The Valetta Convention, spatial planning and the process of systematic trial trenching.

Put forward in the EAA session regarding to developing best practice for archaeology in spatial planning, the current article will relate two main topics: a critical reading of some international documents dealing with cultural heritage, and more specifically with archaeological remains, as the ICOMOS Charter (1990) and the Valetta convention (1992) and a presentation of systematic 10% trial trenching, as carried out in France. The latter, as a key aspect of the planning procedure, fall within the scope of preventive archaeology as a scientific activity producing knowledge and concern, indirectly, the aims of quality assurance: methodology and academic output.

First of all, we must underpin the axiom "without remains there is no archaeology" as it's also improving that a distinction must be made between the archaeological heritage and historical monuments. As the types of resources are not the same, neither are the methods to procure information and the conservation approaches, nor the criteria in planning process. The present review, indeed deal exclusively with archaeological remains in rural context, as an important field of investigation since the expansion of gravel extraction, linear project (speedway and railway network) and more recently, the creation of area of concerted activities and vast development projects.

Before moving on to the principal themes, the role of Inrap[1], the National Institute of Archaeological Research, as one of the partners of the archaeological institutional setting in France must be reminded. This public institution is especially in charge -on state request- with the detection, preservation and scientific study of archaeological heritage endangered by territorial development. Unless the procedure of environmental impact assessment (EIA), archaeology is dealt with a specific and independent administrative process in France as we need, before the discussion about the impact the development will have on the archaeological heritage, to spot and characterize the remains and evaluate their extent and degree of conservation. If none can ignore the historical background of the French jurisdiction and legislation since 1941 on, the new law of the 17th January 2001, modified in 2003, on preventive archaeology can be considered as the French articulation of the international documents regarding archaeological heritage, especially the Valletta convention.

1. International treaties and the French law on archaeology.

The Valetta convention (revised 1992) and his explanatory report, the ICOMOS Charter (1990), the UNESCO recommendations (1956), the European directives on EIA (97/11/EC), the compared legislation study n°138 (L'archéologie préventive 2004)[2] and the French law on archaeology (Saujot 2003, fig.1) have been analyzed by comparing several topics and a special attention have been drawn to the articles concerning conservation/preservation of archaeological heritage and to some linguistically twists or even omissions.

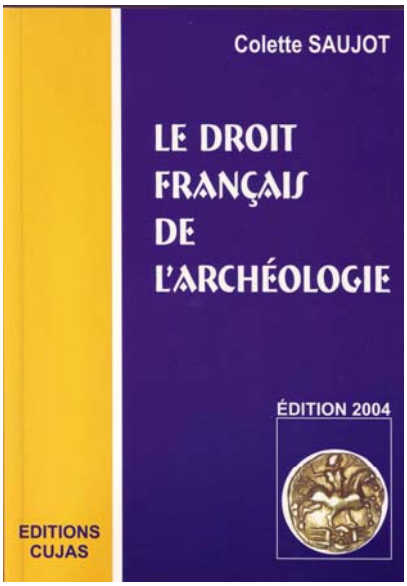

Fig.1: Front page of the book related to French law on archaeology.

[1] You can visit the site on www.inrap.fr Inrap is depends on two Ministries: Culture and Communication, as well as Research.
[2] The study was carried out by the Service of Legal Studies of the Senate.

1.1. First dichotomy: visible versus invisible remains

As already mentioned above, the international treaties don't dissociate the "visible" historical monuments from the buried down remains, and stipulate indirectly that the record of the known is sufficient to manage cultural heritage. The close link between those two kinds of witnesses of the past, results of the history itself of archaeology supported by investigation in countries embellished with pyramids, temples… architectural monuments "dressed up". More recent studies undertaken in our cities opened the way for urban archaeology and development projects all through the country side unlocked new possibilities on fields till then unexplored. They underpin the dichotomy between the record of the known and the "invisible" as the intrinsic character of the hidden archaeological leftovers. As the ICOMOS charter and the Valetta convention emphasize the elaboration and management of Sites and Monuments Records (SMR), several international, as well as national, work schemes kept that order of presentation, but in a certain way caused prejudice to the buried down -and therefore rather unpredictable- relics. Even the action of evaluation as such is in distortion with the reality. Before estimating the importance of archaeological remains and the impact of the development on it, the opportunity (by creation of laws, measures) to detect and locate them must be generated. Its evident that the international documents underestimate the need to distinguish those two major types of traces and therefore create a lack to guarantee that adequate measures should been taken into planning process. The one needs heritage managers[3] and specialized architects, the other field archaeologists, working together one with each other and with developers, to assure constructive cooperation.

Even if record has his importance as a first approach of the problem –the available as preliminary data for background information-, each country is dealing with it differently as well as in developing the system of registration, as in the way traces are preserved and sealed. If in the United Kingdom many Bronze Age enclosures are still visible in the landscape, in France, on the contrary, these cases are extremely rare, and most of the visible remains concerns the more recent medieval moated sites (fig.2), as at a national level, the damage of agricultural practice is already irreversible. It must be remarked that the negative impact of agriculture on archaeological heritage evoked in Art.2 of the ICOMOS carter, is no more mentioned in the Valletta convention, excepted in the preamble as "country planning". Whatever, it seems evident, that other, complementary methods than exhaustive SMR, have to be worked out to answer accurately on the demands formulated by planners as well as on the scientific requirements expressed by the instance of control.

Fig.2: Bayenghem-les-Eperlecques (Pas-de-Calais), medieval moated site (© R. Agache – Ministry of Culture and Communication (MCC) - 1975).

1.2. Second dichotomy: excavation versus conservation "in situ"

Through the reading of the treaties, a second dichotomy emerges: excavation (as preservation by record and study) and conservation *in situ* considering excavation as destruction, indeed, but also as the main source of information (Art.1.2.ii of Valetta and Art.1 of the ICOMOS charter), to acquire and enrich knowledge. If the ICOMOS charter (Art.1) mentions archaeological methods without specifying them or just referring to the UNESCO recommendations (who needs some adjustments since), the Valletta convention promotes non destructive investigation (Art.3.ib), using as argument the creation of "archaeological reserves" for future generations (Art.2.ii). This is indeed important as we deal with archaeology as a non renewable resource, factor already mentioned by André Leroy-Gourhan in 1966, but even there we must resort to reliable data risking to disappoint the next generations.

[3] It is one of the subjects of the EAC (*Europae Archaeologiae Consilium*).

1.3. Linguistically twists

As the authors of this report are no linguists, the few comments must be taken with precaution. But some examples seem unquestionable as for instance in Art.6 of the Valletta convention (English version) "rescue" archaeology is still employed instead of preventive or "in advance", as "rescue" still is in reminiscence of discoveries made during the development works, statement the treaties and some national laws try to avoid. An other detail can be highlighted such as "on" land (Art.1 of the Valetta, English version) had to be read as a name of place and probably as opposition with under water, but it can be interpreted as a more subtle difference; therefore "subsoil" should be preferable. The French "dans le sol" is less open to controversy; it is "in", "on" as well as "under".

Confusion also is rising with "survey" for "*relevé*" and *vice versa*, as it is a wide-ranging term in English (study, prospection…) and a more detailed one in French (to note something by writing or more exactly represent something in plan, mapping).

But finally, during the exercise of reading and comparing the English and French version of the explanatory text of the Valletta convention a phrase is missing in the English text about article 7: The necessity of having up-to-date surveys, (…). (Without this information) It is impossible to launch land preventive administration. In the French text, you found this phrase followed by: "It is a matter to proceed to a preventive action" (*Il s'agit de procéder à une action préventive)*!

1.4. The articles we should bear in mind

Having the above mentioned statements in mind it is evident that the existence of Inrap, its mission and the expanse of preventive archaeology are mainly based on the following articles:
- ICOMOS: (…) *legislation should require full archaeological investigation and documentation in cases where destruction of the archaeological heritage is authorised* (Art.3) and further on the Art.5 stipulate that the *archaeological knowledge is based on scientific investigation embracing a whole range of methods from… to total excavation. Excavation should be carried out on sites and monuments threatened by development, land use change, looting, or natural deterioration.*
- Valletta: (…) *if projects has to go ahead, so adequate time will be given "for an appropriate scientific study to be made of the site*" (Art.5).

Regarding the comparative study, n°138, concerning legislation on preventive archaeology asked by the French Senate (Service des études juridiques du Sénat 2004), many countries still dealing with the problem of fortuitous discoveries during the development works, findings who needs, indeed, to be stated to the authorities and often require stopping the works for allowing rescue excavation. Only Sweden, France and in a lesser way Italy took in consideration the fact that archaeological research (by intrusive diagnosis) should provide the detection of archaeological remains to reduce the risk of accidental finds.

If the French penal code (article 322-2 in reference to the law 95-877, 1995) prohibit the destruction or the deterioration of archaeological heritage without previous investigation, since the law of 2001, modified in 2003[4] the stage of diagnosis (intrusive trial trenching at 10%) is financed by a tax (paid by the developer), seen as a forfeit (or compensation) to a mutual system supporting the charge (cost) of preventive archaeology, on all projects supposed damaging the sub-soil and thereby the archaeological buried down remains. In reference to the Heritage Codex (Book V, L.522-5) each of the regional services of archaeology (*Service Régional de l'Archéologie*, SRA)[5] has to establish zonings based on the archaeological map and related to surface levels (as a screening measure) from which the documents of development (building or demolition authorization, housing estate authorization, as well as all major planning schemes submitted to EIA...) are brought to the attention of the SRA by the competent authority. The SRA further on, enact his motivated decision for the necessity or not to realize an archaeological diagnosis, executed by Inrap or eventually by a local community provided with a registered archaeological service.

Each year in France about 60 000ha are destroyed for economical development work. For administrative and economical reasons 12% of these surfaces are subject to diagnosis.

[4] More information on www.legifrance.fr
[5] The SRA is a state administration depending on the Regional Direction of Cultural Affaires (DRAC) from the Ministry of Culture and Communication (MCC). The notifications, decrees, prescriptions … are delivered by the regional Prefect in conformity with the French policy concerning the planning process.

2. The process of systematic trial trenching and preventive archaeology

2.1. A historical overview

Through some key moments of the evolution of preventive archaeology in rural context from the seventies till now (Talon 2006, forthcoming), we'll try to answer to some fundamental questions about professionalism as well as research, especially the following matters: does she produce creative knowledge and does she generate particular contributions (Pion 2005)?

Turning back to the seventies, the first projects related with preventive archaeology were the extractions of sand and gravel situated on the bottom of the valleys. The technical advantage for archaeologists was the exhaustive strip off, when the practical advantages were the first work contracts and conventions with developers, as well as agendas. At this stage, the beginnings are placed of the later outcome in the nineties: a better planning, creation of steering committees, the estimate of a tax per hectare.

Over the eighties and the first part of the nineties, linear projects as the TGV-railway and several speedways, became quite common and offered, in essence, heterogeneous environmental transects. The following up of such developments allowed a complete geomorphologic survey of valleys and valorised sustainable cooperation with paleoenvironmentalists (Pastre 1994). If the developer assured technical assistance for diagnosis, these were mostly made up of field walking, desk-top studies and trial trenching on evidence.

In the nineties, linear projects progresses and areas of concerted activities are created on plateaus adding knew geological contexts to explore. Systematic trial trenching at about 10% and realisation of deep pits as preliminary investigation to detect sites become general to the detriment of desk-top study. For each archaeological operation a convention links the developer, the operator (Association pour des Fouilles Archéologiques Nationales, Afan, predecessor of Inrap) and the State service (SRA). Security measures for the field archaeologists made an important step. Charges of work unit became accurate and regional directions for preventive archaeology rose. The scientific outcome of the different archaeological investigations (diagnosis, excavation, study and transmission) focalized on a broader approach of archaeological representativeness and on the cartography of alluvial dynamics.

The emergence of vast development projects of several hundred hectares is reserved for the 21st century. They reflect on less documented areas and needed knew methodological approaches for record. The intrusive trial trenching is overwhelming. The archaeological operator is in charge of all the technical affairs. Acquisition of accurate knowledge and the understanding of land use through ages is the result as the gain of information of those huge developments offers the opportunity to reconsider and clarify the settlements and discoveries realised on smaller operations.

2.2. Promoting systematic trial trenching: why?

The method of systematic trial trenching is indeed intrusive. But bearing in mind that archaeology is dealing with hidden/underlying information for which collecting accurate data pass through a process of breakdown with a perspective to reconstruct by interpretation/understanding, it is the best way to obtain tangible data (such as the depth or various depths of the remains buried down, as well as the degree of conservation of the remains by testing (manual or mechanical excavation)). These data consent to adequate scientific evidence necessarily to establish the conservation measures or prescriptions for excavation by the competent authority (see contribution above, J.-P. Demoule). They materialize the preliminary scientific approaches of an unknown as a well as a known site and permit the working out of technical estimation and human needs for the excavation. A budget for environmental studies and other requirements (as consolidation of metal object for instance) can be projected and strategies for sampling, for efficient methods of digging and for recording established.

Whatever the grid system of the trenches, continuous or not, it has been proved statistically over the last 10 years that the fraction of survey can't be lesser then 10% of the whole surface to be explored (Blouet 1994, Talon 1994, Georges-Leroy 2003 and Dubouloz 2003). The recent Onnaing[6] experience (Clotuche forthcoming) demonstrates that the 10% fraction survey allow the detection of settlements (especially Bronze Age/Hallstatt) and other traces (early roman cremation burials assembled in small units) with less impact in the soil (fig.3). Indeed on a surface of 237ha examined by a grid with staggered rows at a 5% fraction, 12 non enclosed sites have been detected and 5 supplementary during excavation (42% extra), while the area of 90ha next to Toyota

[6] Onnaing is the town in North France where the Toyota factory has been build up on 237ha. It was the first example of a major master plan that archaeology was dealing with in 1998.

project has been explored with parallel continuous trenches at a 10% fraction permit the detection of 18 such sites and only 1 supplementary during excavation (5% extra).

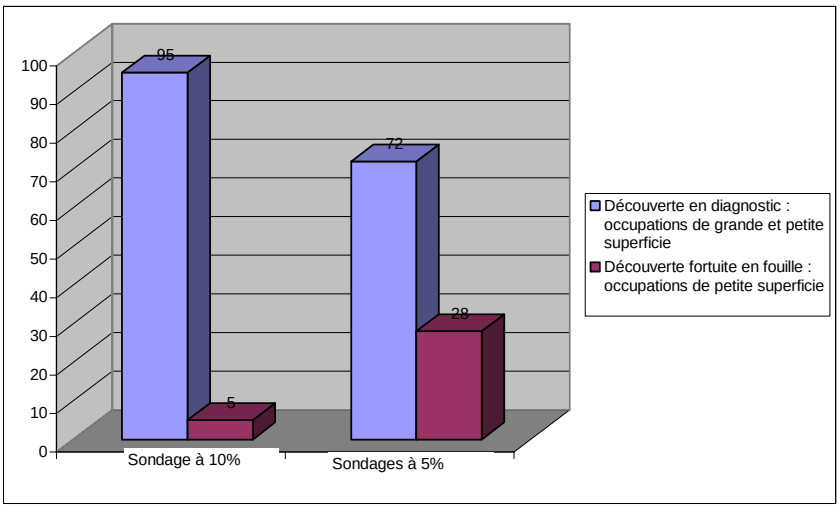

Fig.3: Statistical expression of the difference in findings between trial trenching 10% and 5% fraction in comparison with excavation (R. Clotuche, Inrap).

The data according to morpho-sedimentation dynamics and taphonomy that can be record on small scales can learn us about human settlements and their environment and can eventually serve as predictive and theoretical models to guide future investigation, but we have to underpin that the immense variation shown us that those models are very brittle faced with the immense variability of the taphonomy and, today, only intrusive field work give assurances.

The effectiveness of this method is proved as it ensure an equal protection of buried down remains and offer a realistic image of land use through time at a regional, as well as at a national level.

Finally, the principle that a stage of trial trenches takes place before development work is fully accepted by planners and developers as it correspond to a law and avoid (mostly) interrupting the work. For the archaeologist, rescue excavation (“just saving” objects or minimize the damage already occasioned during the work) turn into preventive excavation as a scientific study where the archaeological remains can be examined in their environmental context.

3. Conclusion

As archaeology still is considered as a science to produce knowledge, so the actors the archaeologists are must put forwards and inform planners and politicians that almost all fields can contain potential information and face up with territorial development. Our knowledge in archaeology has considerably been renewed since the last ten years linked to the archaeological excavations on huge spatial development projects.
It’s strange to think that excavation come down to a simple technique which in special occasions only would be used to answer to scientific problems. That would mean making non-archaeology as a way of heritage management? It’s only by excavating that research makes progress (fig.4), that new opportunity can be explored, and that methods can be developed.

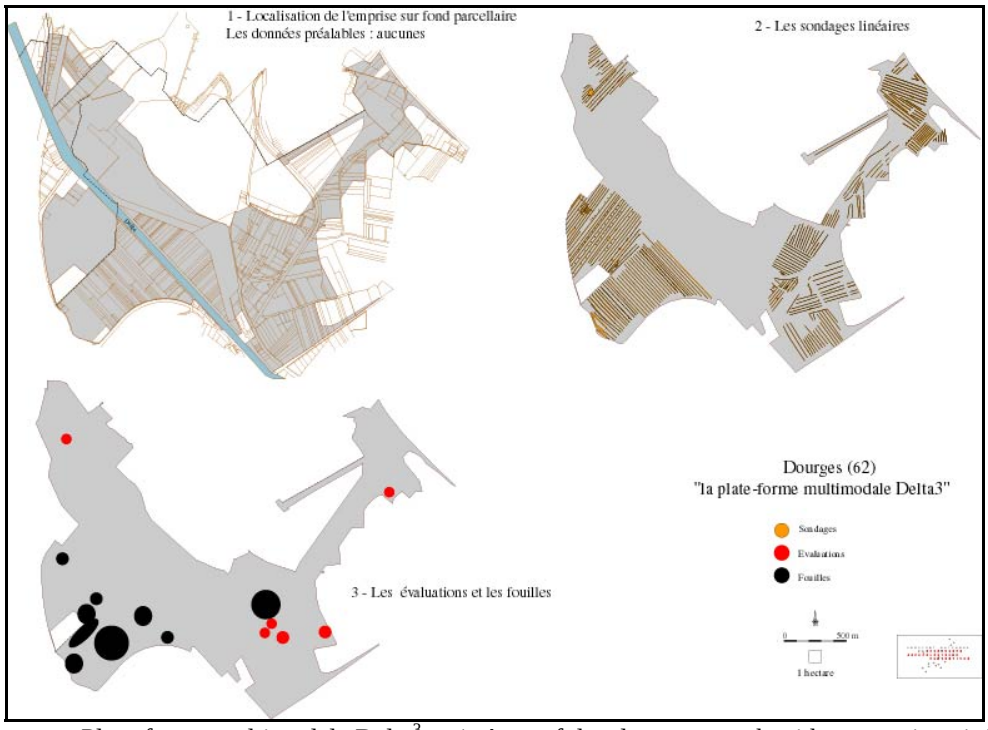

Fig.4: Dourges « Plate-forme multimodale Delta[3] »: 1. Area of development work without previous information, 2. Area accessible and submitted to trial trenching, 3. Our knowledge of the area after evaluation and excavation (G. Blancquaert et D. Bossut/Inrap).

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