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MEDIEVAL CHURCHES AND SETTLEMENT STRUCTURES: "ECCENTRICALLY" LOCATED VILLAGE CHURCHES

Keywords

medieval church
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natural threats

Abstract

The goal of the article is to highlight the yet unappreciated but often-problematic interpretational testimonial value of eccentrically located churches (up to about 1km away from the adjacent village). The subject of study is the consideration of a range of aspects and processes that could have influenced the eccentric location of the churches, including potentially destructive natural processes such as floods or slope deformations.

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The Testimony of Churches About the Development and Transformation of Settlement

The development and transformation of settlements represents one of the key medieval topics with overlaps into the post-medieval period. Mapping the study of the topic and its scope today would make for an independent essay and even then, much would be mentioned only very briefly or not at all. In terms of the transformations of settlements, we may think of the macro and micro perspectives. In the first case, this is the development and transformation of settlement on a broader scale, such as within historic regions (royal, noble, and monastic domains, etc.), while the latter deals with the transformation of a settlement on the local level. We know of cases where settlements moved several kilometres, as well as much shorter distances, which are cases that especially require archaeology or construction historical surveys. Comparatively, the localization of individual phases of settlement by interpreting written sources is practically impossible. One of the indicators of the transformation of settlement structures are medieval churches. There are rather common cases where a solitary originally Gothic (or even Romanesque) church is the only relic of an abandoned village. Churches are also often witnesses to the spatial development within the town or village, such as churches outside towns (that in the case of fortified towns were outside the walls) or churches that made up one of the forming centres of the village; and finally there are those churches that are in an eccentric position vis-à-vis the centre of the settlement. If this article is to focus on the testimony of medieval churches in the context of the history of settlement, specifically just the group of "eccentric" churches, we must first discuss the starting points, potential, and the meaning/benefit of this approach.[1]

We will focus on **rural areas** (villages and lesser towns) where historical settlement structures have been preserved more authentically than in urban environments and where the possibilities to reconstruct the past are more favourable than in cities where old settlements on the outskirts were rebuilt many times over the years. The specific group discussed here are **"eccentric" churches**, which we define as those that

[1] The literature about Gothic sacred architecture and its testimonial value is so extensive that not even a selection can be listed here; many examples will be listed in the text, but it's sufficient here to note three recent territorially limited detailed studies (with extensive bibliographies), that show the intensive interest into rural Gothic sacred architecture within the broader framework of settlement development and administrative structures: Dalibor PRIX – Eliška RACKOVÁ – Jiří SLAVÍK, Středověké venkovské kostely východních Čech I. Archidiakonát hradecký (do roku 1378) I, Praha 2020; II, Praha 2022; Jaroslav SKOPEC et al., Středověké venkovské kostely okresu Louny, Ústí nad Labem 2022; Václav NEČADA, Řečický děkanát a jeho klérus do roku 1436, Brno 2023. They are based on cataloguing localities in defined regions that are the base for extensive thematically structured passages (see Eliška RACKOVÁ, Kostel, osídlení a farní síť ve středověku, in: D. PRIX – E. RACKOVÁ – J. SLAVÍK, Středověké venkovské kostely východních Čech I (see above), pp. 29–49 on the relations between settlement and the parish network).

survive in a village's conurbation but stand alone several hundred meters up to one kilometre away from the historical centre. There are dozens of these cases in the Czech lands. It is thus not a common situation, but also not exceptional. In any case, it evokes questions about the contexts and causes of the situation that we see today. Practically in all cases, the situation today corresponds to that of the second half of the 18th century, which is the oldest period for which we have reliable testimonies about the special relations between the village (settlement) and the church using maps from the first military mapping. "Eccentric" churches can be found in all parts of the country, both the interior and the border areas, without conclusive ties to the developmental phases of the settlement as testified to by the varied range of church dedications or the variable altitude of the individual locations.[2]

As is often true, there can be a deep chasm between a simple listing of "facts" (either from the written sources or the testimony of architecture, art, or material culture in its wider meaning), and their interpretation in the proper context in the development of settlement structures. The retrospective testimony of surviving written or cartographic sources documenting the outlines of the historic centres of towns and villages is tricky, and they show that even the stable cadastre (from the second quarter of the 19th century, by far the most precise and most detailed mapping of its time), has its limits in projecting the captured state into the past.[3] The questions we are seeking answers to also touch upon the mechanisms of forming village plans and the influences and aspects utilized. What can we learn from well documented situations on maps (from the mid-18th century and sporadically for an older period, such as the mapping of Jewish communities from 1727/1728), or from archaeological research that reflects the medieval state in this respect?[4] The simple discovery that village plans can be differentiated into several basic types suggests ideas about the creation of these types (the

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[2] The study of patronage as a source for the history of settlements has a long tradition in Czech historiography; the latest relevant text is listed in the introduction to Petr JOKEŠ, Patrocinium svatého Mikuláše a středověká Morava, in: Pro pana profesora Libora Jana k životnímu jubileu, ed. Bronislav Chocholáč et al., Brno 2020, pp. 181–189.

[3] The opportunities and limits of cartographic sources and chiefly the stable cadastre were observed repeatedly in recent decades, primarily in Matin DOHNAL, Vesnická sídla a kulturní krajina na Táborsku v 15. –19. století, Praha 2006; IDEM, Svědectví písemných pramenů k otázce vyměřování velkých návsí na Rakovnicku, Historická geografie 39, 2013, pp. 213–235; for the regular ordering of villages, see IDEM, Regulace vesnického osídlení a krajiny ve středověké a novověké severní Evropě, Český lid 96, 2009, pp. 279–308; collectively Jiří ŠKABRADA, Nástin vývoje vesnických půdorysů a plužin v Čechách. K výpovědní schopnosti map stabilního katastru, Brno 2022 (an overview of heretofore research pp. 18–26); while inspiration can still be taken from Zdeněk BOHÁČ, Katastry – málo využitý pramen k dějinám osídlení, Historická geografie 20, 1982, pp. 15–87.

[4] Filip PAULUS – Šárka STEINOVÁ et al., Krajina a urbanismus na rukopisných plánech 18. století. Translokační plány židovských obydlí v zemích Koruny české v letech 1727–1728, Praha 2020.

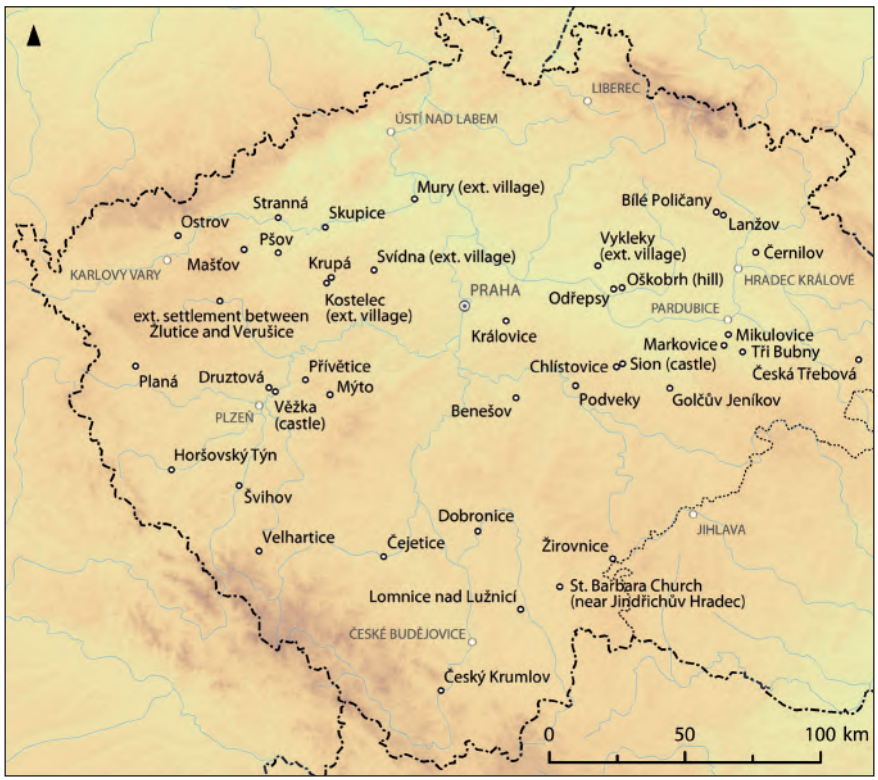
settlement's ties to road; the order of homesteads within the village; and the structure of fields corresponding to the character of the terrain and thus the possibilities of land use); hypothetically capturing relics of unrealized intentions (an example could be the interpretation of the enormously extensive village centres in the region of Rakovník); as well as the question of the planned surveying of future settlements with pre-determined proportions.

Fig. no. 1. The originally Gothic church of St. James bellow Hartenštejn Castle is a remnant of the village of Krašnov, which was abandoned with the foundation of Bochov (whose square is only 1km away from the church). The photo from Hungerberg Castle shows Hartenštejn Castle in the middle, on the right the Church of St. James in a copse of trees, and the centre of Bochov is on the left (not pictured). – Photo Robert Šimůnek (2022).

Connections to settlements have been primarily studied in the case of originally Romanesque (partially also Gothic) churches that verifiably connected to an older settlement tradition.[5] It is rather surprising that **eccentric positions of churches in relation to the centre of village settlements** remain rather rare within this frame-

[5] Model studies include Jan HAJŠMAN – Robert TRNKA, Pravěké a středověké osídlení v okolí kostela sv. Jakuba Většího na Prusinách, in: Sborník Západočeského muzea v Plzni 19, 2008, pp. 157–172; Petr ROŽMBERSKÝ – Milan ŘEHÁČ – Jiří ORNA, Srbická Hůrka – vývoj osídlení, kostel sv. Víta a jeho sídelně-historický kontext, Archeologie západních Čech 2, 2011, pp. 163–172; Vojtěch PEKSA, Očihov. Sídelně historické souvislosti kostela sv. Martina, Dějiny staveb 2014, pp. 109–116; Jan FROLÍK, Kostel sv. Václava v Lažanech a počátky středověkého osídlení Skutečska I. Katalog, Praha 2017; II. Analýza, Praha 2019; Milena HAUSEROVÁ, Několik pohledů do stavebních dějin kostela sv. Markéty u Královic, Památky středních Čech 35, 2021, no. 2, pp. 1–27.

work as a testimony about the unique development of the given settlement. The subject of the following essay is how churches of these types could be inspirational for the development of settlement structures and what aspects played or could have played a role when choosing the position of the church (reflected in its ties to a settlement). The goal is not to be exhaustive, not just in terms of interpretations (which is hardly possible), or to list all locations of the discussed type. Those selected are model cases. They are illustrative in a general way, and primarily localities that were previously archaeologically excavated where the results of which can be confronted with the testimony of written and cartographic sources as well as the construction of the church itself.



Map no. 1. A map of the locations mentioned in the text. – Sources: Robert Šimůnek, cartographically processed by Jiří Krejčí.

"Eccentric" Churches – Witnesses to Historical Development

The **cartographer Jan Kryštof Müller** was among the first to document **solitary churches** three hundred years ago, marking these structures on his map of Bohemia (1720). He also created a new label for them: "*templa solitaria*". And though it may not appear that way at first glance, there are nearly 400 on the map – specifically 396, of which 128 were not labelled. Müller did not differentiate the structures according to age, so this includes post-medieval solitary churches and chapels as well. Furthermore, some (evidently solitary) churches are missing as are others whose position we would more likely view as peripheral to the (historical) centre of the settlement than originally solitary.[6]

It's clear the categorization is to a certain extent intuitive, but in terms of attempts to interpret the testimony of solitary churches in relation to the development and transformation of the settlement situation, it seems justified to differentiate **between a "solitary" location (roughly marking an abandoned settlement) and an "eccentric" location (in relation to an existing settlement)**. In the first case, these churches (whether still standing and often fulfilling the role of cemetery churches, or just documented and then having disappeared), are those we can label as the remains of abandoned villages.

But how do we define the position of "eccentric" churches in relation to the settlement? Solitary churches are usually several kilometres from the closest structures. What sort of distance should we use for what we call "eccentric" churches? We have limited our focus to villages where the centre had been clearly defined by the second half of the 18th century at the latest (later movement, with exceptions, did not occur), and the distance to the church from the centre could be set at 1km. This distance does not have any sort of foundation, and nor does any other. It's only a working value set to probe the relations between the church and an existing settlement. A supporting argument here could be the fact that there was often about 1km distance between subject towns and medieval churches that stood in their hinterland.[7] However, even in this case

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[6] Ondřej MALINA, Samostatně stojící kostel jako doklad transformace osídlení – možnosti archeologie a GIS, Svorník 10, 2012, pp. 33–44, the number of solitary churches in Müller's map p. 34; the author further discussed the evidence of solitary churches in later mappings as well as the transformation of settlement contexts that these churches reflect or could reflect.

[7] These include the Church of St. Stephen in Mýto (1.3km NE of the centre) or the Church of St. Giles in Švihov (about 750m E of the centre on the opposite bank of the Úhlava River); there were also two churches in medieval Velhartice – one in the town and the second (now a cemetery church) less than 1km to the SW. Less known examples of medieval churches illustrating the settlement development can be seen in Planá – the initial settlement (11th century) was concentrated around the Church of St. Peter and Paul, where there is evidence of a cemetery from the same time; it is then moved westward, and the Church of the Assumption of St. Mary was built in the 13th century, while the first written evidence of Planá in its current location about 650m W from the first church

Fig. no. 2. The solitary Church of St. Martin in Přívětice surrounded by an active cemetery lies in a slightly elevated position about 500m NW from the centre of the village with a large farm below the church (these farms are often indicators of abandoned settlements); the entire situation is clearly visible in the first military mapping (https://www.chartae-antiquae.cz/cs/maps/12976/?view=-49.2963359182732,70.640625,6 [accessed on 3. 10. 2023]). The view from the N shows the farm on the left, the church on the right. – Photo Robert Šimůnek (2021).

solitary churches are a testimony to the settlement’s development. In the case of urban localities, a parish church is usually built close to the town, contrary to situations in villages, and the church was in an “eccentric” location vis-à-vis the centre of the city.

comes from 1251 (Jiří CHLEVIŠŤAN, Planá u Mariánských Lázní. Doklady počátku městské sídelní aglomerace a její podoba, Archeologie západních Čech 9, 2018, no. 2, pp. 92–106). We also find an original sanctuary, still solitary, in Ostrov: the originally Romanesque Church of St. James the Great about 500m S of the square, while the Gothic parish church was built in the centre of the town on the W edge of the square. The solitary cemetery Church of St. Margaret in Golčův Jeníkov located about 750m SW from the square is the remains of the village of Zábělčice, which like Jeníkov was part of the 13th century settlement network forming on the Vohančický Stream (Zdeněk PEHAL, Středověké osídlení kolem kostela sv. Markéty v Golčově Jeníkově, in: Sborník Havlíčkobrodské společnosti pro povznesení regionálně-historického povědomí, Havlíčkův Brod 2002, pp. 20–33). The situation is specific in Mašťov, where two “mirroring” Gothic churches on the W and E of the area document two settlement centres (Tomáš VELÍMSKÝ, Trans montes, ad fontes! K roli újezdů při středověké kolonizaci středních a vyšších poloh na území severozápadních Čech, Most 1998, esp. pp. 78–79). The latest interpretation of the location of the castle in Lomnice nad Lužnicí sheds new light on the interpretation of two medieval sanctuaries – on the NW and SE edges of the historical centre (Daniel KOVÁŘ, Nad otázkou lokalizace hradu v Lomnici nad Lužnicí (okr. Jindřichův Hradec), Castellologica Bohemica 20, 2023, pp. 97–116).

We noted there are dozens of "eccentrically" located churches in the Czech Lands (as we have defined this working classification). Their distribution throughout the country suggests this was not reserved to a specific part of the territory. In terms of chronology, these churches are mostly mentioned in writing in ecclesiastic documents from the second half of the 14th century. However, in terms of the founding of these churches (and villages), this is a datum ante quem that in some cases could be specified by art-historical or archaeological research. The search for a possible interpretational frame spreads out into several directions and encounters several variables: We often do not know with certainty whether today's centre (whose position is securely documented only from the mid-18th century) is in the same location and has a similar appearance to the medieval centre, or whether there was movement from a location closer to the church. If the settlement moved, rural churches usually retained their original location (*stabilitas loci*), continued to be used, and a new church was not built in the same village (during the Middle Ages), with certain exceptions.[8] An indicator of the ties between the settlement could be the entrance of the church, where we expect it to point towards the settlement.[9] However, even in this case we do not have any more knowledge about its character – whether the village was compact or interspersed, nor the influence of the terrain, cardinal directions, or access to water.[10] Churches in an eccentric location in relation to the village but still within the built-up area could be a reflection of several phases of the village's medieval development (e.g. Černilov and its Church of St. Stephen at the E edge of today's village).[11]

We usually cannot certainly determine **the location and appearance of the medieval centre of a village** if an archaeological survey has not been performed that would document the settlement at a certain time, or if the original medieval buildings (farms, agricultural buildings, etc.) did not survive. The cases where we are able to explain the "eccentric" location of the church with at least some level of certainty are few. Before we focus on them, we need to recall one general framework, probably used in a series of cases, but with local specifics.

This **elevated position** of the church was in the interest of having a good view and being seen in the landscape, as well as for defence. The fact that churches func-

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[8] One of the exceptions is the early medieval settlement about 700m W of Pšov, where during the 12th or at the beginning of the 13th century a church was built on an elevated position; probably in the late 13th or 14th century the settlement is moved E into the space of today's Pšov. A church was built here later, mentioned in the second half of the 14th century (replaced by a new building in the 18th century), while a cemetery existed at the older church up to the 12th century, which is now "eccentrically" located vis-à-vis the village (Vojtěch PEKSA, Znovunalezení kostela Všech svatých v Pšově u Podbořan, Archeologie západních Čech 10, 2016, pp. 172–186).

[9] An exemplary case is in V. PEKSA, Očihov (see note 5), p. 111.

[10] J. ŠKABRADA, Nástin vývoje vesnických půdorysů (see note 3), esp. pp. 160–169.

[11] Z. BOHÁČ, Katastry (see note 3), pp. 67–68.

Fig. no. 3. One of the solitary churches visible from distance is the Church of St. Gall about 350m S from the village centre of Podveky, with a difference in altitude of about 20m (467 mamsl/ 488 mamsl). View from SW from the road to Otryby invokes questions about the former and current appearance of the landscape and of the visual axes’ within it.
– Photo Robert Šimůnek (2017).

tioned as a refuge and as vaults is rather clear, documented in various contexts in written sources and visible in the form of structural remains. They were often the only or one of the few stone structures in the given locality.[12] The reasons for the elevated position of the church could have been as a point of orientation in the landscape, which in this case would lead to looking into the cases of the abandoned village and church in Vykleky, which has a series of analogous situations.[13] That is also true of urban en-

[12] Jiří VARHANÍK, Středověký vesnický kostel jako refugium, Archaeologia historica 24, 1999, pp. 313–317 (attention is given to the fortified elements of these churches while their location is not discussed).

[13] Tomáš KLÍR – Tomáš VOJTĚCHOVSKÝ, Sídelní kontext venkovské sakrální architektury. Vykleky číšníka Zbraslava a jeho ženy Domaslavy, Archaeologia historica 38, 2013, no. 2, pp. 327–353.

vironments today where we still see early churches in elevated positions distant from the later centre (e.g. Benešov, Česká Třebová). On a general level, the elevated position of the church could be related to medieval piousness; an effort to be closer to God by raising up the religious location.

We considered **ties to roads** in locations where the written evidence of settlement came later than the art-historical survey's evidence of the existence of a church that seems to be solitary in a later period. In these cases, the visibility of the church over long distances with an orientational function overlaps with the view of the landscape and the defensive function. Example of this type could be the two churches near Chrudim: the Church of St. Mark in Markovice (3km W of Chrudim) and the Church of St. George in Tři Bubny (5km SE of Chrudim), which remain solitary today.[14] An analogous situation can be seen in other areas, such as Dobronice in southern Bohemia where the foundation of the castle and church verifiably came in mid-14th century at the latest and the village could be, but might not be a bit younger. In any case, we lack any interpretation of the meaning of the spatial organization as we see it today. The castle and the church are demonstrably in situ, a certainty we don't have with the village.[15]

Only in exceptional cases is it possible to **interpret the "eccentricity" of a church using known historical context** with certainty or at least a high level of probability. We can define four working types and each of them can be documented using model cases. They could be ascribed to have a general dimension because the probability is low that a situation would be so exceptional that it would not have analogous cases.

1. **A *stabilitas loci* between medieval and older churches**: In this case a relation between the church of an older settlement or at a burial site where its location remained constant in later periods after the change of the settlement's context. An example could be the Church of St. Margaret near Královice (at the E edge of Prague). It stands alone on a peninsula on the Rokytka stream, 700m N of a large farm and fort and about 900m from the associated village. The solitary (and eccentric in relation to the settlement) location of the church has its rather clear explanation in the form of spatial ties to a Slavic hillfort (with a burial ground), the existence of which can be dated to the 10th–12th centuries. The model where a church retains its ties to an older hillfort (or generally a settlement or burial ground) can be applied very frequently, but the relationship is not always as clear as in the case of Královice. The medieval church

[14] These examples are listed by E. RACKOVÁ, Kostel, osídlení a farní síť (see note 1), p. 35.

[15] The localization of the land (fields) and the spatial relations to the church and the road to the church (through a field) in 1572 are repeatedly mentioned (Martin DOHNAL, Vývoj sídelní sítě a krajiny na dobronickém statku u Bechyně v pozdním středověku a novověku, Historická geografie 45, 2019, pp. 49–87, here pp. 58, 69, 70, 78).

Fig. no. 4. A view of the Lužnice River valley from the S shows Dobronice Castle on the left and in the background is the solitary Church of the Assumption of the Virgin Mary about 600m N of the castle on the edge of a natural terrace that steeply falls into the river valley; the church by itself is visible from a long distance, and it offers a rather extensive view of the river valley both to the NE and to the S. The castle and church existed by the mid-14th century, while the village is documented to the beginning of the 15th century, but it could be older (the predicate “of Dobronice” is primarily related to the castle). Today’s centre of the village is some 350m SW of the church.
– Photo Robert Šimůnek (2023).

is dated in written sources beginning in the mid-14th century, while its Gothic structural phase is also documented by certain stonework components. It was therefore a continuation of an older shrine that was created during the time of the hillfort.[16] The wider framework here is difficult to grasp, as at least in some cases there probably was real continuity between the Christian shrine and an older (pagan) religious site.

[16] Ivo ŠTEFAN – Jan HASIL, Raně středověké hradiště v Praze-Královicích. Výsledky výzkumu vnějšího opevnění, Archeologické rozhledy 66, 2014, pp. 453–492; M. HAUSEROVÁ, Několik pohledů (see note 5); https://www.archeologickyatlas. cz/cs/lokace/praha_kralovice_hradiste; http://www.praha-archeologicka.cz/p/203?tgo=102.

Fig. no. 5a–b. a: The view from Věžka Castle to the W to the Church of St. Mary Magdalene; the village of Druztová in the background; b: The wiew from the S on the village of Druztová (left) and the solitary Church of St. Mary Magdalene (in the middle); Věžka Castle is situated on the right (not visible). – Photo Robert Šimůnek (2023).

2. **A church located between a castle and a village:** This situation explicitly illustrated in written sources in an isolated case offers the possibility for analogous interpretations of other cases. The first case study is related to the Church of St. Mary Magdalene that stands along the road between the village of Druztová and Věžka Castle. It's located about 700m SE (in a straight line) from the historical centre of the village and about 150m W in a straight line from the castle, but in both cases the roads are longer, and the latter much more so. The church was built in 1351 or shortly after by Racek of Věžka (a lesser noble). Our source here is the archbishop's permission, which lists the reasons for building a church in this location. Both Věžka Castle (and its occupants), and the nearby villages of Druztová and Dolany (a little further away on the left bank of the Berounka River), were part of the Dýšina parish whose centre was on the right bank. The inhabitants of the villages were thus forced to cross the river on their way to church, often with great danger to themselves, and some of them even perished in the effort without the administration of the sacraments. Racek of Věžka offered to build the church, largely funded it, and offered the property needed to support the priest. The archbishop issued his approval under the condition that henceforth the church will be an affiliate to the parish in Dýšina, whose priest had patronal rights and the clergy in the Druztová church would pay the Dýšina priest two candles of three pounds each on Candlemas as a symbol of subjugation ("*in signum subiectionis*"). The church served the occupants of the castle and the nearby village, which is why it stands alone and not within the village itself. The entire case has a broader context in connection with the communication network in the area set down in the older period by the

need to regularly cross the Berounka River in this area. This was clearly easier for the inhabitants of Dolany, who could cross about where the later bridge would stand, while the inhabitants of Druztová (and the castle's garrison) had a longer trip and thus seemingly crossed the Berounka below the castle. Poor access to a church, which was the reason for the founding of a new one, also played a role in other cases. However, because of the density of the parish network the usual solution was to change the boundary of a parish and founding a new church was a rare solution.[17]

A similar situation can be seen in the case of the Church of St. Andrew in the space between the villages of Chlístovice and Sion Castle near Kutná hora. It is located E of Chlístovice, about 300m from the built-up area on the second military mapping map, and today it's only about 200m. Sion Castle is also about 200m away, albeit in a straight line through difficult terrain. The difference in this case is that we lack a similarly explanatory and undoubtable source as in the case of Druztová, and we must formulate a hypothesis. The church that lies eccentrically in relation to the village evidently originally belonged to an (assumed) older settlement near the hillfort (e. g., the later Sion Castle), which is indicated by the church being labelled as Hrádek in 1352. Later, it appears in the form of "Chlístovice, otherwise Hrádek", which clearly reflects the spatial (and functional) ties to the village and the castle. The patronage rights in the older period belonged to the St. Vitus chapter (at Prague Castle), who at the time owned the Chlístovice farm. The ties between Hrádek-Sion are problematic because of the unclear nature of Sion's predecessor (whether it was an early medieval hillfort or whether a noble seat was located here in the meantime). Even in this case, we assume the church was created on the boundary between the castle and the village, analogously to Druztová, or at least nothing testifies to the opposite. The medieval origin of the castle and the village is clear, as is the case of the church. It's not important how we date today's structure (the dating of the late Gothic tower to the late 15th century is usually applied to the entire church), because the location itself suggests that if it were a new structure from the late Gothic period, then there was an older sanctuary in the same area testified to by written sources.[18]

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[17] A charter from 1351, Josef STRNAD, Listář královského města Plzně a druhdy poddaných osad I. Od r. 1300–1450, Plzeň 1891, pp. 75–77, no. 67; in 1367, Racek of Věžka founded in the church ("*... dedi ecclesiae parochiali sitae sub castro Wyeska in honorem dei et sanctae Mariae Magdalenae constructe et dedicate in villa Drustowe*") a requiem for his ancestors and relatives (ibidem, pp. 106–107, no. 98); the communication situation, see Filip KASL – Petr SOKOL, Středověký přívoz pod hradem Věžka, in: Na stopě (pre)historii jihozápadních Čech 5, 2021, pp. 65–75; IIDEM, Příspěvek k poznání zázemí hradu Věžka u Plzně. Fortifikace a komunikace v blízkém okolí hradu, Archaeologia historica 47, 2022, no. 2, pp. 625–654.

[18] Karel KIBIC ml. – Vojtěch VANĚK, Středověká venkovská sakrální architektura na Kutnohorsku, Praha 2012, pp. 70–77; Karel KIBIC ml., Pozdně středověké kostelní věže na Kutnohorsku, in: Dějiny staveb 2012, s. 167–182, here pp. 170–172; second military mapping https://www.chartae-antiquae.cz/cs/maps/13233/?view=-192.94506674714705,20,5 [accessed on 3. 10. 2023].

3. **The "solitary/eccentric" nature of the medieval church is unknown at first examination** and cannot be discovered without knowledge of the settlement's development. An example could be Bílé Poličany near Miletín as the priest Andreas is called "*de Polischan*" in 1271, although no church was founded in Poličany in the Middle Ages (nor later). It's practically certain this was the Church of St. Bartholomew in Lanžov whose origins can be dated back to the first third of the 13th century. The explanation to this seeming anomalous "eccentric" location of the church is based on the development of the settlement in the area. Traces of settlement from the 13th century can be found rather close to the church (about 300m W), and the village was moved to a new location to the W into the valley of the Trotina Creek in the 13th century where Bílé Poličany stretch to as much as 2km from the church (which in this respect is located rather "eccentrically"). The village of Lanžov itself that surrounds the church today came much later (it de facto formed secondarily around the church, probably in the first half of the 16th century).[19]

4. **Solitary churches that were created in the hinterland of towns and villages in the late Middle Ages**: The context of their founding is roughly known and it's obvious their location is not proof of settlement, but more about building a sacred landscape with a network of pilgrimage sites along roads and visual ties to the landscape. Three examples illustrate the situation. The beginnings of the pilgrimage Church of St. Anne near Horšovský Týn go back to the late medieval period (about 2km SW of the town centre). That's also true of the Church of St. Barbara, which stands alone between Mnich and Děbolín near Jindřichův Hradec. The Church of St. Giles about 1km W of the centre and castle of Žirovnice presents a different type as it was founded as burial site at the beginning of the 16th century for the Vencelíks of Vrchoviště, the noble family that owned the domain at the time.

"Eccentric" Churches – The Influence of Environmental Conditions

The listed cases are rare, and for most part we do not have the relevant information to interpret the location of these churches located "eccentrically" in relation to historical centres, and we must satisfy ourselves with hypothetical explanations. We focused on the explicitly unconfirmed aspects that could have played a role in the development of the settlement. One area to focus on is the **environmental conditions of settlements and their transformations**. It's more than likely that economic and environmental conditions (a lack of water or on the contrary floods, exhausted soil, landslides, climate

[19] Ondřej WOLF, Románský kostel sv. Bartoloměje v Lanžově a jeho poličanská éra ve světle archeologických nálezů, in: Krkonoše – Podkrkonoší 20, 2012, pp. 567–573; D. PRIX – E. RACKOVÁ – J. SLAVÍK, Středověké venkovské kostely východních Čech I (see note 1), pp. 474–481.

change) led to the abandonment of a series of villages. However, we usually cannot specify the share of each individual factor, but the blanket expectation of the causes of villages being abandoned due to wars in the late Middle Ages used in older literature needs to be corrected.[20]

One of the aspects of this last category (e.g. environmental conditions) that should be considered in the movement of villages is **flooding**. Probably the most well-known village that was not moved but abandoned (evidently accompanied by the dispersion of the inhabitants to the surrounding villages) is Mury (about 1¾km S from the Doksany monastery), located close to the Ohře River. It was abandoned in the 1340s because of the river overrunning its banks (1341/1342).[21] The Ohře River also plays a role in the almost mysterious case of the original position of Skupice (near Postoloprty). The translation of this village is captured at the end of the 19th century as part of local folk history, but despite a verifiably mistaken story, it seems likely that Skupice was really destroyed by a massive flood of the Ohře at the turn of 1601/1602. It is thus logical it was moved outside the flood plain (e.g. to today's location). The original location of the village can only be reconstructed with a certain level of probability to a place called Na přívozu, which was along the road from Skupice to the Ohře and continued on the other bank to Postoloprty. However, that does not answer all questions. About 900m E of the centre of Skupice lies the solitary church of St. John the Baptist listed in written sources from the mid-14th century. Its medieval origin is also securely verified by its construction (although it may partially be late Gothic). It's possible the location on the edge of a path in the landscape close to a steep eroding slope in a dominant position above the Ohře played a role. We know for certain the village was not originally located around the church, and if we accept the above localization, it was about 600m from the church (this one lies to the W). The church remained solitary even after the village was moved as the distance between it and the church increased. Access to water (the Hasina Stream) outside the flood plain possibly played a role in the selection of the new location. This example demonstrates the limits of our knowledge and creates questions that we don't even have hypothetic answers to. And this is one of the rare cases where the movement of the village itself is undoubtable.[22]

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[20] The model example of a village being abandoned because of adverse economic conditions is Svídna in central Bohemia (Zdeněk SMETÁNKA, Život středověké vesnice. Zaniklá Svídna, Praha 1988).

[21] Oldřich KOTYZA – Jan SMETANA, Zaniklá středověká osada Mury a města doksanského kláštera, Archeologické rozhledy 44, 1992, pp. 611–632.

[22] Bohumír ROEDL, Skupice: Úvahy o přeložení vesnice a o dataci zvonice u tamního kostela svatého Jana Křtitele, Poohří 10, 2022, pp. 57–66, here pp. 58–62 (the author did not discuss the ties of today's and the older village to the church, including the dating of today's structure); J. SKOPEC et al., Středověké venkovské kostely okresu Louny (see note 1), pp. 477–488 (authors of the entry: Jaroslav Skopec – Jan Mareš – Vojtěch Peksa).

Fig. no. 6. Church of St. John the Baptist, NE from Skupice; on the left is the edge of the terrain terrace sloping down to the Ohře River, in the background we can see the town of Postoloprty, situated on the opposite river bank. – Photo Robert Šimůnek (2017).

Another factor that could play a role in moving a settlement to a nearby location could be **geological conditions**. We know of similar cases from the later period and their application is unavoidable in the previous period as well. We will cite a specific case, and the written sources include passing indications beginning in the Middle Ages.[23] The specific case can be the movement of Stranná in relation to a massive landslide and the destruction of most of the village including the church that took place in 1820, although warnings about this eventuality appeared 30 years earlier and immediate indications of a disaster were reported as late as 1819 (the obvious cause was gradual erosion caused by the Ohře). The village was moved about 600m SW and to an elevation about 50m lower. Although landslides in the area of the former village (*Neu Strahn* and *Alt Strahn* still appear next to one another on the second military mapping) still occurred after that, the new position was safe.[24]

[23] An example can be the note about the destruction of the rear castle bridge in Český Krumlov (1457), whose pillars were knocked down by stones from a rockslide into the river (Archiv český XXI, ed. Josef Kalousek, Praha 1903, p. 312, no. 70).

[24] Zdena BINTEROVÁ, Březno, Chomutov 2001, chapter on Stranná, pp. 57–61; second military mapping https://www.chartae-antiquae.cz/cs/maps/13350/?view=-91.24427593221,165.3125,4 [accessed on 3. 10. 2023].

In the following section, we will focus more on **potential interpretations based on the analysis of geologic sources** and whether and to what extent geologic conditions could have eventually played a role in selecting a location for a settlement, specifically in its movement to a new nearby location. Once again, there are several such locations with surviving medieval churches (with one exception). Understandably, the survival of the church can relativize the role of geographic factors somewhat, but on the other hand (and the situation in Skupice is a prime example), the settlement may not have originally been concentrated in the immediate proximity to the church. In any case, there is no alternative to attempt to interpret the “eccentric” location of the church, usually without hope for an acceptable result. The first three model cases offer at least some level of conditions to study the local geographic conditions, specifically about the causes of moving the centre of the settlement to today’s position because of adverse geologic conditions, landslides, etc. On the contrary, several other cases illustrate a situation where geology does not offer an interpretation to explain the settlement’s situation.

The Possible Contribution of Geological Data Interpretation for Deciphering Spatial Relationships of Solitary Medieval Churches and Settlements

Speculating about the possible role of natural conditions including hazardous geological processes on changes in settlement patterns during the Middle Ages is highly challenging. This is due to difficulties in assessing the frequencies, intensities, and spatial distribution of hazardous or adverse natural processes and conditions, as well as because of the different vulnerabilities of historical settlements and communities leading to changes in the settlement structure of the villages that we are not able to identify from written sources or archaeologically. It depends on the construction design of the buildings as well as social, economic, and cultural conditions that affect the ability to cope with damages or adverse natural conditions.[25] Describing the vulnerabilities accurately is a difficult task even in recent times and is thus nearly an impossible problem for the medieval period. Therefore, the following text will consider the medieval villages to be highly vulnerable to the evaluated natural processes (e. g., floods, riverbank erosion, landslides, a long-term increase of groundwater levels, wind erosion), and the occurrence of potentially damaging natural processes will be assessed only with respect to specifically selected case study sites assuming that their **frequencies and intensities were enough to result in a relocation of the settlement** even a short distance, which narrows the range of aspects that could have been the cause (increased groundwater levels, landslides). Only recently produced geological and morphological

[25] The term “tipping point” is used for an analogous concept in Geoffrey PARKER, Global Crisis: War, Climate Change and Catastrophe in the Seventeenth Century, New Haven 2013.

data covering all Czech territory with the same precision and detail will be used as a base for qualitative scholarly assessment. This approach means that a large body of paleoenvironmental information describing past climate and environmental conditions (e. g., land use, vegetation cover) at the regional[26] and local[27] levels will not be used. Such an approach may be seen as oversimplified, but it is easy and quick to implement and can provide highly valuable indications for selecting sites where past natural conditions could be responsible for settlement relocation and where detailed investigations using all available information could be conducted.

The **methods used** are a geomorphological assessment combining the evaluation of terrain morphology with information about bedrock types and properties. The 5G DEM detailed digital elevation model along with old topographic maps enable us to draw assumptions about possible surface-forming processes and their past development (e. g., riverbed development, the occurrence of landslides).[28] It is important to keep in mind that a large portion of morphological evidence of past natural processes as well as abandoned medieval settlements has been erased from the landscape over several centuries usually due to intensive land use, erosion, and vegetation growth. This increases the speculative character of using recent surface morphology for historical assessment. Nevertheless, the basic features of relief development usually persist for protracted periods, allowing the drawing of generally valid assumptions. The reliability of such assumptions can be significantly increased when the recent DEM is combined with surviving topographic maps that provide important historical information, especially for the development of the river network. Mutual consideration of the properties of bedrock along with their products from quaternary weathering is especially important as their properties do not change that quickly over time and thus allow a more direct connection between recent and past conditions. The use of basic geo-

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[26] Jan ROLEČEK – Vojtěch ABRAHAM – Ondřej VILD – Helena SVITAVSKÁ SVOBODOVÁ – Eva JAMRICHOVÁ – Zuzana PLESKOVÁ – Petr POKORNÝ – Petr KUNEŠ, Holocene plant diversity dynamics show a distinct biogeographical pattern in temperate Europe, Journal of Biogeography 48, 2021, pp. 1366–1376 (https://doi. org/10. 1111/jbi. 14082); Eva JAMRICHOVÁ – Libor PETR – Borja JIMÉNEZ-ALFARO – Vlasta JANKOVSKÁ – Lydie DUDOVÁ – Petr POKORNÝ – Piotr KOŁACZEK – Valentina ZERNITSKAYA – Malvína ČIERNIKOVÁ – Eva BŘÍZOVÁ – Vít SYROVÁTKA – Petra HÁJKOVÁ – Michal HÁJEK, Pollen-inferred millennial changes in landscape patterns at a major biogeographical interface within Europe. Journal of Biogeography 44, 2017, pp. 2386–2397 (https://doi. org/10. 1111/jbi.13038).

[27] Vlasta JANKOVSKÁ – Petr POKORNÝ, Reevaluation of the palaeoenvironmental record of the former Komořanské jezero lake: late-glacial and Holocene palaeolimnology and vegetation development in north-western Bohemia, Czech Republic, Preslia 85, 2013, pp. 265–287.

[28] 5G DEM Český úřad zeměměřický a katastrální, 2023 https://ags.cuzk.cz/av/ [accessed on 5. 5. 2023]. – Český úřad zeměměřický a katastrální, Stabilní katastr (Stable Cadastre), https://ags.cuzk.cz/archiv/ [accessed on 11. 10. 2022]. – Český úřad zeměměřický a katastrální, 2019, https://archivnimapy.cuzk.cz/uazk/pohledy/archiv. html [accessed on 11. 10. 2022].

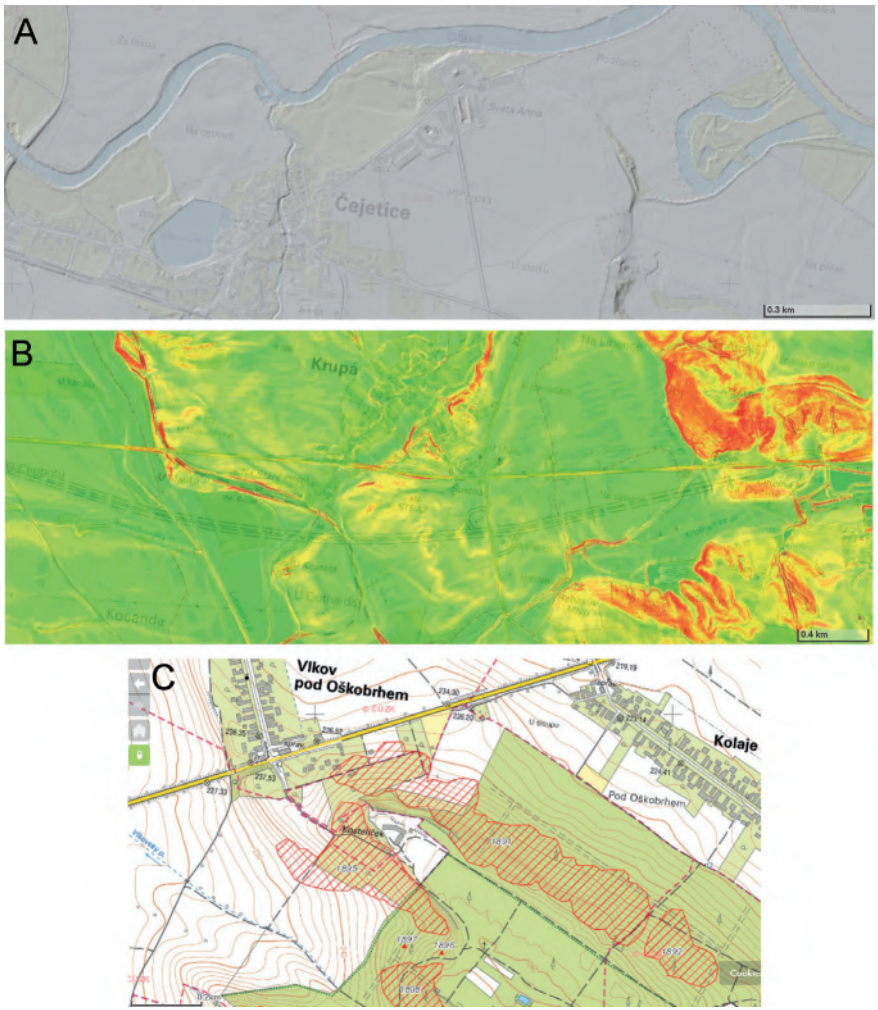

Fig. no. 7a–c. A: Shaded relief of the 5G DEM with a 1:10,000 topographic map shows the detailed morphology of the Otava River flood plain below the river terrace with the St. Gallus Church (source: State Administration of Land Surveying and Cadastre); B: Slope map derived from the 5G DEM shows the location of the St. Gothard Church and Krupá village (source: State Administration of Land Surveying and Cadastre); C: Landslide map of the area around the abandoned Odřepsy village (source: Česká geologická služba).

logical maps at a scale of 1:50,000[29] along with derived thematic maps[30] provides basic though general information that can be complemented with the results of site-specific investigations. They can represent sediment descriptions in archaeological research[31] or landslide field mapping[32] and the historical inventory.[33]

The **first case study** is the solitary Church of St. Gallus situated about 500m NE from the centre of Čejetice on the right bank of the Otava River, E of Strakonice (49. 2571822N, 14. 0266939E). The church is located close to the rim of a river terrace about 3m high and there is no evidence of a medieval village surrounding it, though the flat terrace surface seemingly represents a suitable site for settlement construction. Nevertheless, the location of 13th century Čejetice along the right tributary of the Otava River suggests the immediate vicinity of a stream is a very important locational factor for historical settlement.[34] Combining the floodplain morphology recorded by the detailed 5G DEM with old maps suggests the existence of a narrow river channel

[29] Česká geologická služba, Geologická mapa (Geological map) 1:50,000, 2023, https://mapy.geology.cz/geocr50/ [accessed on 5. 5. 2023].

[30] Česká geologická služba, Povodňový informační systém (Map of the suitability of the Czech Republic for the controlled subsidy of groundwater), 2023, https://webmap.dppcr. cz/dpp_cr/povis. dll?MU=001&MAP=5440&lon=13. 737844&lat=50. 1674036&scale=15120 [accessed on 5. 5. 2023]; Česká geologická služba, Geologická mapa odkrytá (Engineering geological zonation map), 2023, https://mapy.geology.cz/geocr500/# [accessed on 5. 5. 2023]; Česká geologická služba, Geologická mapa odkrytá (Drilling exploration map), 2023, https://mapy.geology.cz/geocr500/# [accessed on 5. 5. 2023].

[31] Fekri A. HASSAN, Sediments in Archaeology: Methods and Implications for Paleoenvironmental and Cultural Analysis, Journal of Field Archaeology 5, 1978, no. 2, pp. 197–213 (https://doi/abs/10.1179/009346978791489899).

[32] Česká geologická služba, Svahové deformace (Slope instabilities), 2023, https://mapy.geology.cz/svahove_nestability/ [accessed on 5. 5. 2023].

[33] Czech historical landslide database, 2023, https://childa.cz/?lang=en [accessed on 5. 5. 2023].

[34] In the written sources, the village is mentioned for the first time in the mid-14th century (the mention of Jan of Čejetice from 1289 is problematic), the Church of St. Gallus can be dated to the 13th century, most likely to its third quarter or second half. Čejetice used to be a knight's residence in the Middle Ages, but the fortress disappeared without a trace, and it is assumed it was located near the church (its last remains were said to have been still visible here in 1842). – Dobroslav LÍBAL, Katalog gotické architektury v České republice do husitských válek, Praha 2001, p. 57; https://www.pamatkovykatalog.cz/kostel-sv-havla-694226 [accessed on 8. 5. 2023]; August SEDLÁČEK, Hrady, zámky a tvrze království Českého XI. Prachensko, Praha 1897, p. 243; Karel SKLENÁŘ, Zborovy a Čejetice: zprávy Josefa Pachla z jihozápadních Čech (1842), Castellologica Bohemica 6, 1998, vol. 2, pp. 455–458, here pp. 457–458.

and a shallow pond between the Čejetice village, the church, and the Otava River.[35] It further supports the assumption that no medieval village could be located on the floodplain next to the church as most likely the river and hydrological structures occupied it. There is also no evidence to suggest that part of the village adjoining the St. Gallus Church to the W could be destroyed by a slide of the river terrace. Therefore, in this case, it seems that other reasons than those related to adverse or hazardous natural conditions are responsible for the church’s location close to the noble seat, whereas the village was founded about 550m away.

The **second case study** is the St. Gothard Church (50. 1659150N, 13. 7260103E) in Kostelec. In the written sources, the parish church was first mentioned in the mid--14th century, and there is no conclusive evidence of older origins. It was last mentioned as a parish church in 1623, and it is supposed the village was abandoned during the Thirty Years’ War. The church was later rebuilt and still serves as a cemetery church about 1.2km SSW from the historical centre of Krupá first mentioned in the mid--14th century where there still is no church.[36] In this case, it is not possible to completely rule out that adverse climate and geological conditions may be co-responsible for the abandonment of the original village of Kostelec surrounding the church and relocating it to the recent position along the Krupský Stream. The 17th century was marked by a wet and cold climate that may have fostered favourable conditions for landslides. At the same time, the bedrock of the study site is composed of sandstone and claystone that also made for favourable landslide conditions. Field mapping recorded landslides within the same geological unit just 3km to the E of the study site, which developed on a 20° slope.[37] Although the relief around the church is very mild, slope deformations by creep movements on the steeper (7°) western slopes cannot be completely ruled out. At the same time, the broad, very low-sloping valley just east of the church is compounded by permeable slope sediments[38] with confirmed depths up to 7m-10m and underlaid by less permeable bedrock frequently described in borehole

[35] Český úřad zeměměřický a katastrální, Stabilní katastr (Stable Cadastre), https://ags.cuzk.cz/archiv/ [accessed on 11. 10. 2022].

[36] Antonín CECHNER, Soupis památek historických a uměleckých . . . XXXIX. Politický okres Rakovnický II. vol., Praha 1913, pp. 39–41; https://pamatkovykatalog.cz/kostel-sv-gotharda-2147046 [accessed on 8. 5. 2023].

[37] Česká geologická služba, Svahové deformace (Slope instabilities), 2023, https://mapy.geology.cz/svahove_nestability/ [accessed on 5. 5. 2023].

[38] Česká geologická služba, Povodňový informační systém (Map of the suitability of the Czech Republic for the controlled subsidy of groundwater), 2023, https://webmap.dppcr. cz/dpp_cr/povis. dll?MU=001&MAP=5440&lon=13. 737844&lat=50. 1674036&scale=15120 [accessed on 5. 5. 2023].

descriptions as clays or claystone.[39] Under such conditions, elevated groundwater levels during periods of prolonged, above-average precipitation could occur and have a negative impact on building structures.

Speculation about the contribution of adverse natural conditions to the decline of the older Kostelec village is further supported by its timing during the 17th century that was characterised by a generally colder and wetter climate with frequent extremes of droughts and intensive precipitation, possibly triggering slope deformations or floods.[40] In addition, some evidence suggests more abundant surface water forming short streams that do not exist in the more recent landscape. The old map depicts the west-facing slope of the broad valley east of the church (mentioned above) in considerable detail.[41] It shows a main stream with four short, valley-slope tributaries that correspond well to four shallow gullies masked by surface denudation, but still clearly visible on the recent 5G DEM.[42] The same map shows four short streams on the slope around the Krupá village and none of them exists in the recent landscape. Also, the layout of the village itself with respect to the stream is very distinct and contrasts with the previously discussed Čejetice where houses were built in the immediate vicinity of the stream. On the other hand, houses in Krupá were originally built only on the right bank, about 100m away and 2m above the stream.[43] Houses began to appear on the left bank only much later, which is mostly a steep erosional slope with the stream flowing close to its edge.[44]

The **third case study** represents a well-known site affected by landslides that caused the destruction and relocation of the Odřepsy village (50. 1534258N, 15. 2257592E, situated on the NW end and slopes of a flat ridge, cf., mesa) with a high degree of certainty. They formed in fine-grained calcareous sandstone underlaid by calcareous claystone. The Church of St. Peter and Paul at the foot of the Oškobrh hill did not survive to current times but was confirmed by archaeological excavation.[45]

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[39] Česká geologická služba, Geologická mapa odkrytá (Drilling exploration map), 2023, https://mapy.geology.cz/geocr500/# [accessed on 5. 5. 2023].

[40] G. PARKER, Global Crisis (see note 25).

[41] Český úřad zeměměřický a katastrální, Stabilní katastr (Stable Cadastre), https://ags.cuzk.cz/archiv/ [accessed on 11. 10. 2022].

[42] The second military mapping (1836–1852) shows a small pond in this valley confirming abundant water sources (https://www.chartae-antiquae.cz/cs/maps/13360/?view=-185.45032034361185,38.375,4 [accessed on 3. 10. 2023]).

[43] It is evident on both old maps.

[44] The first houses on the left bank are shown on the map of the second military mapping (see above).

[45] Ladislav HRDLIČKA – Miroslav RICHTER, Slovanské a středověké osídlení Oškobrhu u Poděbrad, Památky archeologické 65, 1974, pp. 111–184, here esp. pp. 122–136.

Fig. no. 8. St. Nicholas Church near Žlutice, view from the N; Žlutice is situated on the left, on the right (not pictured) there is a village Verušice. – Photo Robert Šimůnek (2022).

Landslides at the site are confirmed by the recent landslide map as well as by historical written records witnessing two in 1771 and 1772.[46] The geological conditions are highly susceptible to landslides and recent morphology clearly indicates temporarily inactive landslides.

The evaluation of **three other sites with solitary medieval churches** (Přívětice, the Church of St. Martin – 49. 8382408N, 13. 6084972E; Žlutice, the Church of St. Nicholas – 50. 0962417N, 13. 1457350E; Mikulovice near Chrudim, the Church of St. Wenceslas – 49. 9909081N, 15. 7845264E) **brought no evidence that adverse natural conditions or natural hazards could contribute** to the relocation of possible settlements once located closer to the churches. This conclusion does not necessarily mean the absence of any evidence of slope movements. In the case of the Church of St. Nicholas (Žlutice), some subtle morphological forms suggest the possible occurrence of shallow

[46] Česká geologická služba, Svahové deformace (Slope instabilities), 2023, https://mapy.geology.cz/svahove_nestability/ [accessed on 5. 5. 2023]. – Milan ŠPŮREK, Historical catalogue of slide phenomena, Brno 1972.

landslides, which may be remnants of local quarrying of construction stones (cf., mica-schists) as well. Short (up to 200 m) gullies developed on the steep slopes of local streams. The spatial extent and sizes of these landforms are rather limited, leaving enough safe space for the construction of a village around the church. Their occurrence thus can hardly be related to a hypothetical disaster affecting the settlement.

Conclusions

Solitary medieval churches can certainly be called witnesses to the development of settlements, specifically the settlement (urbanistic) development of a particular locality. However, that is one of the few "certainties", and if we attempt to move to an interpretation of the testimonies of these witnesses (in terms of settlement development), our attention must naturally spread out into a series of directions. Surveys mapping the connections between medieval churches and the transformation of settlement structures either relatively close by or further away show that facts in the form of written and cartographic (or possibly iconographic) sources and the conclusions of art-historical and archaeological research (which also are not always "unequivocal") offer a series of options for arraigning the findings into mutual contexts and then roughly interpreting the development of a settlement.

The intent of the presented essay was primarily to point out a not "unknown", but **an underrated indicator of the development of settlement structures**, which are "eccentrically" located churches. Then the task was to discuss the possible interpretations for the locations of these churches in relation to village settlements and their causes and contexts the results of which was the state documented in the second half of the 18th century (the first military mapping) and that basically lasts to this day.

Only rarely can we explain the **location of the church** with practical certainty (Druztová), or at least with a high level of probability (Chlístovice) – according to the historical development documented by written sources. Much more often we are forced to operate with hypotheses and general frameworks in the interpretation of the church's location (visibility of the church and from it, a strategic defensive position, ties to trade routes, etc.). This situation is similar in cases where we attempt to capture the context of settlement that preceded today's state where the historic centre (captured in the second half of the 18th century, while attempts to look into earlier periods are always accompanied by greater or reduced probability) is several hundred metres from the church that remains solitary to current times. There are **several variables in play**: First the stability of today's location of the village (e.g. when was it established at the location). Second, was it at a different location in the past regardless of its distance from the church; what was behind the selection of this location and the location of the church; and what led or could have led to the movement of the settlement to today's location? Third, when did that happen?

When seeking the possible causes (and interpretational frameworks), we necessarily turn to **environmental conditions**. Inspiration can come from villages abandoned because of environmental conditions (much more probably than wars, epidemics, or one-time disasters such as fires), which prevented the further existence of the settlement. Transformations of climatic conditions (droughts or frequent flood, soil exhaustion, or geologic conditions such as landslides) could be the causes, especially during certain periods characterized by cool, rainy weather with frequent extremes (i.e. the culmination of the Little Ice Age in the 17th century). Even here we rarely have certainty – the mentioned cases of villages that were abandoned (Mury and Svídna, probably for opposite reasons) and translated (Stranná, Odřepsy / Oškobrh) are rather the exception. In a series of other cases, we’re operating with hypotheses where the overlap of various catastrophic events recorded in written sources (e.g. wars, epidemics, famines), together with the expected adverse climatic conditions significantly hampers the identification of the main reasons for the village being abandoned or moved, which usually happened because of a combination of various environmental and social impulses.

The above-described method of evaluating the possible influence of geological and geomorphic conditions and processes to changes in settlement structures can help identify cases where a detailed localized survey of current and historic environmental conditions can contribute to explaining the abandonment or translation of a village (i.e. Kostelec – Krupá), or vice-versa where consideration of environmental conditions isn’t relevant. Specifically, that with today’s knowledge and technical capabilities we are not able to understand the possible testimony. The explanatory possibilities and limits of this interpretational method was the subject of the final part of the essay, which based on several case studies can be summarized as follows: The evaluation of the possible influence of adverse or possibly dangerous environmental conditions and processes on the movement of settlements in the Middle Ages using current geomorphic and geological information is always encumbered with substantial interpretational uncertainty. However, the contribution of environmental conditions to changes in settlement structures could also significantly help map settlement structures. Their combined influence could be confirmed with a high level of certainty only in exceptional cases (Odřepsy/Oškobrh as a model case). On the contrary and probably very often, we can say the solitary location of a church is most probably not related to the influence of environmental conditions (i.e. the Čejetice case study) and other explanations must be sought out (such as a dominant position over the surrounding terrain, or the time between the founding of the church and noble seat on the one side and the village on the other). The described approach allows us to identify locations where environmental conditions could have played a significant role in the process of abandonment and the movement of the village further away from the church and to another location, and where this hypothesis would deserve more thorough research including a detailed mapping of the terrain including geophysical and boring surveys, as well as

evaluating the existing paleoenvironmental data including information about the climate and its external manifestations (i.e. floods, droughts).

Robert Šimůnek – Jan Klimeš
Medieval Churches and Settlement Structures: "Eccentrically" Located Village Churches

The connection between solitary, originally medieval churches and settlement development has been known for quite some time: These churches often represent the only remains of abandoned medieval villages. Much less attention has been paid to "eccentric" churches, specifically churches that are also solitary, but for centuries were associated with a nearby settlement. This article would like to point out these churches as still undervalued as an indicator for the development of settlement structures and then discuss the options for interpreting the positions of these churches vis-à-vis village settlements and the possible causes and contexts that led to the churches being "eccentric" (solitary).

To examine the position and the structure of the settlement and its ties to the "eccentric" church, we require archaeology to reconstruct farther into the past than the mid-18th century. Only rarely can we explain the "eccentric" position of the church with practical certainty or at least with a high degree of probability (written sources explaining the context of the church's founding; continuity from an older sanctuary – *stabilitas loci*, a spatial connection to the older hillfort, etc.; a specific group consists of solitary churches in the vicinity of villages, but also near towns, where the link to the settlement was not assumed from the beginning – they were founded in the late Middle Ages e.g. as pilgrimage churches or churches serving as aristocratic burial places), but much more often we are forced to hypothesizes and use general frameworks to interpret the position of the church (visibility and views, a strategic defensive position, ties to trade routes, etc.). We are also forced to look at the environmental conditions when seeking possible causes (and interpretational frameworks). Inspiration can come from abandoned villages where environmental conditions (more probably than wars, epidemics, or one-time disasters such as fires) prevented the further existence of the village. Changes to hydrological conditions, such as drought or frequent floods, as well as exhaustion of the soil or geological processes like slope deformations, could also be possible explanations.

The options and limits of individual approaches to interpret the "eccentric" position of the medieval church in relation to (today's) settlement structures are demonstrated in the text using model studies with a (general) broader testimonial value for the study of this topic.