x 14) with only one bench, a single swing, and two spring swings – in comparison to the size of the parking lot.

Source: InterSIT of Lodz Geodesy Centre.

Urban planners indicate that pedestrians are willing to walk up to 500 metres to reach services such as bus stops (which is considered acceptable pedestrian access) (Poelman, Dijkstra, Ackermans 2020; Lis et al. 2014). Polish law also provides urban standards that housing developments should meet (see the Act on Facilitating the Preparation and Implementation of Housing Investments and Accompanying Investments dated 5 July 2018 and the Act on Spatial Planning and Development dated 27 March 2003). However, developers usually count this distance in relation to the first home, and the buyers of the last one sometimes have a two or three times longer distance to walk than the others do. This forces households to purchase more cars.

Another example of ‘pathodevelopment’ in this area is that developers often build as much as possible to maximise profits. This is done at the expense of social and service infrastructure, such as playgrounds, parking lots, shops, kindergartens, and schools. For instance, there are examples of playgrounds that amount to the size of one or two parking spaces (see Image 2 and Witkowska 2025), because until 2024 there were no regulations regarding this matter. Some playgrounds also have inadequate equipment (see Jaros 2019).

The Architectural Character of Pathodevelopment

Although compliant with the law, ‘pathodevelopment’ can also take the form of nonfunctional projects. Sometimes developers offer dwellings with unusual shapes, such as obtuse or acute angles or an elongated rectangular shape. One such example was a 48.8 m² apartment, of which 23.1 m² (over 47%) was taken up by the hallway and entryway (Bachowski 2020c). It seems that developer redesigned this apartment, and after that, the corridor accounts for about 31% of the total area. Another example is a 34.8 m² apartment with an irregular shape, similar to a triangle, making it difficult to arrange (see more Bachowski 2020c).

This can be the result of the plot's own shape – planning regulations may require the front of the building to run parallel to the plot boundary. However, some apartments are deliberately designed this way to maximise the usage of space. Furnishing and decorating such dwellings can be problematic, especially if the floor area is small. This requires ordering custom-made furniture, which increases the finishing costs for buyers. Long dwellings also have a problem with access to sunlight. There are many examples of such problems (see more Bachowski 2020c; Cymer 2022).



The Construction Nature of the Pathodevelopment

This form of 'pathodevelopment' is associated with poor-quality construction work and the use of low-quality materials. The reason for this is the desire to achieve the greatest possible savings. Smaller or larger defects related to artistry occur everywhere. The problem arises when the actions taken by the developer are deliberate and will significantly affect buyers' costs and quality of life.

One example of how this can be problematic is the case of underground parking lots in areas with high groundwater levels and located near rivers or escarpments. Generally, building facilities in such areas is difficult (Chmielewski and Kruszk 2015). It is necessary to use the appropriate technology and insulation. However, developers do not always do this, hoping the truth will not come to light quickly. In one investment project in Warsaw, the garages are flooded during heavy rainfall (Karpieszuk 2024).

Botched work is also the result of rushing to finish quickly. For instance, wet work should not be done in the winter due to the increased risk of mould. However, time is money. Botched work is often masked by creating elegant receptions or sophisticated floors to distract from the poor quality of the façade, the finishes, the acoustics, or the thermal insulation (Drozda 2023).

The Marketing Nature of Pathodevelopment

'Pathodevelopment' can also take the form of an information asymmetry, which is related to the deliberate misleading of buyers. The most common problem in this area is the failure to provide buyers with the true dimensions of the rooms – furniture is instead depicted on an unrealistic scale. In reality, a full-size piece of furniture does not fit or take up an entire room (Drozda 2023). Such examples were discovered in the projects in Katowice and Warsaw (Bachowski 2020b). Marketers also artificially enlarge spaces in photos.

People employed in selling housing often do not tell the truth, avoid uncomfortable topics, and mislead and confuse buyers. Advertising slogans are usually exaggerated. For example, they promise a home with a view of greenery, but there is actually a cemetery outside the window (Panikowska-Filipek 2022).

So What Is Pathodevelopment?

Based on the above considerations, negative actions taken by developers can have two outcomes:

1. they can be generally illegal and unethical – such actions should never be undertaken, because, in the author's perspective, they constitute a crime;
2. they can be rather legal but still unethical – 'pathodevelopment' falls into this category.

Considering the above, an attempt was made to create a uniform definition of 'pathodevelopment', treating it similarly to 'building pathology' as a form of 'disease'.

In the author's opinion *'pathodevelopment' refers to developers' unethical and deliberate actions aimed at maximising profit (cause), which manifest as institutional, architectural, urban, infrastructural, construction, and marketing 'defects' (symptoms). These defects lead to*



a decrease in the quality of life for future residents, for the owners of neighbouring properties, and sometimes for entire municipalities (consequences).

Given the diverse nature and forms of 'pathodevelopment', remedial measures cannot be summarised in a single statement.

Therefore, there are differences between 'pathodevelopment' and the phenomena discussed in the literature review. 'Shrinking homes' should not be viewed as pathological if they provide decent living conditions and are not the result of unethical practices, but should be understood rather as an attempt to address the housing crisis. Nanoflats, micro-apartments, and low-quality housing appear to be just signs of 'pathodevelopment', but they not always are. In cases of 'pathodevelopment', what also matters is the manner in which these apartments are constructed. This can involve bending or circumventing legal regulations and exploiting loopholes. It can also result from fraud, dishonesty, negligence, or simply operating under the principle that 'what is not forbidden is allowed'.

Moreover, when the phenomenon of 'pathodevelopment' is considered alongside 'vulnerability' and 'precarity', differences in the respective target groups should be highlighted. Developer apartments are usually sold to two groups: individuals looking to meet their housing needs, and investors. 'Pathodevelopment' often means cheaper apartments, usually purchased by individuals sensitive to housing costs, such as foreigners, young people, divorcees, and singles. In this respect, the concept of 'pathodevelopment' corresponds to the phenomena of 'vulnerability' and 'precarity'. However, a significant proportion of buyers are investors who are not concerned about the quality of the apartments because they do not physically occupy them. Consequently, they create significant demand and encourage developers to construct more 'pathodevelopment' projects.

Discussion and Conclusions

Given that the phenomenon of 'pathodevelopment', which involves unethical practices mostly relating to clients, is not yet widely recognised, this article takes a primarily theoretical and exploratory approach. Therefore, it makes an important addition to existing research on housing. The article defines and systematises the phenomenon, while also identifying its initial causes.

The above considerations demonstrate the variety of forms that 'pathodevelopment' takes in Poland. The reasons for this phenomenon are also diverse. Despite over 30 years of ongoing property development in Poland, the sector appears to remain deeply rooted in the 1990s, when entrepreneurs were unable to act in accordance with the principle of 'fair play' (Antczak and Załączna 2012). Unfortunately, little has changed in this regard (cf. Tanajewska 2018). The situation is further exacerbated by the high demand for housing. People buy these properties because they need a place to live. Poland is experiencing a shortage of affordable housing and its distribution is uneven (Matel and Marcinkiewicz 2017; Habitat for Humanity Poland 2023). Municipalities responsible for meeting housing needs often have limited resources for municipal stock. Young people do not want to live with their parents, but they cannot afford suitable housing: prices are high, and given the current credit conditions, they can only afford properties that are small or in unattractive locations. Furthermore, investors who purchase small properties to rent out (Górski et al. 2021) drive up the demand for this type of property. Other causes of 'pathodevelopment' include an ineffective spatial planning system and inadequate supervision (c.f. NIK 2016).



Owing to the lack of statistical data, it is difficult to determine the scale of this phenomenon in Poland. However, micro-apartments and strip-field developments are arguably the most common examples of 'pathodevelopment' discussed above. According to data from the Polish Economic Institute (PIE), approximately 500 micro-apartments were offered for rent each week in 2023. The share of micro-apartments in the sales market was small (PIE 2023). Strip-field developments are popular on the outskirts of cities and in suburban areas. For example, in May 2026, 5 of the 64 single-family developments identified for sale in Łódź were strip-field developments where the furthest home was located over 500 metres from the main road (in another 16 developments the furthest home was located over 200 metres from the road). Examples of irregularly shaped apartments and developments with small, poorly equipped playgrounds can also be easily found. However, some of the cases discussed above were just incidental. In general, most residential developments completed in 2023 appear to be in line with legal regulations and social norms (GOV.pl 2023b). While 'pathodevelopment' is a marginal issue in Polish housing market, it has serious consequences and is prevalent enough, particularly in large cities, that legal changes have been introduced to restrict manifestations of 'pathodevelopment'. In July 2024, amendments were introduced to the regulation on the technical conditions that buildings and their locations must meet. These changes included changing the distance between multi-family buildings, which was increased from 4 m to 5 m from the boundary of a plot, and setting the size of playgrounds according to the number of dwellings in the development. Additionally, the minimum area of commercial premises has been set in some case at 25 m² to limit the number of micro-apartments. However, this is only a drop in the ocean of what is required. Solving the problems associated with 'pathodevelopment' will be challenging. This requires changes to the legal regulations governing construction and spatial planning, as well as a change in the mindsets of developers and buyers. Changes to Poland's housing and tax policies also seem necessary. The growth of 'pathodevelopment', which is supported by investor activity in the housing market, could be limited by imposing stricter taxes on those who own multiple rental properties. Conversely, providing long-term rentals through social housing associations could help the needs of people without housing and with moderate incomes. Additionally, there is a need to organise professional training sessions on the ethics and dissemination of the developers' Best Practices Code.

'Pathodevelopment' appears to some degree to be a feature of post-socialist countries, where people used to live in small, lower-quality apartments with inadequate infrastructure. Consequently, they are now also more willing to accept such apartments. CBOS research confirms this. In 2024, 87% of analysed Poles were satisfied with their place of residence and 69% with their living conditions, including their housing and furnishings (Feliksiak 2025). This may also be a common phenomenon in developing economies, where the institutional environment of the real estate and construction markets is still taking shape. The costs of adapting to various requirements can be so high that developers try to circumvent these regulations (Agarwalla and Mimani 2026).

This study had some limitations. First, there is a lack of academic literature on this topic. Only three articles and two books on this topic were found in the Polish literature and some publications on related topics were located in the international literature. Second, while the cases discussed merely illustrate the phenomenon of 'pathodevelopment', they demonstrate its complexity. To the best of the author's knowledge, no one has yet attempted to systematise this issue, and there are no statistics available to determine the scale of this phenomenon in Poland. The author intends to examine this issue further by using the example of developments in one specific city and probably limiting the focus to certain types of 'pathodevelopment', as new examples continue to emerge.



Further research is necessary in this area, including into the causes and consequences of this phenomenon for both buyers and housing policy in Poland. Ultimately, remedial measures must be implemented. As the causes are varied, the measures must be diverse. Simply tightening the law will not eliminate developers' negative actions.



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