

LEIBNIZ'S SOLUTION TO THE PUZZLE OF LEX FALCIDIA

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Abstract: In his early legal works, G.W Leibniz addressed a puzzle in Roman Law, the paradox, or “perplexing case” of Lex Falcidia, proposing a solution to it. Here, after introducing the Falcidian paradox and its Leibnitian solution, a logical analysis will be presented. Some consideration will finally be developed concerning the legal and logical significance of Leibniz’s approach to the Falcidian case.

Keywords: perplexing case, Lex Falcidia, antinomy

1. Introduction: the puzzle of Lex Falcidia

Lex Falcidia was a Roman law (of 40 B.C) that allowed a testator to dispose only up to three-fourths of his or her estate; the testator could not deprive the legitimate heirs of the other fourth. Here is its introduction by jurist Paulus in Justinian’s Digest (D. 35.2.1).¹

There was promulgated the lex Falcidia which, in its first chapter, granted free power of disposition by bequeath up to “three quarters” of one’s substance. The wording of that chapter is this: “Any Roman citizen who, after the promulgation of this statute, wishes to make a will, giving his money and possessions to whom he choose, shall have the right and power so to do, so far as this ensuing enactment permits.” The second chapter imposes a limitation on legacies in the following terms: “Any Roman citizen who, after the promulgation of this statute, makes his will shall have the right and power, under the general law, to give and bequeath money to any Roman citizen so long as the legacy [or legacies]

¹ For the Digest, the English translation by Watson (1985) is here used.

be such that the heirs take not less than a quarter of the estate under the will".²

That this law could lead to a legal puzzle was detected by the Roman jurist Africanus, who is quoted as follows in Justinian's Digest (D. 35.2.88.)

A man with four hundred made legacies of three hundred; he then devised to you land worth one hundred gold pieces subject to the condition: "if the *lex Falcidia* has no application to [my] will." Question: What is the legal position? I replied that this is an impossible question, styled "a deception" by dialecticians. For whatever we assert to be true will be found to be false. Here is the proof: If we say that your legacy is valid, the *lex Falcidia* operates, and so, the condition failing, the legacy will not be due. Again, if the legacy be not valid because of the failure of the condition, there will be no place for the *lex Falcidia*. Furthermore, if the *lex* should not obtain, the condition will be realized, and the legacy will be due to you.³

Africanus does not directly address the logical paradox, but rather argues for the puzzling clause to be applied in such a way as to implement the implied intention of the testator, namely his intention that the legacy established by that clause should not negatively affect his other legacies.

² *Lex Falcidia* lata est, quae primo capite liberam legandi facultatem dedit usque ad dodrantem his verbis: "qui cives romani sunt, qui eorum post hanc legem rogatam testamentum facere volet, ut eam pecuniam easque res quibusque dare legare volet, ius potestasque esto, ut hac lege sequenti licebit". secundo capite modum legatorum constituit his verbis: "quicumque civis romanus post hanc legem rogatam testamentum faciet, is quantam cuique civi romano pecuniam iure publico dare legare volet, ius potestasque esto, dum ita detur legatum, ne minus quam partem quartam hereditatis eo testamento heredes capiant".

³ Qui quadringenta habebat, trecenta legavit: deinde fundum tibi dignum centum aureis sub hac condicione legavit, si legi *falcidiae* in testamento suo locus non esset: quaeritur, quid iuris est. Dixi tòn aporôn hanc quaestionem esse, qui tractatus apud dialecticos tou qeudomenou dicitur. etenim quidquid constituerimus verum esse, falsum repperietur. Namque si legatum tibi datum valere dicamus, legi *falcidiae* locus erit ideoque deficiente condicione non debebitur. Rursus si, quia condicio deficiat, legatum valiturum non sit, legi *falcidiae* locus non erit: porro si legi locus non sit, existente condicione legatum tibi debebitur.

In fact, according to Falcidia, in case the total legacies exceed $\frac{3}{4}$ of the inheritance, all legacies must proportionally be reduced in such a way that $\frac{1}{4}$ is left to the legitimate heirs. Therefore, when Falcidia applies to a will, any legacy negatively affects all other legacies, involving a proportional reduction of each of them. According to Africanus, we should pragmatically assume (or pretend, through a sort of legal fiction) that Lex Falcidia applies to the will. This would mean that the condition of the legacy (i.e., that Falcidia does not apply to the will) has not been met, which would lead to the result intended by the testator for the contingency that his legacy goes beyond the $\frac{3}{4}$: the legacy is ineffective and consequently it does not negatively affect the other legacies.

Since, however, it would appear to have been the testator's intention that the legacies of others should not be abated by reason of that to you, our better course is to hold that the condition of your legacy is not complied with.⁴

The Lex Falcidia puzzle was addressed by Leibniz, at the time attending law school, in his 1664 academic dissertation for a master in philosophy, the *Specimen quaestionum philosophicarum ex jure collectarum* (Specimen of Philosophical Questions Collected from the Law, A VI i 69–95) hereafter *Specimen quaestionum philosophicarum*.⁵ Here is how he presents the puzzling case.

However, that two contradictories can be both false seems to be inferable from l. 88 D. Ad legem Falcidiam, where in fact the jurist Africanus says: Assume that one who had 400, bequeathed 300, and then devised to you a tract of land worth 100 gold pieces under the condition that the Falcidian law should not apply to his will. Here, whatever we may state to be true will be found to be false. For if the legacy will be valid (*valebit*),

⁴ Cum autem voluntatem testatoris eam fuisse appareat, ut propter tuum legatum ceterorum legata minui nollet, magis est, ut statuere debeamus tui legati condicionem defecisse.

⁵ The first English translation of this work is available, together with the original Latin text, in Artosi et al. (2013). On Leibniz's legal works, see Artosi and Sartor (2016).

then by law there will be ground for the application of the Falcidian law, and therefore the legacy will not be valid (*non valebit* according to its condition. If, on the contrary, the legacy will not be valid, by law there will be no ground for the application of the Falcidian law, and therefore the legacy will be valid according to its condition (*Specimen quaestionum philosophicarum*, Quaestio XII).⁶

Leibniz's solution to the paradox in the *Specimen quaestionum philosophicarum* goes back to the approach by Africanus, namely, refers to the supposed will of the testator. However, he argues that the invalidity of the legacy does not depend on the fact that its condition had not been met (i.e., that Falcidia applies) as Africanus seems to imply. It rather depends on the fact that by putting together "impossible" things, the testator must have wanted to convey the intention that the legacy would be ineffective.

To the difficulty deriving from our laws, I answer that we must presume as concerns the intention of the author of the legacy, that he wanted the legacy will to be void, and that he was only jesting (since it is in someone's nature not to abandon his jesting even when close to death), when he knowingly put together impossible things. And so according to strict law, and to juristic subtlety, the legacy should be void. (*Specimen quaestionum philosophicarum*, Question XII.)⁷

Note that Leibniz does not seem to consider, as Africanus did, the context in which the conditioned legacy may make some sense. This is

⁶ Duo contradictoria autem simul falsa esse posse, videtur inferri ex l. 88. D. ad L. Falcid. Ibi enim dicit Africanus JCtus: si qui 400 habebat 300 legavit, deinde fundum tibi dignum 100 aureis sub hac conditione legavit: si legi Falcidiae in suo testamento locus non erit. Hic quicquid constituerimus, verum esse, falsum reperietur. Nam si Legatum valebit locus erit Falcidiae ex lege, et sic Legatum non valebit ex conditione Legati. Si Legatum non valebit, non erit Falcidiae ex lege, et sic Legatum valebit ex conditione Legati.

⁷ Ad difficultatem ex Legibus nostris respondeo, praesumendum de animo legantis, volueritne Legatum nullum esse, et ludere tantum (quae quorundam natura est, ut nec in morte jocos deponant), dum impossibilia sciens copulavit, atque ita jure stricto est nullum, et subtilitate juris.

the situation in which the testator does not know the total amount of his legacies relatively to his patrimony, and wants to be sure, when making an additional legacy, that it will not negatively affect the legacies he has already established.

The Lex Falcidia puzzle was taken up again by Leibniz in his 1666 doctoral dissertation, the *Disputatio inauguralis de casibus perplexis in jure* (Inaugural Disputation on Perplexing Cases in the Law, A VI i 97–150), hereafter *Disputatio de casibus perplexis*).⁸ Here Leibniz provides a solution to the puzzle that no longer appeals to the intention of the testator, as in Africanus's account. First he introduces his notion of a perplexing case. He observes that in a perplexing case two incompatible alternatives are at stake, both of which appear to “stand on solid grounds”. The clash of the two alternatives is not due, as in antinomies, by the “immediate clashing of two laws”, but rather by particular factual circumstances that trigger the legal conflict:

I define a (properly) PERPLEXING case as (that which is really doubtful in the law owing to) the contingent joining in a fact of several things having a legal efficacy that is now hindered by their running together. In an antinomy, by contrast, there is an immediate clashing of the laws themselves, even though a perplexity may itself in a sense be considered an indirect antinomy (*Disputatio de casibus perplexis*, Section V)⁹

He also specifies that his inquiry concerns dispositions, by which he means voluntary acts (typically, contracts, wills, or legacies, or clauses in them), or clauses in such acts, disposing that “something be done with some thing belonging to the disposing party”. According to Leibniz all “perplexing dispositions” are invalid.

A PERPLEXING DISPOSITION IS INVALID, AND
HE WHO GROUNDS HIS CASE ON IT OBTAINS

⁸ First English translation, together with the original Latin text are available in Artosi et al. (2013)

⁹ Casum igitur (proprie) PERPLEXUM definitio (eum, qui realiter in jure dubius est ob) copulationem contingentem plurium in facto eum effectum juris habentium, qui nunc mutuo concursu impeditur. In Antinomia autem ipsarum immediate ‘legum pugna est, quanquam et perplexitas Antinomia quaedam indirecta dici potest.

NOTHING (Disputatio de casibus perplexis, Section XIII)¹⁰

The reason of the invalidity of such dispositions pertains to the fact that an acceptable legal argument cannot be built by relying on them: a perplexing disposition does not enable a party to substantiate the claim for the legal effect established by that disposition.

Leibniz applies this framework to the kind of perplexing disposition to which the clause in the Falcidian case belongs, namely a disposition establishing a legal effect that contradicts the very condition that the dispositions requires for that effect to be produced.

A condition is INCOMPATIBLE when it establishes the contrary of the contrary, either directly, e.g., “If you will not be my heir, be my heir”, where one is substituted for oneself (l. 9, last, D. De vulgari et pupillari substitutione), as in the just-mentioned case I, or indirectly, as in the following case II. A testator who has already bequeathed three-quarters of his estate bequeaths 100 to Titius if the Lex Falcidia does not apply to his will, a condition which is incompatible with such a bequeath because of the act of the testator himself (*Disputatio de casibus perplexis*, Section XIII).¹¹

The party who wants to claim the legacy on the basis of the conditional clause would have to show that Falcidia does not apply the will, but this very fact would lead to the contradictory conclusion that Falcidia does apply to the will. Therefore this party would not be able to substantiate his or her claim on the basis of that clause. Therefore Leibniz concludes that the clause establishing the conditioned legacy is void, deprived of legal significance.

¹⁰ DISPOSITIO PERPLEXA INVALIDA EST, ET QUI SE SUPER EA FUNDAT, NIL OBTINET.

¹¹ INCOMPATIBILIS CONDITIO est, cum contrarium contrarii conditio est vel directe, v. g. si haeres non eris, haeres esto, ubi quis sibi substituitur, l. 9. fin. D. de V.P.S., qui erat casus I., vel indirecte, v. g. II. Testator, qui jam tum dodrantem legatis exhausit, Titio ita 100 legat, si Legi Falcidiae in suo testamento locus non sit, quae conditio cum legato tali propter ipsius testatoris factum incompatibilis.

2. Comment on the Leibnitian solutions to the puzzle

In addressing the Leibnitian approach to Lex Falcidia puzzle we need to avoid being captured in doctrinal or legal-theoretical discussions on the concept of legal validity, a term which has now (multiple) connotations it could not have at Leibniz's time. For the validity of a declaration, such as a contractual clause, we can just mean, for our purposes, the declaration's ability to generate the legal effect it is aimed to deliver. In the case of conditional clause "if *A* then *B*", it will be the ability of the declaration or this clause to generate the effect *B* when condition *A* is satisfied. Thus, we can say that the clause "if *A* then *B*" is valid (productive or effective) if in virtue of this clause, legal effect *B* will be generated when condition *A* obtains. On the contrary, the clause is invalid (non-productive, ineffective or void), if it will not deliver outcome *B* even when condition *A* obtains. For instance, the clause: "the property of object *X* is transferred to you if you pay the whole price" is valid (in this sense) if it is the case that, in virtue of this clause, when you pay the whole price, the property *X* is transferred to you. The clause would be invalid, if it is the case that property *X* will fail to be transferred to you in virtue of this clause, even after you pay the whole price.

As we have seen above, the Leibnitian solution to the paradox of Lex Falcidia consists in denying the validity of the contractual clause which makes the legacy dependant on the non-application of Lex Falcidia. This clause is invalid because of its inconsistency. More exactly, it is invalid since its direct effect, namely, the legacy of the fund, generates a further legal effect, the application of Falcidia to the will, that contradicts the condition (the non-application of Falcidia to the will) from which the clause's direct effect is dependent according to the clause itself. This makes it impossible for a party to establish a convincing claim –satisfying its burden of proof or of argumentation– on the basis of the clause.

To clarify Leibniz's approach, I shall attempt to formalise the contractual clause and the Lex Falcidia in a propositional language. I shall use the following connectives

- \neg for the negation: $\neg A$ means "it is not the case that *A*"

- \Rightarrow for the conditional: $A \Rightarrow B$ means “if A then B ”, i.e., A is a sufficient condition for B .
- \Leftrightarrow for the biconditional: $A \Leftrightarrow B$ means “if and only if A then B ”, i.e., A is a sufficient and necessary condition for B . Note that $A \Leftrightarrow B$ is equivalent to the combination of $A \Rightarrow B$ and $\neg A \Rightarrow \neg B$. A conditional $A \Rightarrow B$ can be interpreted according to different logical systems (as a material conditional, a strict conditional, or also a defeasible conditional) since the only inference rule we will use is modus ponens (from A and $A \Rightarrow B$, infer B).

Let us start with the contractual clause: “Under the condition that Lex Falcidia does not apply to my testament, I will bequeath to you this piece of land (worth 100 pieces of gold)”. We reformulate this clause as the biconditional “if and only if Falcidia does not apply to the will, then the fund is transferred to you”, i.e., as the double conditional “if Falcidia does not apply to the will, then the fund is transferred to you, and if it does apply, then the fund is not transferred to you”:

(1)

$C_1 : \neg[\text{Falcidia applies to the will}] \Leftrightarrow [\text{I bequeath the fund to you}]$

Note that clause C_1 is no description of a fact, but rather a constitutive declaration: it declares that under the sufficient and necessary condition that Falcidia does not apply to the will, a legal effect, namely, my bequest you (the transfer of the fund worth 100 from my estate to your estate) will be constituted (triggered, produced, brought about in virtue of the law).¹²

But we know from the case, as presented by Africanus, that if and only if I bequeath the fund to you then the Falcidian limit is exceeded (the total of legacies exceed 3/4 of the inheritance):

(2) $[\text{I bequeath the fund to you}] \Leftrightarrow [\text{The Falcidian limit is exceeded}]$

¹² We adopt here the Leibnizian perspective on conditional clauses, namely, the view that such clauses are meant to specify conditions that are both sufficient and necessary for effect to take place. This view is developed by Leibniz in his, *Specimen certitudinis seu demonstrationum in jure exhibitum in doctrina conditionum* (A VI i 97-150), see Armgardt (2001).

And if and only the Falcidian limit is exceeded, then Falcidia applies to the will,

(3) [The Falcidian limit is exceeded] \Leftrightarrow [Falcidia applies to the will]

If we assume that Lex Falcidia does not apply to the will, we can construct the following inference 4:

- (4)
- a* \neg [Falcidia applies to the will](assumption)
 - b* [I bequeath the fund to you](from 1 and *a*)
 - c*. [The Falcidian limit is exceeded](from 2 and *b*)
 - d* [Falcidia applies to the will](from 3 and *c*)

The conclusion (d) of inference 4, contradicts its assumption (a).

Let us now assume that Lex Falcidia does apply to the will. We construct the following inference 5

- (5)
- a* [Falcidia applies to the will](assumption)
 - b* \neg [T bequeath the fund to G](from 1 and *a*)
 - c*. \neg [The Falcidian limit is exceeded](from 2 and *b*)
 - d* \neg [Falcidia applies to the will](from 3 and *c*)

Also the conclusion (d) of inference 5, contradicts its assumption (a).

It may seem that we have reached a paradox similar to the liar's paradox: according to the bivalence principle, either Lex Falcidia applies to the will or it does not, and in both cases we run into a contradiction. However, according to Leibniz we can find a way out.

The Leibnizian solution is simply to assume that clause C_1 (formula 1 above) is invalid (in the sense of being void or unproductive). Typically a clause (a norm) has a conditional structure, it states that certain conditions (operative facts) determine or constitute certain normative conclusions (legal effects). When a clause is invalid, as we observed above, it fails to establish this constitutive connection: even when the antecedent conditions hold, the effect is not triggered. Thus if clause C_1 is invalid, even when the C_1 's condition holds (Falcidia does not apply to the contract), C_1 's effect (the taking place of the legacy) is not constituted: what is void produces no effect.

What justifies the assumption that C_1 is invalid is not Lex Falcidia, but the general principle advocated by Leibniz. This is the principle that

if a clause leads to a legal effect that is incompatible with the antecedent of the clause, then the clause is void.

Leibniz's view applies to directly self-defeating clauses ("If you will not be my heir, be my heir"; "if clause C is valid, then it is invalid"), and also to indirectly self-defeating ones (as in the case of C_1).¹³

In fact, the Lex Falcidia puzzle is not even a puzzle of self-reference, as shown by the above formalisation. Note also that the notion of validity does not occur in the formalisation. In fact what happens in case the condition from which the legacy is dependent fails to happen, is not that the clause establishing the legacy becomes invalid, but rather that the legacy (the transfer it establishes) does not take place (and thus it is invalid in this general non-technical sense).

One way to include the term "valid" in the argument, is to substitute, in formulae (1) and (2) above, the proposition

[I bequeath the fund to you]

with the redundantly framed proposition

[The legacy according to which I bequeath the fund to you is valid]

Then the assumption that the legacy is valid would lead to the conclusion that it is not valid (and vice versa), but the logical structure of the self-defeating argument would be the same as that of arguments 5 and 4 above, and so would be the remedy to it.

To obtain an appearance of self-reference we could rephrase the original conditional clause C_1 (see 1 above) with the following two. The first, C_{1a} says that if and only if Falcidia does not apply to the will, then C_{1a} is valid (if Falcidia does not apply C_{1a} is valid and if does, C_{1a} is invalid).

(6) $C_{1a} : \neg[\text{Falcidia applies to the will}] \Leftrightarrow [C_{1a} \text{ is valid}]$

The second, clause C_{1b} says that if and only if C_{1a} is valid then the fund is bequeathed.

(7) $C_{1b} : [C_{1a} \text{ is valid}] \Leftrightarrow [\text{I bequeath the fund to you}]$

¹³ Note that the inconsistency addressed by Leibniz only arises if the condition and its direct or indirect effect are required to hold at the same time. There would be no inconsistency in the clause 'If you are not yet my heir, be my heir'.

It is easy to check (see inference 8) that the assumption that $[C_{1a}$ is valid] leads to the conclusion that $\neg[C_{1a}$ is valid].

- (8)
- a* $[C_{1a}$ is valid](assumption)
 - b* [I bequeath the fund to you](from c_{1b} and *a*)
 - c*. [The Falcidian limit is exceeded](from 2 and *b*)
 - d* [Falcidia applies to the will](from 3 and *c*)
 - e* $\neg [C_{1a}$ is valid](from C_{1a} and *d*)

The Leibnizian approach to this new formalisation would consist in claiming that also clause C_{1a} is void, since it is self-defeating (in the same way as clause C_1 in 1 above). C_{1a} 's invalidity prevents any contradiction, regardless of the fact that C_{1a} is self-referring.

3. Self-referring legal declarations vs the liar's paradox

The nature of constitutive declarations (and of norms, as constitutive rules being enacted through such declarations), which are meant to produce institutional effects, explains why a self-referring invalidity declaration does not reproduce the liar's paradox (see also Conte 1974).

Compare the self-referring proposition asserting that P_1 is false and the self-referring declaration (normative act) stating that N_1 is invalid.

$$(9) \quad P_1 : False(P_1)$$

$$(10) \quad N_1 : \neg Valid(N_1)$$

Clearly, P_1 is a serious paradox, unless we regiment our language so as to avoid self-reference, as advocated by Russell and Tarski (see Quine 1966, 8 ff., Sainsbury 2009, Ch. 6). In fact, P_1 must be either true or false, but both options get us into trouble: if P_1 is false (it is not the case that ' P_1 is false'), then P_1 is true; and P_1 is true (it is the case that ' P_1 is false') then it is false. In both cases we get a contradiction.

On the contrary, the assumption that N_1 is invalid, causes no logical problem. It is true that the opposite assumption, namely, the assumption that N_1 is valid would deliver an inconsistency: in this case N_1 would be valid, and according to N_1 its validity would constitute its own invalidity,

which is incompatible with N_1 being valid at the same time. But if N_1 is invalid, no contradiction emerges. N_1 , being invalid, cannot constitute any effect, and therefore it cannot constitute its own validity.

Put in another way, the falsity of P_1 is not innocuous: it produces an outcome, namely, the truth of P_1 . On the contrary, the invalidity of N_1 is innocuous: it produces no outcome, but simply preempts N_1 from having any effect.

Let us consider the more puzzling case of a norm stating that if and only if N_1 is valid, then N_1 is invalid (not valid), ie., that if N_1 is valid, then N_1 itself is invalid, and if N_1 is invalid, then it is valid.

$$(11) \quad N_1 : Valid(N_1) \Leftrightarrow \neg Valid(N_1)$$

Also here there is no parallel to the Liar's paradox. It is true that the assumption that N_1 is valid determines an inconsistency, since N_1 validity is the constitutive pre-condition of its its invalidity, according to N_1 itself. However, we can safely assume that N_1 is invalid (in the sense of void or ineffective). An invalid N_1 produces no legal effect, and so it will not make its invalidity trigger its own validity: N_1 must be valid in order that its invalidity constitutes its validity, according to N_1 itself. So, the invalid N_1 remains invalid, with no contradiction being delivered.

4. A paradox-free formulation

Following Leibniz's approach, the paradox can find a satisfactory solution. However, we we may wonder whether the testator could have framed the Falcidian clause in such a way as to obtain the result he intended according to Africanus —preventing the other legacies from being reduced by Falcidia— without incurring in paradoxes.

It seems to me that the testator could indeed had avoided the paradox by using the following formulation for his legacy: "I bequeath the fund to you if and only my bequest would not trigger Falcidia". Developing the condition, we obtain " I bequeath the fund to you if and only if, Falcidia would not apply to my will if I bequeathed the fund to you "

Expressing conditionals in the orderly structure used above, this would become "if and only if, if I bequeathed the fund to you then Falcidia would not apply to my will, then I bequeath the fund to you",

which can be formalised as

$$(12) \quad ([I \text{ bequeath the fund to you}] > \neg[\text{Falcidia applies to the will}]) \Leftrightarrow \\ [I \text{ bequeath the fund to you}]$$

where $>$ denotes a counterfactual conditional. There are various theories and formal models of counterfactual conditionals, but for our purposes it may be sufficient to say that a counterfactual conditional $A > B$ asserts that B would hold in the hypothetical case in which A were the case, all the rest being unchanged, or at least minimally changed. For instance, in the belief-revision approach, the conditional $A > B$ is understood as the claim that, if we were to revise our current beliefs by adding proposition A , we would obtain a belief-set from which B can be inferred. On the other hand, in a possible world semantics, $A > B$ would be true if and only if B is true in those A worlds (situations in which A is true) that are most similar to the current world. Without engaging in a logical analysis of these and other approaches of counterfactuals, we may say that for the the conditional

$$(13) \quad ([I \text{ bequeath the fund to you}] > \neg[\text{Falcidia applies to the will}])$$

to hold it is necessary and sufficient that the addition of proposition

$$(14) \quad [I \text{ bequeath the fund to you}]$$

to the rules characterising the application of Lex Falcidia in our case, namely formula 2 and 3 above, supports the conclusion that

$$\neg[\text{Falcidia applies to the will}]$$

. This clearly is not the case, since propositions

- a.* [I bequeath the fund to you]
- b.* [I bequeath the fund to you] \Leftrightarrow [The Falcidian limit is exceeded]
- c.* [The Falcidian limit is exceeded] \Leftrightarrow [Falcidia applies to the will]

lead to the opposite conclusion that [Falcidia applies to the will]. Therefore the counterfactual conditional 13 is false. Since this counterfactual provides the antecedent of the conditional clause 12, the consequent of the this clause is negated. Thus we may conclude that

$$\neg[I \text{ bequeath the fund to you}]$$

In other terms, in this formalisation the conditional clause does not deliver its effect, since its condition (the counterfactual conditional) fails to be satisfied.

5. Conclusion

The Leibnitian approach —namely the adoption of the principle according to which self-defeating norms (those conditional norms whose consequent contradicts, directly or indirectly their antecedent) are invalid— seems to provide a consistent solution to the Lex Falcidia Puzzle.

It raises however a number of issues that cannot be addressed here. Let me just mention two of them.

One issue pertains to the foundation of the Leibnitian postulation of the invalidity (as voidness or inefficacy) of self-defeating dispositions. Is this for Leibniz a normative ideal or rather, as Leibniz seems to assume, a necessary feature of legal reasoning, as self-defeating arguments cannot be successful? Is it only a principle for normative reasoning, or does it reflect the nature of institutional arrangements? Must such arrangements necessarily be consistent since the requirement of logical consistency or compossibility also applies to them, as it applies to physical facts?

Another issue pertains to whether the Leibnitian solution also covers those cases where a norm's conclusion entails (in the given legal system) the invalidity of that very norm. It would then apply also to Ross's famous paradox of the abrogation of a competence norm (Ross 1969). But this must be left to future research.

Abbreviations

A

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