

A PRINCIPLES BASED APPROACH TO CADASTRAL REINSTATEMENT FOR AUSTRALIAN JURISDICTIONS

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Abstract

Cadastral reinstatement is the process whereby a cadastral surveyor re-establishes and describes the position of boundaries created by earlier actions. Previous boundary reinstatement cases are examined and the principles on which the courts made their decisions are identified. These principles are synthesised into a simple set of guidelines that may be applied by cadastral surveyors to practical cadastral reinstatement problems. A number of common circumstances that confront practising cadastral surveyors are used to show how these principles may be used to supplement the hierarchy approach to reinstatement.

Keywords: Cadastral reinstatement, hierarchy of evidence, boundaries

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1. INTRODUCTION

Cadastral reinstatement is the process whereby a cadastral surveyor re-establishes and describes the position of boundaries created by earlier actions. The power to define boundaries rests with the courts, not the surveyor. The task of a surveyor is to describe the existing boundaries by collecting sufficient evidence and then interpreting the evidence in a way that is consistent with the precedent set by previous court decisions. In much the same way as Tolstoy (1980) described families, (*All happy families are happy alike, all unhappy families are unhappy in their own way*), boundary surveys where the physical evidence fits the documentary evidence are all straightforward, but surveys where the physical evidence does not fit are all different. Previous authors (Brown 1980; Hallmann 1973; Hamer 1967) have endeavoured to distil the results of earlier court cases into a rules based hierarchy of cadastral evidence to give guidance to surveyors as they set about reinstating cadastral boundaries. In many cases authors and judges specifically warn against using the resultant hierarchy in a rigid manner. For example:

Finally, but most important of all, any one of these rules may be of more (or less) weight in one case than another. The rules set out are for cases of conflict, they are general rules, to be used as a guide but not as a straightjacket.

(Brown 1980, p. 155)

and:

The ranking order is not rigidly applied; special circumstances may lead the Court at times to give greater weight than normal to a feature of lower rank.

(Hallmann 1973, p. 176)

*They all maintain that in locating lands, we are to resort, 1st. To natural boundaries, 2d. To artificial marks, 3d. To adjacent boundaries, 4th. To course and distance; **but it has never been said, that each of these occupied an inflexible position. It sometimes might occur, that an inferior means of location might control a higher, when it was plain there was a mistake.***

(Fulwood v Graham, 1 Rich. 491 (1844) at p3)

This apparent contradiction is a significant impediment to students and graduates alike as they develop a more nuanced view of the cadastral reinstatement process. In cases where the accepted hierarchy is usurped it is often because an established judicial principle has been seen as more important than the attitude of previous courts to the cadastral evidence types. If the courts have seen the principles as being more important than the hierarchy, then perhaps a cadastral surveyor should consider a principles based approach to reinstatement rather than the traditional rules based approach. A focus on principles, rather than on rules, may allow students, graduates and cadastral surveyors to have a better understanding of how the courts may view the evidence they have uncovered. The aim of this work is to identify the principles used by the courts to resolve previous boundary reinstatement cases and distil from them a working set of principles that may be applied by cadastral surveyors to practical cadastral reinstatement problems. This paper will describe a number of court cases where the judgement appeared to be in conflict with the recognised reinstatement hierarchy and will highlight the principles that were used in arriving at that decision. It will then show how these principles may be used to supplement the hierarchy approach in a number of common circumstances that confront practising cadastral surveyors.

2. CADASTRAL REINSTATEMENT PRINCIPLES

Clarity of Intention

Boundaries are legal objects that are created by individuals, corporations or governments and they come into being by an action. Before there can be an action there needs to be an intention to perform that action. Courts and legal texts have agreed that the intention needs to be the ‘expressed’ intention of the parties rather than what can be surmised.

*The cardinal rule for the interpretation of deeds is to discover the **expressed intention** of the parties, gathered from all parts of the instrument, giving each word its due force read in light of existing conditions and circumstances at the time of the conveyance. It is the intention definitely expressed in the instrument that controls, **not intention merely surmised.***

(Brown 1980, p. 150)

*...the location of a boundary is primarily governed by the **expressed intention** of the originating party or parties or, where the intention is uncertain by the behaviour of the parties.*

(Hallmann 1973, p. 175)

Therefore one of the keys to ascertaining the intention of the parties is resolving how it was expressed in the actions of the parties. An example of how the courts have considered the question of intention is the judgement in *Pukallus v Cameron* (1982) 180 CLR 447. The parties entered into a contract to sell a lot (Lot 1) with both parties under the misapprehension that a bore and area of cultivation lay within the boundaries of the lot. They contracted to buy and sell Lot 1 without any mention of the bore or mention of resubdivision. After a number of appeals, the High Court found that the intention of the contract was clear, that only Lot 1 was being conveyed, and that “convincing proof” was required to maintain that the intention is other than what is clearly written in the contract. If the intention of the parties is clear then the boundary is clear. Likewise, if the physical evidence of boundaries is in accord with the documentary evidence of the boundaries then there are no decisions for the cadastral surveyor to make. If however, the physical evidence is contradictory or it is not in agreement with the documentary evidence then the cadastral surveyor is obliged to decide which evidence gives the better indication of the expressed intention of the parties. For example, in *Re Boundary of Jarwood Holding* (1938) 17 QCLR 63 the court was required to decide on a conflict, within a description of a lease, between a straight line between two surveyed points and description of that line as a watershed. The hierarchy would place the natural monument (the watershed) before the artificial monuments (the pegs). The judge preferred the artificial monuments after taking the intention into account. The judge divined that the original intention of the Minister and the Governor in Council could be ascertained from documentary evidence tendered at the hearing because the position of the survey points was known at the time the leases were offered and the location of the watershed was not.

User Understanding

Australian and New Zealand courts have borrowed heavily from American case law in relation to boundaries as the “doctrines of the American Courts seem entirely consistent with the principle of the common law” (*Equitable Building and Investment Co. v Ross* (1886) NZLR 5SC 229 at p235). It is from these cases that the idea that the physical evidence of boundaries should be considered as superior to the documentary evidence originates.

There is no rule of construction more established than this, that where a deed describes land by its admeasurement, and at the same time by known and visible monuments, these latter shall govern. And the rule is bottomed on the soundest reason. There may be mistakes in measuring land, but there can be none in monuments. When a party is about purchasing land, he naturally estimates its quantity, and of course its value, by the fences which enclose it, or by other fixed monuments which mark its boundaries, and he purchases accordingly.

(*Howe v Bass*, 2 Mass. 380 (1807) at p383)

In the Australian context Griffith CJ used the American court’s example when he proposed that the preferred approach to ascertaining the intention of the parties was “to give most effect to those things about which men are least liable to mistake” (*Donaldson v. Hemmant* (1901) 11 QLJ 35 at p41, *Overland v Lenehan* (1901) 11 QLJ 59 at p66). This approach is often paraphrased into ‘monuments over measurements’, however the principle is more nuanced than that simplified adage. The essence of the court’s approach is a consumer view of property boundaries. If the people are willing to buy what they see around them then they should be satisfied with the land they observed.

Hallmann (1973) makes the point that the term monument is rarely defined even though it is used in judicial decisions and legal texts. He suggests that the vital requisite to convert some durable object into a boundary monument is that it be referred to in a document of title. This definition was later used in *Registrar General v Tuckfield* [1991] NSWLEC 121. Surveyors are comfortable in considering a cadastral survey plan as an appropriate document if they consider the explanation given in *Davis v Rainsford* 17 Mass. 207 (1821):

When lines are laid down on a map or plan, and are referred to in a deed, the courses, distances, and other particulars appearing on such plan, are to be as much regarded as the true description of the land conveyed, as they would be, if expressly recited in the deed. This is a familiar rule of construction in all those cases, wherein no other description is given in the title-deeds, than the number of the lot on a surveyor's plan of a township or other large tract of land.

(Davis v Rainsford 17 Mass. 207 (1821) at p3)

Brown (1980, p. 149) writes that monuments need to be visible, permanent, stable, certain of identity and independent of measurement.

In *Resurrection Gold Mining Co. v. Fortune Gold Mining Co*, 129 F. 668 (1904) the identity of the monument was thought to be of critical importance. A mark was found that did not agree with the written description of the corner mark and it was not found in the described position. The surveyor's field notes described the monuments as square posts with figures carved into it. Several other monuments matching this description were found at other corners but at the corner in dispute a round stake with a blaze on the side and pencil marks of the lot number was found 28 feet northwest of the corner as described by the bearings and distances. The judges agreed that if this mark was the original corner mark then it would control the boundary. The court was split as to whether this stake was the mark that was originally placed. The majority thought it should have been ignored and the dissenting judge thought the mark was placed by the original survey.

Notwithstanding the judge's opinions of where the stake had come from, all the judges agreed that if a monument has been lost or removed and its original position can be shown by parol (i.e. oral) or other competent evidence then this location will prevail over dimensions. Where they differed was that the majority of the court thought that the evidence was not sufficient to substitute a different monument.

In cases of this character the original monuments called by the patent, if they still remain in place, prevail over the courses and distances noted in the description. If the monuments called have been lost or removed, the places where they were originally located may be shown by parol

or other competent evidence, and, if proved to the satisfaction of the jury by a fair preponderance of evidence, these original locations will prevail over the courses and distances, and control the application of the description to the land. ... If the monuments are lost or removed and their original locations are not established by competent proof, the courses and distances prevail, and control the description.

(Resurrection Gold Mining Co. v. Fortune Gold Mining Co, 129 F. 668 (1904) at 671)

This idea of a chain of evidence was used in *Mt Bischoff Tin Mining Co. v Mt Bischoff Extended* (1913) 15 CLR 549. This case revolved about a boundary that separated two mining leases. The first lease had been created in 1874 and although it was not certain, the judge found it probable that the lease had been surveyed and marked at that date. Ten years later a change in legislation gave an obligation to lessees to maintain posts and lockspits at their corners. In 1891 a surveyor was employed to re-mark the leases. He found marks at the corner and renewed them. At the time of the conflict in 1913 the judge was satisfied that these marks marked the corner of the lease even though they were not physically the marks placed by the original surveyor. Similarly in a decision from the NSW Land and Environment Court (*Registrar General v Tuckfield* [1991] NSWLEC 121) the judge was quite prepared to accept a survey mark that had been lost but “re-established in a survey done by Mr Hogan's firm”. It would appear that knowledge of by whom, when and for what purpose a monument is placed is a decisive factor. An original mark or monument in the legal sense need not be the mark first placed by the original surveyor but it is a mark of known origin.

As to the recognition of monuments *Turner v Hubner* (1923) 24 SR 3 makes some useful remarks.

Fences are the most unsatisfactory of monuments because they are not durable and are easily shifted. In the absence of some indication or evidence of identity it is a large assumption to make that a fence round an allotment in a plan of 1862 is identical with a fence shown round the same allotment in 1868 or 1874. They may be the same but if the measurements do not tally I do not think I am justified in coming to the conclusion that the fences must be identical and the measurements therefore wrong.

(Turner v Hubner (1923) 24 SR 3 at p8)

This should sound a word of warning as the same can be said of survey pegs (Hamer 1967). The judge makes the point that since the fence was shown in different positions by two surveys then it is optimistic to make the presumption that it is the same fence. It is reasonable to extend this reasoning to pegs. If a peg is found which conforms to neither dimensions nor other monuments then the surveyor may not necessarily be required to fix the boundary to the peg.

Cessante Causa, Cessat Effectus

In resolving the central dispute in *Davis v Rainsford* the judge conceded the most established principle is that known monuments must govern over bearings and distances. However the judge made an exception due to the facts of the case. He stated that the reason monuments control is because they are less liable to mistake, but then he applied the legal maxim *cessante causa, cessat effectus*, which translates as “the cause ceasing, the effect must cease”. The judge made the point that the deed made a distance as being 0.381 m (1’3”) whereas the monuments made the distance to be 1.067 m (3’6”) and concluded that no-one could make a 0.686 m error in a 1.067 m line. He maintained that there is no mistake in the written dimension (it was intended to be 0.381 m) so then there was no need for the rule (that monuments should govern). (Note: In this case the monument was a shop being constructed at the time the land was conveyed by a written description, there is no mention in the case of a survey being performed.)

Ockham’s Razor

The principle that plurality should not be posited without necessity is attributed to the philosopher William of Ockham. If an explanation that invokes fewer assumptions can be created then it should be preferred to an explanation that requires more assumptions. While it has not been explicitly referred to in judgements related to boundary reinstatement, it makes a useful umbrella under which to put similar principles.

Falsa demonstratio non nocet proposes that if part of a description is true and part false, if the true part describes the subject with sufficient certainty, the untrue part will be rejected or ignored (Osborn's Concise Law Dictionary; 1983). That is to say that if there is redundant evidence, be it documentary or physical, then it is legitimate to disregard some evidence if it conflicts with the whole. This principle has been used in cases that form the basis for the hierarchy. For example, in *Small v Glen* (1880) 6 VLR 154 a lot was shown as bounded by three roads. The distance shown on the plan between two of the roads was shorter than true distance between the roads. The court decided that the dimension could be considered as *falsa demonstratio*. In this case if the distance was adopted the lot could not be unambiguously defined. The distance could be laid in from the first road and the lot not be bounded by the second road or the distance could be laid in from the second road and fall short of the first or the lot centre could be equidistant from each road and not be bounded by either. However if the distance was ignored then the lot could unambiguously be bounded by all three roads. Therefore the distance was ignored and the lot reinstated by the road bounds. In another instance, the same principle was applied in *Archard v Ellerker* (1888) 10 ALT 196. A surveyor had been asked to prepare a plan which showed a lot as being 5.486 m (18') wide and bounded on one side by a party wall. In fact the two sides of the lot were not parallel and the lot was 0.115 m wider at the rear of the lot. While finding that the surveyor was negligent, the court found that the wrong dimension on the plan did not change the boundary and it was still the centre of the party wall.

The principle has also been used to render decisions that conflict with the established hierarchy. For example, many cases have explicitly stated the reported area of the lot is to rank lowly as evidence of the boundary location. However in some notable cases it has been area that has been considered the decisive fact over which the case has been decided. The court in *Watcham v. East Africa Protectorate* [1919] AC 533 was confronted with a written description for a large parcel that contained a latent ambiguity. This ambiguity only became apparent when attempts were made to apply the description to the facts on the ground. Only one of the two competing constructions of the deed gave an area that was close to the area mentioned twice in the deed. The area was retained as part of the description and a portion of the metes description was considered as *falsa demonstratio*. In the South African case of

Horne v Struben [1902] AC 454 the judge leant in favour of the respondent because the boundary position put forward by the respondent Struben meant that he was in fact receiving considerably less land than the boundary preferred by the Surveyor General Horne: again, area acted as a critical factor in arriving at the decision. It is also interesting to note that the judge considered the probability that the river was the true boundary was increased by the fact that the property could only be profitably occupied if it had access to fresh water.

With respect to evidence provided by the owner's occupation of a lot, the most commonly cited case is *Equitable Building and Investment Co. v Ross* (1886) NZLR 5SC 229 which is often referred to as the *Lambton Quay Case*. The parties contended over an encroachment in an area where the surveyed boundaries were unclear because there were no original survey marks.

*Where there are no natural boundaries, and the original survey-marks are gone, and **there is no great difference in admeasurement**, a long occupation originally authorised by the proper public authority, and acquiesced in throughout the period by the surrounding owners, is evidence of a convincing nature that the land so occupied is that which the deed conveys. Even where monuments exist which enable a more accurate survey to be made, no trifling discrepancy can be allowed to over-rule the practical interpretation put upon the instrument by such an occupation. The occupier is not to be driven to rely on a mere possessory title; but has a right to assert that the land he holds is the very land granted.*

(Equitable Building and Investment Co. v Ross (1886) NZLR 5SC 229 at 234)

Australian courts have also considered the status of occupation. *Attorney-General v Nicholas* [1927] GLR 340, commenting on the *Lambton Quay Case*, considered that whether or not the Local Authority authorised the occupation was irrelevant. *National Trustees Etc. Co. v Hassett* [1907] VLR 404 made the point that in the absence of survey marks there can be no better indication of the land to which the grant relates than long and unchallenged occupation but it does not rely on adverse possession: the fence shows where the original boundary was.

In *Turner v. Myerson* (1917) 18 SR (NSW) 133 the judge was critical of the fact that the NSW legislation did not allow any possessory title. Perhaps it was this preference that led him to say:

Where possession of land, purporting to be occupation of the land described in a certificate of title as a lot on a deposited plan, has been uninterrupted for 30 years, the most positive evidence is required to rebut the presumption that the land as occupied is in accordance with the boundaries as originally plotted.

(Turner v. Myerson (1917) 18 SR (NSW) 133 at 135)

That the occupation was in close agreement with the previous boundary measurements was also significant (Hamer 1967). The judge concedes that occupation, as evidence, relies on its connection to the original survey but he thought that surveyors could not be certain enough to show an encroachment in this case.

This idea of a connection to the original survey may have meant that the court in *Cable v. Roche* (1961) NZLR 614 took particular note of the phrase ‘there is no great difference in admeasurement’ to rule that the position of the occupation in question in that action was too different to the boundary position as described by the plan to be considered evidence of that boundary.

Occupation simpliciter may be taken as sufficient in the absence of good evidence countervailing it, but mere proof of long and uncontested occupation does not relieve the Court of the duty of inquiry and of considering the history of the property and the technical evidence bearing on the dispute.

(Cable v. Roche (1961) NZLR 614 at 616)

The law presumes that everyone in possession is lawfully in possession unless it can be proven otherwise (Cumbrae-Stewart 1931). It would appear that a surveyor should start with the position that the land occupied is the land that was originally marked by survey pegs, but they are obliged to seek out evidence that may conflict with that assumption. In *Cable v Roche* it was the fact that the

occupation differed too much from the surveyed boundaries, but in other cases it may be that the occupation may not be old enough to support the assumption (Dupuy 1915).

Turner v Hubner (1923) 24 SR 3 found that if the dimensions of the occupation did not tally with the dimensions of the plan then the surveyor was justified in coming to the conclusion that the fence was not the original and so it could be disregarded. These cases reasoned that to be evidence of the original survey that occupation should reflect that survey and that occupation that differed greatly from the expected position may be disregarded. Obviously there can be no absolute value of disparity but it must reflect the age of the original survey and the consistency of the other evidence.

Cases have taken into consideration the type of occupation when assessing its usefulness as evidence of the boundary. *Turner v Hubner* found that fences were unsatisfactory because they were not durable and were easily shifted. In addition it would be reasonable to assume that people would take more care in erecting an object that would take more time and money to remove if it was found to be in the incorrect position. Considering these reasons it is clear that a surveyor is entitled to consider that buildings are preferable to fences as occupation evidence. The method of construction of the occupation was important in *Attorney-General v Nicholas* [1927] GLR 340. The judge considered it significant that the fence in dispute had no ditch beside it like the other boundary fences in the area and so decided that it was not intended to mark the boundary. In *James v Stevenson* [1893] AC 162 a fence that had been in position for upwards of forty years was accepted as “no legal origin can be shewn to this fence, except the boundary drawn by the release of 1839” (at p166). The fact that this fence had been erected in “1839, or very soon after” led the court to the compelling presumption in favour of the fence being on the line intended to be the boundary.

Nemo dat quod non habet

If a boundary is a theoretical line that marks the limit of a parcel of land, then it is desirable that adjoining parcels have the same boundary, otherwise there would exist small strips of ownerless land, or worse still, strips of overlapping land that are in dispute. Where the dimensions on a plan would lead to a wrong inference as to the dimensions of the land, but the abutments are shown correctly, the

owner is entitled to all the land which actual measurement on the ground would show to lie between those abutments (*Archard v. Ellerker* (1888) 10 ALT 196).

In *Bank of Australasia v Attorney-General* (1894) 15 NSW 256 land had been granted by the Crown with four boundaries running in the cardinal directions. The northern and southern boundaries already existed. The grant was stated as being 660 acres but the area between the two known boundaries was approximately 1000 acres. The court found that the adjoining boundaries were sufficient to describe the land and the grantee was entitled to all that land between. The judge said:

The question of quantity is mere matter of description, if the boundaries are ascertained...

(Bank of Australasia v Attorney-General (1894) 15 NSW 256 at 262)

This was similar to the position the court found itself in *Hutchison v Leeworthy* (1860) 2 SALR 152. The lot was described as being bounded by a river on two sides, a road and an existing lot. The plan showed the area as 134 acres but in reality it was closer to 190 acres. The action started when the Crown attempted to recover the difference of 56 acres and grant it to another person. The court found that the description of the land was unambiguous and the Crown could not grant what it no longer had. The maxim *Nemo dat quod non habet* proposes that no-one can give what they do not possess (Cook 1996). The judge makes the comment that it was not the purchaser's fault that the survey was inaccurate. The judge went on to say that it made no difference as to how big the mistake was, but in some circumstances it may raise a question as to the intention.

The critical point when fixing boundaries by abutments is the order in which the boundaries are created. The fact that one lot was in existence before the other was an important point in *Mt Bischoff Tin Mining Co. v Mt Bischoff Extended* (1913) 15 CLR 549.

The plaintiff's southern boundary, wherever that was, was the defendants' northern boundary, which was, in 1891, eight years before the defendants' title began, denoted by old marks on the ground and was then marked afresh.

(Mt Bischoff Tin Mining Co. v Mt Bischoff Extended (1913) 15 CLR 549 at 554)

Likewise, in *Stevens v Williams* (1886) 12 VLR 152; Allotment 2 had been granted by a metes description that did not agree with position of the boundary of Allotment 1 which had been granted previously to the defendant. The judge said:

...the defendant has shown that the land in dispute has been already conveyed to her by a certificate of title at least as equally conclusive with that of the plaintiff.

(Stevens v Williams (1886) 12 VLR 152 at 158)

The Crown could not convey land to another person after it had already conveyed to someone previously, nor could plans for adjoiners that come after the original necessarily control the boundary. Similarly, the marks from subsequent surveys of adjoining lots that reinstate existing boundaries will have a lesser status to those placed in connection with the original surveys.

A man's title to land is not to be placed in jeopardy by hearsay evidence as to what some surveyor may have done or placed upon record in the shape of a map ...a man's title to land is not to be affected by some description contained in a deed or grant to which he is no way privy, and of a date subsequent to the grant under which he holds the land.

(Smith v Neild (1889) 10 NSW 171 at 174)

Summary

The previous discussion has referred to a large number of cases and by necessity has resorted to the language of the courts. It is possible to translate this body of argument into four plain English principles.

1. It is not the surveyor's understanding of the boundary but the vendor's and purchaser's that is more important.
2. The simpler the action, the more reliable that action is.
3. The solution that posits the least number of errors on the previous surveyor's behalf should be preferred.

4. You cannot convey what you do not own. It should be noted that this principle binds the Crown, not just private property owners.

These principles are not proposed as a replacement for the hierarchy, but they may give surveyors confidence in situations where the physical and documentary evidence of the boundaries necessitates a solution that does not apply the hierarchy rigidly.

3. CADASTRAL REINSTATEMENT PRACTICE

Jan L.A. van de Snepscheut is often attributed with the idea that in theory, there is no difference between theory and practice, but in practice, there is. This is true with respect to cadastral reinstatement and is often an impediment to students of the discipline. However if we consider the principles behind the cases described above it is possible to see that standard cadastral practice is much closer to the theory than it at first appears. The purpose of this section is to show how the principles discussed above can be applied to examples of practical reinstatement problems.

In practice a surveyor may be confronted with the situation where a corner is monumented by a reference mark without any physical evidence being extant at the cadastral corner and the distance or bearing to that mark from the last established corner differs from the previous plan. A strict reading of the hierarchy would dictate that both the bearing and distance from the corner to corner and the corner to reference mark will be of equal status. In practice, surveyors give preference to the shorter distance to the reference mark and the angle at the corner to be fixed over the longer distance to the previous corner or the angle measured at that previous corner. This is clearly inconsistent with the rules based approach. However, considering it in light of the principles it is possible to explain this action in two ways, providing the connection from the reference mark to the corner is not of an excessive distance. The surveyor is applying the *cessante causa, cessat effectus* principle in conjunction with Ockham's razor. The surveyor is maintaining that it is far more likely that the previous surveyor was able to measure the short distance to the reference mark reliably than they were able to measure the longer distance. They consider the simpler measurement to be the more reliable one.

As another example, consider the following circumstance. A large lot is alienated from the Crown and as part of the survey a road is created which forms one of the boundaries of the lot. At a later time another surveyor subdivides this lot and creates a boundary perpendicular to the road and monuments the corner with a peg and reference mark. In the process of reinstating this survey another surveyor discovers that the connection between the peg and reference mark agrees with the previous plan but the peg is actually on the road reserve. The normal solution is to reinstate the corner at the intersection of the road reserve and the perpendicular boundary created by the second survey. This action is difficult to justify in terms of the traditional rules based hierarchy but the action can be easily justified by consideration of the *nemo dat quod non habet* principle. The second surveyor was not entitled to place the peg in the position they did when the perpendicular boundary was created because the owner of the original lot was not entitled to grant to their successors in title land that they did not own, namely the road reservation.

Another common contradiction that faces a cadastral surveyor is the following. The corner that is required to be reinstated is marked by an original survey peg as well as a reference mark. In this case the surveyor determines the bearing and distance between the two marks and discovers a difference from the original reference. A strict interpretation of the published reinstatement hierarchies would require that the corner be fixed by the peg and the boundary dimensions and reference mark connection altered to suit the physical evidence. Considering the situation based on principles, the surveyor may look at the adjacent evidence and from those connections decide which mark to adopt. If the reference mark agrees with the other evidence the surveyor would be warranted in applying Ockham's razor to decide that the peg had been disturbed and could be safely re-referenced. It is worthy of note that this action is mandated in New South Wales by s 32 of the *Surveying Regulation 2006*.

The list of examples above is not exhaustive, but it does demonstrate how normal reinstatement practice is already using a *de facto* application of a principles based approach in cases where the strict adherence to the hierarchy of evidence would lead to unreasonable results.

4. CONCLUSIONS

The idea of a hierarchy of cadastral evidence has been, and continues as a useful tool to apply to the problem of cadastral reinstatement. Nevertheless, this paper has shown how a principles based approach to the reinstatement of cadastral surveys may allow a surveyor the flexibility they require when confronted with contradictions in the physical and documentary cadastral evidence that make the application of the traditional hierarchy problematic. This is not to suggest that this article has described all the legal principles that will be applicable to boundary reinstatement. The principles have, by necessity, been extracted from situations where the boundary evidence has been so contrary or the value of the land so high that it has meant that the parties have not been able to reach an amicable solution. As a result the cases represent extreme circumstances. However the examples show how these extreme circumstances have drawn attention to principles that are equally applicable to the small differences that surveyors find in their day to day practice.

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