The Language of Architecture: in English and in Polish

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This paper is intended as a three-layered comparison of English and Polish architectural terms. The three main areas of analysis are morphology, semantics and etymology, with some occasional references being made to terminology. The paper seeks to highlight the similarities and differences between English and Polish terms and, by bringing the three areas together, is hoped to give the architectural lexicons a more comprehensive interpretation.

Keywords: *compound, derivation, lexical relation, concept, metaphor, metonymy*

1. Introduction

The aim of this paper is to describe and compare the lexicons relating to architecture in two languages: English and Polish. Since architecture is both an engineering science and an art, the language it speaks reflects both the spirit of scientific precision and an aura of artistic freedom. This peculiar fusion of qualities makes it intriguing and worth exploring. On the other hand, confronting the English architectural terms with their Polish counterparts is promising from the linguistic contrastive point of view. The sections to follow address English and Polish architectural terms from morphological, semantic and etymological points of view.

2. Morphology

Examples of English terms given in this section have been analysed according to the classifications by Marchand (1969) and Bauer (1983), whereas the analysis of Polish terms is based on Grzegorczykowa (1979, 1984) and Szymanek (2010).

2.1 *English morphology*

Unless they are simplex forms, English terms are generally products of three fundamental processes: derivation, compounding and conversion. Derivation is richly represented by cases of suffixation, examples of which are given below, sorted by suffix:

(1)   *-esque*:   *Roman-esque*
         -ic: *Goth-ic*
         -y: *presbyter-y*
         -ade: *arc-ade*
         -er: *spring-er*
         -ory: *ambulat-ory*
         -ery: *trac-ery*
         -ress: *butt-ress*

Cases of prefixation appear to be relatively less numerous, although not rare, among architectural terms, as shown by the instances below:

(2)   *bi-:*   *bi-forium*
         tri-:   *tri-forium*
         multi-:   *multi-foil*
         tran(s)-:   *tran-sept*
         demi-:   *demi-column*
         counter-:   *counter-fort*
         non-:   *non-loadbearing*

A large proportion of architectural terms are compounds which usually are names of types or of components of buildings. They are therefore typically nominal, so their heads are always nouns but their non-heads can be nouns, adjectives or verbs. The N+N pattern is the most common among the English compounds. These can be exemplified by:

(3)   *chapter house, cross church, king post, entrance hall, collar beam, draught lobby, fan vault, floor joist, gable roof, gatehouse, panel tracery, log cabin, reception area*

Another type of compounds which are fairly common in the language of architecture are A+N compounds, such as:

(4)   *defensive work, geometric tracery, stellar vault, thermal insulation*

In the combinations like those above, the adjective is typically relational. The combination of a relational adjective with a noun should be regarded as a compound rather than a phrase (ten Hacken 1994: 67). The architectural lexicon also includes (much less numerous) instances of V+N compounds like *drawbridge, dripstone* or *treadmill*.

Derivation and compounding are normally easy to distinguish but sometimes tricky cases are encountered. The words *architrave* and *archivolt* might easily be taken for instances of the same process. However, their etymologies show that *archi-* in *archivolt* is related to the Latin noun *arcus* ('bow'), whereas *archi-* in *architrave* is an Italian modification of the Greek *arkhos* meaning "chief, prime" (Jespersen 1946: 532). *Archivolt* is, therefore, a neoclassical compound consisting of two combining forms related to the Latin *arcus* ('bow') and *volta* ('vault'), whereas *architrave* is a derivative. *Archi-* and *arch-* are spelling variants of the same prefix, which is usually added to free bases (unlike *-trave* in *architrave*) and it, then, functions as a typical class-maintaining prefix (Bauer 1983: 217), as in *archbishop*.

Conversion also finds its place among word formation processes contributing to the creation of architectural terms. Products of conversion can be illustrated by such nouns as:

(5)   *overhang, tie, tread, thrust, respond, keep, batter*

All of the instances above definitely reveal de-verbal origin, and since they denote objects (with the exception of *thrust*, which describes a process), they represent the verb-to-noun type of conversion.

2.2 Polish morphology

One of the most productive word formation processes in Polish is derivation. Its operation is particularly noticeable within suffixation, which has yielded a huge number of Polish words. Below are given selected instances of thus-produced architectural terms sorted by suffix:

(6)   *-ica:*   *głowa* 'head'   → *głow-ica* 'capital'
                   igła 'needle'   → *igl-ica* 'spire'
                   pętla 'loop'   → *pętl-ica* 'loop ornament'
        -yca: *róża* 'rose'   → *róż-yca* 'rose window'
        -ec: *klin* 'wedge'   → *klini-ec* 'arch stone'
        -arz: *kapituła* 'chapter'   → *kapitul-arz* 'chapter house'

A particular class of denominal nouns are diminutives, which are formed by appending to the base noun the suffixes *-ek* and *-ka*, or, as in the case of *wierzchołek*, by employing the composite formative *-ołek* (Szymanek 2010: 205). Normally, this operation yields a derivative denoting 'a small kind of X' but in the context of architecture these diminutives often convey specific meanings which are given in brackets below:

(7)   *wierzch* 'top'   → *wierzch-ołek* 'peak, point'
        słup 'post'   → *słup-ek* 'small post'
        koleba 'cradle'   → *koleb-ka* 'barrel vault': it resembles a rocker of a cradle
        żagiel 'sail'   → *żagiel-ek* 'spandrel': its shape resembles that of a sail
        żłób 'trough'   → *żłob-ek* 'flute': its shape resembles that of a trough
        nos 'nose'   → *nos-ek* 'cusp': it has a tapered tip, like a nose
        noga 'leg'   → *nóż-ka* 'springer': it bears an arch in the way legs bear the body
        sługa 'servant'   → *służka* 'respond': its function is like the role of a servant
        żaba 'frog'   → *żab-ka* 'crocket': from a distance it looks like a small frog

As for prefixation, most of its instances are connected with the derivation of perfective verbs. Such derived verbs subsequently form the basis for nominalization, as shown by the examples below:

(8)   *kleić* V Imperf 'glue   → *s-klejać* V Perf 'glue together' → *sklej-ka* N 'plywood'
        kończyć V Imperf 'finish'   → *wy-kończyć* V Perf 'finish' → *wykończ-enie* N 'finish'
        wlec V Imperf 'drag'   → *po-wlekać* V Perf 'coat' → *powlek-anie* N 'coating'
        ciągnąć V Imperf 'pull'   → *ś-ciągnąć* V Perf 'tie together' → *ściąg-acz* N 'tie'
        grzać V Imperf 'heat'   → *o-grzać* V Perf 'heat' → *o-grzew-anie* N 'heating'

On the one hand, the prefixes in the words above are not involved in the process of nominalization and therefore, could be ignored within this analysis. On the other hand, they are present in so many nouns and are so eye-catching that it seemed reasonable to make this brief reference to the problem of morphological representation of aspect in verbs.

The other of two most productive word formation processes in Polish is compounding. Generally, Polish compounds fall into three classes. The "classic type" compounds, such as *śrub-o-kręt* ('screwdriver') consist of two stems connected by means of a linking vowel, usually *-o-* or *-i-*. Another type of compound to be found in Polish are *solid compounds* (Szymanek 2010: 224), whose Polish name is *zrosty* (Grzegorczykowa 1979: 59).

Unlike compounds with an interfix, solid compounds reveal an internal syntactic dependence between the two lexemes which is realized through inflectional means (Szymanek 2010: 224). This dependence can be either of the agreement type or of the government type (Grzegorczykowa 1979: 59), as shown below:

(9)   agreement: *Wielkanoc* 'Easter' (*wielka*$_{\text{Adj Fem}}$ 'great' + *noc*$_{\text{N Fem}}$ 'night')
       government: *psubrat* 'rogue' (*psu*$_{\text{N Dat}}$ 'dog' + *brat*$_{\text{N Nom}}$ 'brother')

Of particularly frequent usage in Polish are *juxtapositions*, such as *wieczne pióro* (lit. 'perpetual pen', i.e. 'fountain pen'), in Polish known as *zestawienia* (Grzegorczykowa 1979: 59). A juxtaposition is a combination of two or more words which functions as the name of a single designatum. Thus, in *wieczne pióro*, the meanings of the individual words, that is, *wieczny* 'perpetual' and *pióro* 'pen' are not interpreted by speakers separately but the whole combination is automatically lexicalized and perceived as the name of the particular object. Architectural terms abound in juxtapositions, which can be exemplified by the following instances:

(10)   *kotew ścienna* (*kotew*$_{\text{N}}$ 'tie, anchor' + *ścienny*$_{\text{Adj}}$ 'wall$_{\text{Attr.}}$', i.e. 'wall tie')
        legar stropowy (*legar*$_{\text{N}}$ 'joist' + *stropowy*$_{\text{Adj}}$ 'ceiling$_{\text{Attr}}$')
        żebro jarzmowe (*żebro*$_{\text{N}}$ 'rib' + *jarzmowy*$_{\text{Adj}}$ 'yoke$_{\text{Attr}}$', i.e. 'transverse rib')
        belka tęczowa (*belka*$_{\text{N}}$ 'beam' + *tęczowy*$_{\text{Adj}}$ 'rainbow$_{\text{Attr}}$', i.e. 'rood beam')
        łęk przyporowy (*łęk*$_{\text{N}}$ 'arch' + *przyporowy*$_{\text{Adj}}$ 'buttress$_{\text{Attr}}$', i.e. 'flying buttress')

Less numerous are cases of "classic type" compounds, such as:

(11)   *wiatrołap* (*wiatr* 'wind' - o - *łap* 'catch', i.e. 'draught lobby')
        wodociąg (*woda* 'water' - o - *ciąg* 'draw', i.e. 'water supply system')

Architectural terms also include lexicalized phrases, such as those listed below:

(12)   *maswerk z laskowaniem* (lit. 'tracery with bars', i.e. 'bar tracery')
        dach kryty dachówką (lit. 'roof covered with tiles', i.e. 'tiled roof')
        konstrukcja o szkielecie drewnianym (lit. 'construction with wooden skeleton',
                                              i.e. 'timber-framed construction')

On the other hand, the instances below could be regarded as Polish counterparts of English N+N combinations:

(13)   *skrzyżowanie naw* (*skrzyżowanie*$_{\text{N}}$ 'crossing' + *nawa*$_{\text{GenPl}}$ 'nave')
        wieniec kaplic (*wieniec*$_{\text{N}}$ 'wreath, ring' + *kaplica*$_{\text{GenPl}}$ 'chapel', i.e. 'chevet')
        łuk Tudorów (*łuk*$_{\text{N}}$ 'arch' + *Tudor*$_{\text{GenPl}}$ 'of Tudors', i.e. 'Tudor arch')
        Brama Niebios (*brama*$_{\text{N}}$ 'gate' + *niebiosa*$_{\text{GenPl}}$ 'heaven')
        krzyż św. Andrzeja (*krzyż*$_{\text{N}}$ 'cross' + *św. Andrzej*$_{\text{NGen}}$ 'St Andrew's')
        koło św. Katarzyny (*koło*$_{\text{N}}$ 'wheel' + *św. Katarzyna*$_{\text{NGen}}$ 'St Catherine's')

In each of them the connection between the two elements is based on the Genitive-case link, so it is of a syntactic nature. On the other hand, each of them has a fixed denotational

reference; therefore, they should all be treated as lexicalized phrases. According to ten Hacken (2013) genitive constructions are in general ambiguous between phrasal and compounding interpretations. However, since in cases such as the examples given here they are naming units, with a preference for categorization as a single rather than two different entities, the compounding interpretation seems well-justified (2013: 104).

One type of compounds mentioned in Grzegorczykowa (1979) appears to have no representation among architectural terms. These are solid compounds, no instances of which have been identified among the terms studied for this paper.

3. Semantics

In a semantic analysis architectural terms can be examined according to the methodology of componential analysis. Below is an attempt at adapting the method used by Riemer (2010) for representing some terms relating to the structure of a gothic church:

	To be used by congregation	Used to enter the church	Located in the east section	Located longitudinally	Located centrally
nave	+	−	−	+	+
aisle	+	−	−	+	−
chancel	−	−	+	+	+
porch	+	+	−	−	−
sacristy	−	−	+	−	−

Table 1 *Representation of some terms related to the structure of a gothic church*

This kind of analysis, in fact amounts to specifying class memberships and has been criticised for its lack of accuracy and even failure to attain its goal (Kempson 1977: 20). It appears that for a semantic description of nouns – and architectural terms are mostly nouns – a more useful solution is the theory by Pustejovsky (1991), who postulates decomposition of the meaning of nouns in a fashion inspired by Aristotle. An attempt can be made at representing an architectural term according to Pustejovsky's theory of qualia structure:

(14)   *buttress (*x*)*
             Const: structural support (*x*)
             Form: external (*x*), vertical (*x*)
             Telic: support (P, *x*, y)
             Agentive: artefact (*x*), build (T, z, *x*)

Pustejovsky's formalism reads as follows: a buttress is an element of structural support, it is typically external and vertical, its purpose is supporting (a wall), and it is an artefact created through a transition process of building.

Many architectural terms are N+N compounds, which are inherently ambiguous (as has been pointed out by many authors). An interesting proposal for resolving this ambiguity is offered by Jackendoff (2009), who propounds introducing the notion of *coercion* understood as 'coerced function F' and suggests a list of possible basic coerced functions for English compounds (2009: 123,124). Jackendoff's theory can be applied for a description of architectural terms, which is illustrated by the instances below:

(15) $stone_1\ skirt_2$ = $SKIRT_2\ \alpha$; [X MAKE (α, FROM $STONE_1$)]
        $gate_1house_2$ = $HOUSE_2\ \alpha$; [PART-OF (α, $GATE_1$)]
        $chancel_1\ isle_2$ = $ISLE_2\ \alpha$; [LOC (α, AROUND $CHANCEL_1$)]
        $fan_1\ vault_2$ = $VAULT_2\ \alpha$; [SIMILAR-TO (α, FAN_1)]
        $chip_1\ board_2$ = $BOARD_2\ \alpha$; [COMP (α, $CHIP_1$)]
        $escape_1\ stair_2$ = $STAIR_2\ \alpha$; [SERVES-AS (α, $ESCAPE_1$)]

In semantics, the facts discovered and the relations identified in one language generally tend to hold true for the other. If X is a hyponym of Y in English, the relation between the Polish counterparts of X and Y is expected to be the same. The reason for this overlap is that semantics homes in on concepts rather than forms, and concepts are largely shared between languages (unless the latter represent significantly different cultures). Below are some examples of lexical relations which obtain between selected pairs of English architectural terms.

(16)   hyponymy: *chapel*   :   *Lady Chapel*
                     roof   :   *pitched roof*
                     bridge   :   *drawbridge*

        meronymy: *pinnacle*   :   *crocket*
                     crenallation :   *merlon*
                     gatehouse   :   *portcullis*

        synonymy: *ambulatory*   :   *chancel aisle*
                     boss   :   *keystone*
                     drawing room :   *lounge*

If the English terms above are replaced with their Polish counterparts, the relations will stay the same for hyponymy and meronymy. On the other hand, synonymy often encroaches upon the subtle matter of varying connotations as well as pragmatic and society-related choices. Therefore, cases of synonymy (or near-synonymy, to be exact) should be studied with reference to a particular language. An interesting case is that of *sitting room* : *lounge* : *drawing room*. Whereas each of them denotes a room intended for relaxation and social life, they are, as Fox (2004: 78) observes, associated with different social classes: *drawing room* and *sitting room* with the upper class, *lounge* with the middle class. Their connotations are, therefore, different, which implies that they should be treated as cases of near-synonymy rather than absolute synonymy.

As regards antonymy, instances are not numerous since architectural terms generally do not reflect qualities or processes. Nevertheless, it can be claimed that the pairs: *scarp : counterscarp* and *crenel : merlon* do represent antonymy. In the former, the oppositeness of meaning is automatically suggested by the prefix *counter-*; in the latter, it takes some encyclopaedic knowledge to visualise how crenels and merlons complement each other within a crenellation. Therefore, *crenel* and *merlon* can be metaphorically treated as complementaries, logically parallel with the adjectives *empty* : *full*.

What is often language-specific are problems related to polysemy and metaphor, where individual languages can follow their own paths of mental association. Below are some

examples of metaphor-driven Polish architectural terms which are based on polysemous words:

(17) *rzygacz* 'gargoyle'   orig. 'vomiter'
      plwacz 'gargoyle'   orig. 'spitter'
      hełm 'spire'   orig. 'helmet'
      jarzmo 'arched brace'   orig. 'yoke'

In some cases, the metaphor develops in the same direction in an English term and in its Polish counterpart. For example, the polysemous structure in English *facade* and in Polish *fasada* is the same. In other cases, metaphors extend in different directions: for instance, in *concrete curing* the association is of medical nature, while in its Polish counterpart, *dojrzewanie betonu*, the metaphor is based on the notion of maturation.

4. Etymology

Etymology is the study of histories of individual words. It largely draws upon historical linguistics, whose scope includes studies of semantic change, but it also relies heavily on contact linguistics, which provides theories of borrowing, a process that accounts for the origin of thousands of both English and Polish words.

4.1 *Semantic change*

When a diachronic perspective is chosen, both English and Polish terms reveal effects of classical processes of semantic change, or again, of the operation of metaphor and, quite frequently, of metonymy. The latter is exemplified by the following English examples:

(18) *rusticate*   'assume rural manners; live a country life' >
                     'mark masonry by sunk joints or roughened surfaces'

      study   'thought or meditation directed to the accomplishment of a purpose' >
                     'room in a house furnished with books and used for private study, writing, etc.'

      tracery   'place for tracing or drawing' > 'intersecting ribwork in the upper part of a Gothic window' (an effect of work performed in a tracery room)

Similar examples can also be found among Polish architectural terms, such as those quoted below:

(19) *dziedziniec*   originally *dzieciniec*: 'something connected with children' >
                      'courtyard, where children could find shelter during a siege'

      gospoda   originally 'lord's house' > 'inn, where guests experience hospitality'

      służka   originally 'servant' > 'respond, which serves to support a vault'

As the examples below show, in *metonymy* there is no obvious resemblance, but a contiguity of senses. Therefore, along with employing one's powers of association, one has to draw upon some encyclopaedic knowledge in order to see the link between the core meaning and the derived (here architectural) sense.

4.2 *Borrowing*

Historically, both English and Polish indigenous populations were agricultural peoples living in the country, whereas the later mediaeval city communities consisted largely of foreign settlers. This implies that both English and Polish architectural terms relating to simple country huts should be old native words, whereas terms applying to the structure of castles, big churches and opulent residences which were built by and for the incoming foreigners should predominantly be borrowings.

4.2.1 *English terms*
The examples given below represent basic architectural terms which are native English words with a history going back to Anglo-Saxon times:

(20)   *house* (OE: *hūs*), *door* (OE: *duru*), *floor* (OE: *flōr*), *eaves* (OE: *efes*),
        hall (OE: *hall, heal*), *kitchen* (OE: *cycene*), *roof* (OE: *hrōf*),
        stove (OE: *stofa*), *thatch* (OE: *þeccean 'cover'*), *threshold* (OE: *þerscold*)

The Anglo-Saxon period includes the time of the Scandinavian influence, which brought into the architectural lexicon such items as:

(21)   *bond* (ON: *bóndi*), *loop* (ON: *hlaup*), *skirt* (ON: *skyrta*), *thrust* (ON: *þrysta*)
        window (ON: *vindauga* 'wind + eye')

On the other hand, it is borrowing from Old French that accounts for the existence of numerous architectural terms denoting more sophisticated manifestations of the craft, like those relating to the structure of a gothic cathedral:

(22)   *crocket* (OF: *croket, croquet*), *chapel* (OF: *chapele*), *gargoyle* (OF: *gargouille*),
        presbytery (OF: *presbiterie*), *springer* (OF: *espringuer*), *chancel* (OF: *chancel*),
        pier (OF: *piere 'stone'*), *pillar* (OF: *piler*), *respond* (OF: *respondre*), *vault* (OF: *voute*),
        parclose (OF: *parclos*), *trave* (OF: *trave 'beam'*), *severy* (OF: *civorie*),
        trefoil (OF: *trefeuil*), *buttress* (OF: *bouterez*), *pinnacle* (OF: *pinnacle*)

Many architectural terms were borrowed into English from French after Standard French had taken shape. Instances of such words are given beneath:

(23)   *hut* (Fr: *hutte*), *cabin* (Fr: *cabane* 'temporary shelter'), *chevet* (Fr: *chevet* 'pillow'),
        counterfort (Fr: *contrefort*), *toilet* (Fr: *toilette*), *sash* (Fr: *chassis*), *merlon*
        (Fr: *merlon*), *latrine* (Fr: *latrine*), *barbican* (Fr: *barbicane*), *redoubt* (Fr: *redoute*),
        garderobe (Fr: *garder* 'keep' + *robe* 'robe'), *emplacement* (Fr: *emplacement*),
        caponier (Fr: *caponniere*), *rampart* (Fr: *rempart*), *embrasure* (Fr: *embrasure*),
        meurtriere (Fr: *meurtriere* 'murderess'), *oubliette* (Fr: *oublier* 'forget')

Latin has been affecting English for more than a thousand years (recently, through some neoclassical compounds). As a result, English contains borrowings from Classical, Mediaeval and Modern Latin (In some cases it is difficult to determine whether a word was borrowed into English directly from Latin or through French, or even simultaneously both ways). The list below is chronological and it contains examples preceded by attestation dates reflecting the earliest attested use of each word in its architectural sense:
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(24)   725: *tile* (Lat. *tēgula*), 825: *temple* (Lat. *templum*),1000: *altar* (Lat. *altāre*), 1185: *triforium* (Lat. *triforium*), 1290: *joint* (Lat. *junctus* 'joined'),1290: *porch* (Lat. *porticus*), 1290: *capital* (Lat. *capitellum*), 1425: *fortalice* (Lat. *fortalitia*), 1456: *ventilation* (Lat. *ventilatio*),1483: *refectory* (Lat. *refectorium*), 1485: *dormitory* (Lat. *dormitorium*),1497: *ceiling* (from Lat. *caelum* 'heaven'), 1586: *refuge* (Lat. *refugium*), 1593: *lobby* (Lat. *lobium*), 1609: *necessary* (Lat. *necessaris*), 1623: *ambulatory* (Lat. *ambulatorium*),1637: *nave* (Lat. *navis* 'ship'), 1656: *dome* (Lat. *domus*), 1664: *conservatory* (Lat. *conservatorium*), 1813: *cusp* (Lat. *cuspis* 'point'), 1822: *insulation* (Lat. *insulatus* from *insula* 'island'),1834: *concrete* (Lat. *concretus* 'grown together')

The borrowings from Italian date mostly from the 16th and 17th centuries and typically denote elements of fortifications. Below are some instances of such words:

(25)   *bastion* (It. *bastione*), *banquette* (It. *banchetta* 'small bench'), *parapet* (It. *para* 'protecting' + *petto* 'breast'), *scarp* (It. *scarpa*), *counterscarp* (It. *controscarpa*), *terreplein* (from It. *terrapienare* 'fill with earth')

There are plenty of other languages from which English has borrowed over many years of its evolution. Like other fields, the architectural domain is a linguistic patchwork consisting of pieces of various origins. For instance, *bulwark* comes from the Middle Dutch *bolwerk,* while *cross* derives from the Old Irish *cros.* Then, *wimperg* is an importation of the German *Wimperg*, and *bungalow* is based on the Hindi *baṅglā* 'belonging to Bengal'. To use an architectural term, English lexis is very *eclectic* (a borrowing again: from Greek *eclecticos* 'selective').

4.2.2 *Polish terms*
The basic Polish terms relating to house structure and the house-building technology typically have a *Proto-Slavic* origin, as exemplified by the reconstructed items below:

(26)   *dom* 'house' (**domъ*), *izba* 'room' (**istъba*), *gród* 'fortified settlement' (**gordъ* 'fence'), *krokiew* 'rafter' (**krokъ* 'leg'), *piec* 'stove' (**pektъ* 'device for baking'), *próg* 'threshold' (**porgъ*), *okno* 'window' (**okъno*), *ściana* 'wall' (**stena*), *wieża* 'tower' (*véža* 'tent, yurt, movable shelter'), *wrota* 'gate' (**vorta*), *podłoga* 'floor' (from **podložiti* 'to put something under something else'), *wrota* 'gate' (**vorta*), *sklepienie* 'vault' (**sъklepъ* 'cellar', *sъklepnǫti* 'to connect')

The architectural terms borrowed from Czech are mostly words connected with church design. These words came to Poland together with Czech priests who brought Christianity to this country. The words in question include such terms as:

(27)   *kościół* 'church' (Cz. *kostel*), *krzyż* 'cross' (Cz. *križь*), *ołtarz* 'altar' (Cz. *oltář*),
         łuk 'arch' (Cz. *luk*), *kaplica* 'chapel' (Cz. *kaplica*)

Many words constituting the jargon of architecture have their roots in Middle High German, as shown by the examples below:

(28)   *buda* 'shack, cabin' (MHG: *būde*), *dach* 'roof' (MHG: *dach*),
         kuchnia 'kitchen' (MHG: *kuchen*), *ganek* 'gallery' (MHG: *ganc*),
         komin 'chimney' (MHG: *kamīn*), *stodoła* 'barn' (MHG: *stadel*),
         strych 'attic' (MHG: *esterîch*), *wał* 'rampart' (MHG: *wal*),
         furta 'gate' (MHG: *pforte*), *gmach* 'building' (MHG: *gemach*),
         kruchta 'church porch' (MHG: *gruft*), *ratusz* 'town hall' (MHG: *rathûs*),
         szaniec 'earthwork' (MHG: *schanze*), murłata 'wall post' (MHG: *mürelatte*),
         legar 'joist' (MHG: *leger*), *rynna* 'gutter' (MHG: *rinne*)

Latin has supplied many architectural terms developed in ancient times, as exemplified by:

(29)   *transept* 'transept' (Lat. *trans* 'across' + *saeptum* 'partition'),
         nawa 'nave' (from Lat. *navis* 'ship'), *chór* 'choir' (Lat. *chorus*),
         kolumna 'column' (Lat. *columna*), *fosa* 'moat' (Lat. *fossa*),
         kurtyna 'curtain' (Lat. *cortina*), *cysterna* 'cistern' (Lat. *cisterna*),
         wentylacja 'ventilation' (*ventilation*), *plinta* 'plinth' (Lat. *plinthus*),
         portyk 'portico' (Lat. *porticus*), *westybul* 'vestibule' (Lat. *vestibullum*)

In the Middle Ages, terms related to science and arts were mostly coined by learned men who preferred Latin to vernacular languages, which they considered to lack sufficient refinement and precision required for expressing subtleties of meaning. This also applies to the language of architecture and can be exemplified by such terms as:

(30)   *presbiterium* 'presbytery' (Med. Lat. *presbyterium*), *stalla* 'stall' (Med. Lat. *stallum*),
         zakrystia 'sacristy' (Med. Lat. *sacristia*), *fortalicja* 'fortalice' (Med. Lat. *fortalicium*),
         lektorium 'lectern' (Med. Lat. *lectorium*), *komnata* 'chamber' (Med. Lat. *caminata*),
         tympanon 'tympanum' (Med. Lat. *tympanum*), *portal* 'portal' (Med. Lat. *portale*),
         refektarz 'refectory' (Med. Lat. *refectorium*), *tryforium* 'triforium' (Med.Lat.
         triforium)

The Renaissance and the following centuries brought a fashion for the French lifestyle, which is reflected by a large number of borrowings from that language. For example:

(31)   *arkada* 'arcade' (Fr. *arcade*), *kolumnada* 'colonnade' (Fr. *colonnade*),
         archivolta 'archivolt' (Fr. *archivolte*), *balustrada* 'balustrade' (Fr. *balustrade*),
         fasada 'facade' (Fr. *façade*), *rozeta* 'rose window' (Fr. *rosette*),
         pinakiel 'pinnacle' (Fr. *pinnacle*), *gargulec* 'gargoyle' (Fr. *gargouilles*),
         konsola 'console' (Fr. *console*), *donżon* 'donjon' (Fr. *donjon*)

Another language from which Polish has taken many architectural terms is Italian, as evidenced by the instances below:

(32)   *parapet* 'window sill' (It. *parapetto*), *barbakan* 'barbican' (It. *barbacane*),
        kazamata 'casemate' (It. *casamatto*), *palisada* 'palisade' (It. *palissade*),
        bastion 'bastion' (It. *bastione*), *sufit* 'ceiling' (It. *soffitto*),
        loggia 'loggia' (It. *loggia*), *fronton* 'frontage' (It. *frontons*),
        kopuła 'dome' (It. *cupola*), *altana* 'summer house' (It. *altana*),
        piano nobile 'piano nobile' (It. *piano nobile*)

The jargon of architecture also contains less numerous sets of terms adopted from other languages. The oldest source of borrowings is Greek, on the basis of which Polish has formed such words as *apsyda* 'apse' (from *apsís* 'vault') or *glif* 'embrasure' (from *glyphé* 'carving'). On the other hand, a Russian contribution to the Polish mediaeval word-stock is *stołp* 'donjon' (*stołp* 'pole').

5. Conclusions

The idea of this study is to attempt to view the architectural vocabularies in English and in Polish from a multilateral linguistic perspective. Such an approach is tempting since usually individual branches of linguistics operate within strictly defined areas and tend to cease to follow a path of analysis when a boundary of a given linguistic level has been reached. For example, in a morphological analysis, once the root of a word has been isolated, its analysis does not follow, as this would mean abandoning morphology and entering the shaky ground of etymology.

Nevertheless, if one chooses to examine the same linguistic material from a variety of angles, this will offer an opportunity to keep in sight the multidimensional character of linguistic forms. Thus, morphology focuses on the engineering of words in word-formation; semantics explores their conceptual structures and arranges them into lexical fields; etymology unveils their histories; terminology treats them as names denoting objects of the domain. The idea of this study is to juxtapose these perspectives in order to try to produce a complex linguistic representation of the architectural vocabularies in the two languages. The findings presented in this thesis lead to the following conclusions.

In semantics and terminology, the facts discovered and the relations identified in one language generally tend to hold true for the other. If X is a hyponym of Y in English, the relation between the Polish counterparts of X and Y is expected to be the same. If a terminological definition sets particular criteria for an English term, its Polish counterpart usually receives the same description. The reason for this overlap is that semantics and terminology home in on concepts rather than forms, and concepts are largely shared between languages (unless the latter represent significantly different cultures). The areas outside this overlap include problems related to polysemy and metaphor, where individual languages can follow their own paths of mental association.

The meanings of architectural terms can be successfully analysed by studying the lexical relations between them. The relations which are particularly richly represented here are meronymy and hyponymy. Architectural terms have no antonyms, and they often share their concepts with their synonyms (or near-synonyms, to be exact). On the other hand, if

lexical meanings are to be studied through the individual analysis of specific items, it appears that Pustejovsky's *qualia structures* or Jackendoff's use of *coercion* are more finely tuned tools for investigating architectural terms than componential analysis, as these two methods pay more attention to strictly physical qualities of and relations between objects, whose meanings are studied. The lexicon of architecture is also a favourable ground for cognitivist explorations, such as studies of salient categories and image schemata. Another frequent feature of architectural terms is their polysemous nature. Terms of architecture are often rich in metaphorical content, which can be interpreted according to both classical and cognitivist theories of metaphor. In some cases, a metaphor develops in the same direction in an English term and in its Polish counterpart, while in other cases, metaphors take divergent courses.

Metaphor is where semantics and terminology follow different approaches: since polysemy and metaphor involve jumping from one domain to another, these notions run counter to the fundamental goal of terminology, i.e. providing strict definitions of terms with reference to specific domains. As a result, the terminological treatment of architectural terms is extremely accurate but, in the eyes of a non-specialist, this can be disappointingly confining, as the precision has been achieved at the cost of lost polysemies and metaphors. On the one hand, terms are now unambiguously defined but on the other, much of the linguistic connective tissue (if this biological metaphor is not out of place here) has been removed. If *chevet* is strictly defined as 'apse with an ambulatory giving access behind the high altar to a series of chapels set in bays', and its link to the French sense of 'pillow' is lost out of sight, then one stops perceiving the chancel as an element resembling the head of a person lying on that pillow, and, consequently, linking the image of a church as a whole with that of a human figure.

The main area of difference between the English and Polish sets of terms is morphology. Unless they are simplex forms (and as such, beyond the interest of morphology), English terms are products of derivation, less frequently of conversion, and very often, of compounding. These compounds are all nominal, so their heads are always nouns but their non-heads can be nouns, adjectives or verbs. The N+N pattern is the most common among the English compounds. By contrast, Polish compounds do not include the V+N type; if the N+N type occurs, it is based on the genitive-case link, whereas the prevalent type is the RA+N pattern, more frequently with inverted word order. This RA+N (or rather N+RA) pattern is classified by Polish morphologists as *juxtaposition*, whose morphological status is controversial. Polish also abounds in derivatives, which lend themselves well to classical semantically-oriented classifications. For example *spiż-arnia* ('larder') is a *nomen loci* derived from the obsolete *spyża* ('food'), whereas *zwor-nik* ('keystone') is a *nomen instrumenti* originating from *zwierać* ('bring together'). Furthermore, some Polish derivatives have a phrasal origin, as seen in *międzymurze* ('intermural space'), which clearly comes from the prepositional phrase *między murami* ('between walls').

When a diachronic perspective is chosen, both English and Polish terms under analysis reveal effects of processes of semantic change, such as broadening or narrowing, or, if studied from the cognitivist point of view, the results of the operation of metaphor and metonymy. In this respect, the findings tend to be roughly parallel in English and Polish. However, further etymological explorations inevitably lead us to acknowledging the process of borrowing and point at its different sources in the two languages. In the Middle Ages, English borrowed first from Old Norse, and then, on a very large scale, from Old French and from Anglo-Norman. Roughly at the same time, Polish absorbed first Czech words, and later on, huge numbers of Middle High German lexemes. The Renaissance and the following

centuries witnessed an influx of Modern French and Italian words, both into English and Polish. The sources of borrowing are then different for English and Polish but historically, the patterns of the processes are again, in a sense, symmetrical. Both English and Polish first borrowed from a closely related language, and then, on a massive scale, from a more foreign tongue, perforce together with its distinctly different culture and traditions. Subsequently, both English and Polish were simultaneously affected by the same influences.

On the hole, it appears that architectural terms form a representative set of words and expressions, the study of which complements linguistic descriptions of English and Polish and may serve as an inspiration for research into such fields as history, anthropology or ethnology.

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