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REPUBLICAN LIBERTY AND RESILIENCE

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REPUBLICAN LIBERTY AND RESILIENCE

The object of this paper is to focus attention on the ‘resilience’ property of republican liberty – a property that, at least in some formulations, is among those features that distinguishes republican liberty from its more familiar ‘liberal’ counterpart. Our analysis proceeds by way of an analogy with the idea of risk aversion. After setting the stage with a brief description of what we are taking republican liberty to be (in Section I), we turn to the question of how to conceptualise resilience and how the notion might most plausibly be formulated (Section II). Examining alternative possible formulations serves to suggest an analogy between resilience and ‘risk aversion’. In Section III, we exploit that analogy to develop some implications that resilience carries for institutional design. Section IV offers a brief summary.

I Background

In the Pettit version of neo-republican theory - the version with which we are most familiar¹ - ‘republican liberty’ is to be distinguished from the more familiar ‘liberal’ notion of liberty in respect of several connected features. Whereas liberal liberty (LL) is concerned with non-interference, republican liberty (RL) is concerned with non-domination or antipower. Whereas LL is an attribute of a state of affairs, RL is an attribute of an institutional structure, in which individuals enjoy social relations of a particular kind - namely, a kind characterised by non-domination. Whereas LL can in principle be enjoyed in isolation - indeed, would necessarily be enjoyed in isolation since there is no other agent present to interfere with you - RL can only be enjoyed socially, in interaction with other persons.

Non-domination, the central element in RL, necessarily allows ‘interference’ of a kind: it must do, in the sense that *interacting* agents must always interfere with one another. But non-domination is concerned with excluding *arbitrary* interference - interference, that is, which is a matter of the interferer’s whim, will or power; and against which the interferee has no recourse. Appropriately ‘republican’ institutional safeguards are those that offer recourse against such arbitrary interference – that put in place structures that either discourage would-be arbitrary interferers, or provide appropriate compensation to interferees or both

¹ Specifically in Pettit, P. (1997) *Republicanism: A Theory of Freedom and Government*, Oxford, Clarendon Press, and Pettit, P. (1996) Freedom as Antipower, *Ethics*, 106, 576-604. Some of the points made in this paper also bear on Quentin Skinner’s recent views as expressed for example in *Liberty before Liberalism* Cambridge University Press 1998

Non-domination is associated with a particular observable character in social interaction - one that is characterised by the absence of servility. Since no-one can exercise arbitrary power over another, no-one has any reason to be obsequious, or curry favour with the powerful; each can - and absent psychological disorder, will - “look all others in the eye”. This capacity to look all others in the eye without fear or favour becomes a kind of test of the presence of RL, and a measure of its extent. An institutional structure that satisfies the RL conditions will be one in which this kind of unfazed gaze is accommodated quite generally and without penalty or fear of penalty.

Much of this will, of course, be entirely attractive to the conventional liberal. Indeed the distinction between the liberal and republican schemes might easily be thought overdrawn at the level of practice. A liberal will, for example, be no less interested in institutional design questions than a republican. And though the concept of liberty in itself may not require ‘social enjoyment’, if elements other than liberty are part of the overall evaluative scheme (and in particular, elements such as general well-being, which will require that citizens be able to take advantage of the manifest mutual gains from trade and co-operative endeavour more generally than life in society affords), then an ideal liberal institutional order will certainly not advance the “loneliness of the heath” as any kind of global ideal. That is, once we concede that, in both republican and liberal conceptions, the ideal institutional order will reflect desiderata other than liberty (however precisely conceived) then LL and RL as general schemes may not appear all that different. Consider, for example, an institutional regime that specifies rights to both person and property; that establishes rules for the exchange and modification of such rights; that ensures a system of laws which reliably enforce those rights and rules; and that specifies appropriate arrangements for making collective decisions. Such an institutional regime would appear to provide citizens with significant institutional guarantees of non-domination. It is notable that such an institutional structure has also traditionally been thought of as the classical liberal ideal.

However, there is a further difference, as Pettit conceives it, between republican and liberal conceptions of liberty. This is that whereas LL will recommend institutions that maximise *expected* non-interference, the RL account requires that (arbitrary) non-interference be enjoyed “resiliently”, as Pettit puts it. This idea of resilience is related to the idea of assurance - a resilient liberty is one that is assured in the sense that it is not contingent on circumstances, but rather is entrenched in the institutional structure. For example, someone who suffers the formal status of a slave may, as a contingent matter of fact, enjoy a great deal of non-interference. The slave master may not be disposed to impose his will on the

slave across a very broad range of activities; he may simply leave the slave to get on with the slave's own life. Moreover, the slave may enjoy a high level of *expected* non-interference. The master may have a disposition of reluctance to impose himself on the slave in a way that makes the non-interference entirely predictable. Or it may be that the slave has talents of a distinctive kind which the master wants the slave to exercise, which exercise can be achieved most fully only if the master allows the slave a great deal of independence. In such cases, not only will the level of observed interference be low, but also the *expected* level of interference will be low : that is, interference will be low in a range of possible contingencies that are likely to arise. And if expected interference is low, the liberal theorist must be satisfied. But such a situation of non-interference - and expected non-interference - will not satisfy the RL test. The master enjoys power over the slave, even if the master chooses not to (ab)use it; and even if the slave can reasonably expect that the master will not (ab)use it. The slave lacks any *institutional guarantee* that will protect against arbitrary interference, should such interference actually occur (somewhat against the odds, to be sure). The slave's capacity to "look the master in the eye" is to this extent inhibited. The slave's apparent liberty is not, as we might put it, 'resilient'. Non-domination in the full RL sense demands that exemption from arbitrary interference be resilient in this sense: the agent must be *counterfactually* as well as actually exempt from arbitrary interference. And the counterfactuals that are entertained must not merely be those that are most likely to arise [for that aspect is captured in the *expected* non-interference idea] but also those that could conceivably arise, even in quite unlikely circumstances.

This resilience requirement is therefore more demanding than the requirement that arbitrary interference be minimised either in fact or in the sense of minimising the mathematical expectation of interference. In any choice calculus over alternative institutional regimes, one will have to examine the extent of arbitrary interference in *all* possible worlds. Of course, exactly how the resilience requirement is formulated will make a difference to the ranking of alternative institutional regimes. But across the family of such possible formulations, the resilience requirement is seen to constitute one important difference between republican and more traditional liberal conceptions of liberty, and will translate into important differences in judgements as to the institutional order that best supports liberty.

In this brief note, we wish to subject this notion of resilience to rather more detailed analytic scrutiny than it seems so far to have enjoyed. In doing so, we want to explore in particular the analogy between the idea of resilience and the notions of insurance and risk aversion, more familiar in the analysis of decision-making under uncertainty. We want, first, to test

out how appropriate that analogy is; and then, having satisfied ourselves that the analogy is close enough to be interesting, use it to deduce some implications about the character of republican institutions that we think are both significant and not entirely obvious. Our justification for the discussion is this. If resilience is an important part of what makes the republican concept of liberty distinctive, then one ought to be clear as to what the concept involves and what implications for institutional design the concept carries. Only then can one properly assess whether, and to what extent, this aspect of the republican ideal deserves support.

II Formulating the Resilience Requirement

Begin with a simple analogy between the measurement of personal liberty and the measurement of personal wealth. As a base-line case, consider a simple one-period world with no uncertainty (so that there is only one possible world). And consider the case of some representative individual. We might agree that measurement of either wealth or liberty is conceptually straightforward in such a world - to measure wealth we simply evaluate the individual's actual assets; to measure liberty we simply evaluate all actual (arbitrary) interference with the individual's choices. In particular, no idea of resilience seems to be relevant in such a simple world.

Now consider the shift to a slightly more complex world that admits time but still excludes uncertainty. Liberty [and wealth] can now vary from period to period within a life, so that an additional problem is posed in attempting to measure overall life-time liberty/wealth. The problem is essentially that of finding a summary statistic for a given distribution. Should we focus entirely on the mean level of liberty (or wealth); or should we account for the range and/or the variability of liberty (wealth) over the lifetime? In considering the issues of aggregation presented in this case, we can give the idea of resilience some meaning, although it is still the case that an appropriate measure depends only upon actual facts about the realised world. Liberty/wealth is more resilient, we might say, when it is less variable from period to period - when it is more equally distributed across time. And if resilience is valuable, there will be a trade-off between the mean level of liberty (wealth) and its variability. The details of this trade-off may vary - for example, we might be particularly concerned that liberty (wealth) does not fall below some threshold value in any period - but the general idea of a trade-off between the average magnitude and its variability is clear. In particular, it seems clear that, just as we might be willing to accept a reduction in mean wealth in order to reduce the inequality of wealth as between periods, so we might be willing to accept such a reduction in the case of liberty.

Next, consider the case in which we are attempting to measure the liberty (wealth) of a group of individuals - perhaps a whole society. And concentrate on the single-period case with no uncertainty. Here again we are concerned to aggregate or summarise a given distribution of individual liberties (or levels of wealth), only now the distribution is across persons within time rather than across time within a single life. Essentially the same point applies. We might recognise that the extent of inequality in a distribution of liberty/wealth influences our overall evaluation of that distribution in such a manner that it identifies a trade-off between the average level and its inequality. This trade-off provides a second aspect of the idea of resilience - an aspect that recognises inequality across individuals, rather than inequality across time.

Finally, consider the case involving uncertainty, so that in each time period there are many possible states of the world which may differ in their liberty (or wealth) characteristics depending on the institutional arrangement adopted. So, for each institutional arrangement, a certain aggregate level of liberty for the relevant community will be enjoyed – and that level will depend on which value is taken by a whole range of other variables, including say the actual motivations and capacities of the individuals involved and other external features like the bellicosity of neighbouring polities and the weather and the natural fruitfulness of the land and so on. Now, it may be that there exists some particular institutional arrangement, such that the level of arbitrary interference is lower under this arrangement than under any other feasible arrangement *in each and every possible world*. In this case, that institutional arrangement dominates all others and should be chosen. However Pettit's insistence on *resilient* non-interference as an important and distinctive feature of RL presupposes that this case is implausible. We agree. In general, an institutional arrangement that minimises arbitrary interference in one possible state of the world will not do so in all others. Accordingly, how one weights and aggregates the outcomes in different possible worlds matters: there is, in short, an aggregation issue to be solved. We could proceed, as in the cases examined above, by simply aggregating in some way across the *actually realised* values of liberty (wealth). This aggregation might include mean/variability trade-offs both across time and across persons, but such a measure would only be available *ex post* - once all uncertainty was resolved and the realised values of liberty/wealth were observable. Such an approach essentially ignores uncertainty and so adds nothing to our understanding of resilience beyond the aspects so far rehearsed. Alternatively, we could attempt to incorporate the additional potential variability introduced by the uncertainty into our measure. A first step towards this end would be to consider the *ex ante* expected liberty in each period,

defined as the mathematical expectation of liberty across all the possible states of the world. Of course, this requires us to assign probabilities to all states of the world, but we will simply assume that this is possible. These expected values could then be aggregated across periods, and across persons, as before. But the process of taking expected values imposes a particular and simple form on our evaluation with respect to uncertainty. Specifically, it imposes risk-neutrality. Risk neutrality holds that the value of a gamble is simply the mathematical expectation of the gamble at the relevant probabilities. So, for example, risk neutrality implies that an individual will be indifferent between one prospect, which offers a 50% chance of £2 and a 50% chance of £200, and a second prospect that offers a certainty of £101 : gambles that are actuarially equivalent are of equal value. But the standard assumption in decision theory and in economics is that individuals are risk-averse - that is, that they require compensation for an increase in the riskiness of a prospect, even when that increase leaves the expected value of the prospect unaltered. Risk aversion provides the basis for the demand for insurance, where individuals are willing to pay (i.e. are willing to reduce their mean wealth) in order to reduce their exposure to risk. The analogy with risk aversion identifies a third aspect of resilience - an aspect that picks out inequality across possible states of the world -- or 'risk' -- rather than inequality across individuals or over time.

The parallels between the mean-variability trade-off in the cases of inequality across time, inequality across individuals, and risk is not accidental. Risk aversion and inequality aversion are linked as basic properties of an evaluative structure. However, it is possible to construct an evaluative scheme that displays risk aversion without displaying inequality aversion. In the case of liberty specifically, there are two distinct exercises of aggregation involved in the evaluation of any institutional regime. First, in any given state of the world, the enjoyment of non-interference by different individuals must be aggregated in some way to form the total measure of liberty enjoyed in the community. Second, the 'community' aggregate, so established, associated with each possible state of the world, must be aggregated in some way to reach a value of liberty associated with that particular institutional arrangement. This measure can be compared with the results of similar calculations for other possible institutional arrangements. In this second process of aggregation the probabilities associated with each state of the world will be a relevant factor, but not the only relevant factor. Another relevant factor will be the desire to insure against bad outcomes. Republican resilience, as we understand it, relates primarily to the latter aggregation exercise. Resilience involves specifically weighing more heavily those states of the world in

which the community level of arbitrary interference is relatively high. This seems to capture Pettit's central criticism of LL as offering contingent rather than resilient liberty.

We should be clear that risk aversion in general is not required by any tenet of rationality, or by any other deep commitment. Nor, obversely, is risk-aversion in wealth or liberty or any other object of value ruled out by rationality. It seems clear intuitively that risk aversion in the domain of ultimate value [ie in utility terms] is irrational, because in the utility domain the low value of bad outcomes is already allowed for. But it is the essence of risk-aversion [and, as we see it, resilience concomitantly] that the expected value of a gamble between a good outcome and a bad is less than the value of the expected outcome – eg that an equal chance of a loss of X and a gain of X is of less value than receiving zero, and hence that the rational agent will be prepared to pay something to avoid having to take the gamble. In the liberty domain specifically, rational institutional design in the presence of a demand for resilience will involve forgoing some [expected] liberty in order to avoid the prospect of outcomes in which liberty is especially low, even if that prospect is not very likely. Whether Pettit believes that the resilience requirement also carries implication for the equality of liberty across individuals or across time is not entirely clear. Though individual equality aversion would be in the spirit of Pettit's discussion, it is certainly not logically entailed in the idea of resilience as we here interpret it, which focuses on the risk-uncertainty aspect. In any event, all we aim to suggest here is that risk-aversion and inequality-aversion share the same formal structure - a structure that involves that the value of states in which liberty is low is disproportionately weighed in the assessment of any institutional arrangement. Moreover, our real purpose here is not to defend risk aversion (or inequality aversion) as such, but to analyse resilience in the context of understanding the idea of republican liberty more fully. Here our claim is simple: if resilience matters - as Pettit claims it does - then formulating the idea of resilience in terms of an analogy with risk aversion seems to offer a clear and compelling account of how resilience should matter and, in particular how its value relates to the value of liberty itself.

To see resilience as *exactly* analogous to risk (or inequality) aversion may, however, be to overstate the case. It may be that, in the case of liberty, not only the size but also the *nature* of the downside risk is a relevant consideration. Different kinds of contingency may weigh differently. Suppose, for example that M is a potential arbitrary interferer in the activities of N. It may be the case that M is extremely unlikely to interfere with N whenever N does things of which M approves. And it may also be that N is very unlikely to do anything of which M disapproves. Nevertheless, we might be especially worried about such a case because it means that N's liberty is dependent on a structure of preference that gives rise to

exactly that behaviour pattern that would emerge if M were to interfere with N. If the prisoner in his cell is entirely free to do all that he wants to do, precisely because there is nothing he wants to do that his being incarcerated prevents, then we would still doubt that the prisoner was entirely free. Moreover, even if N does not wish to do those things of which M disapproves, the circumstances give N reason not to do those things. In fact, those with a disposition to do things of which M disapproves may fail to flourish *vis-à-vis* those who have the opposite disposition; the institutions may in this sense ‘select’ for a kind of behavioural servility by placing only the type of person who naturally does things of which M approves in the role of possibly being interfered with. In this case, the reason that those in N’s position enjoy low interference [ie do not wish to do the things of which the Ms disapprove] may be precisely that the N’s have been selected for that property. Institutions that operate to minimise arbitrary interference by such prior selection effects seem to support the very servility that republicans deplore. (Though they support it, as we might say, ‘invisibly’). We might be particularly concerned, therefore, to weigh cases of this sort where the absence of arbitrary interference is contingent on the preferences of the relevant players, more heavily than other cases which are more likely and/or where the level of arbitrary interference is yet higher. Here, it is not so much the amount of arbitrary interference that is the defining characteristic of relevantly bad outcomes, but the process whereby the absence of arbitrary interference comes about. Put another way, some counterfactuals – specifically, those that involve a change in the *preferences* of potential interferer or interferee – weigh more heavily than others in assessing republican liberty overall. Call this the ‘preference interpretation’ of resilience. We shall have cause to revisit this argument later and it will be convenient then to have a name for it.

Accepting the possibility of this ‘preference interpretation’, it nevertheless seems to us that downside risks of all kinds are relevant to the idea of resilience. If there exist circumstances in which the level of arbitrary interference under a particular institutional regime is especially large, those circumstances would seem to weigh disproportionately in any evaluation of that institution. In the limit, we might imagine that institutions be chosen on a ‘maximin’ basis, with no allowance taken of how likely the minimal case is to arise. Short of that limiting case, all downside risks would seem to require special weight – weight over and above their mere probability of occurring. It is precisely that feature which the idea of risk-aversion captures; and it is in exactly that sense that the idea of resilience invites an analogy with the (rather more familiar) risk-aversion notion.

On these grounds, we think that the risk aversion analogy is close enough to be useful - that risk aversion captures much of what resilience is meant to capture. Accordingly, more or less standard results, drawn from other contexts where risk aversion are in play, can be extrapolated to expose some implications of resilience for institutional design. That is the object of the ensuing section.

III Republican Institutional Design

The strong family resemblance between resilience and risk-aversion provides us with more or less immediate access to a range of results drawn from other contexts which will inform us as to some important general properties of republican institutions. We will offer these results as a set of related propositions.

1. 'Best practice' institutions are not the best.

Suppose, as a scholar of comparative institutions, you look around and observe the actual level of arbitrary interference in various societies, under various institutional structures. You will, as a good republican, be disposed to think well of those societies where that level is smallest. You may think that the institutional structures in those societies reflect 'best practice' and are worth emulating. Or, at least, that such societies have something to teach you about institutional design and practice. But that wouldn't be quite right. Other, non-institutional, factors will influence the actual degree of interference realised in any particular society; and it might be that the best performers in regard of actually realised levels of arbitrary interference are those for whom those other factors are most congenial, rather than those with particularly good institutional structures. But there is another, more systematic, argument that is more relevant here and which should convince you that those societies whose institutions deliver particularly good patterns of non-interference are likely to be precisely those societies in which liberty is *less* resilient. More *resilient* liberty will *necessarily* be at the expense of less liberty.

Think of the point here in terms of the direct analogy with wealth and asset choice. If you choose the asset with the highest rate of return over the recent past, this will typically be an asset with excessive risk. It will normally cost you something to protect yourself against risk; and that cost will take the form of a lower rate of return. That is, the asset with the highest *ex post* rate of return is almost surely one which, *ex ante*, had a small chance of a large gain, and where the small chance just happened to be realised. Of course, much here depends on the number of assets on offer and the length of the history over which the rate

of return is appraised. The general point is, however, that the historical record weights the possible world that actually emerge at 100%; by contrast maximising the *ex ante* expected return involves weighting all possible worlds by their likelihood of emerging; and allowing for risk aversion involves weighting those worlds which involve a low rate of return (or a loss) disproportionately more heavily.

In the case where the 'currency' is avoidance of arbitrary interference rather than cash, the same points apply. The 'best' *ex post* performers are in general those which combine risk-loving with excellent luck. These will not even be the ones which maximise *ex ante expected* non-interference; and the ones that do best on *resilient* non-interference will have a lower expected return still. Resilience *costs* something; and where the currency is interference, you will have to endure more arbitrary interference on average to secure non-interference more resiliently.

Put another way, neither 'expected liberty' nor, a fortiori, resilient liberty is a feature which is accessible to direct empirical observation : both require an assessment of risks that did not in fact eventuate. One might think that, if the period over which an institution has been in place is quite long and that it has produced a good performance in terms of arbitrary interference over that period, then this would be sufficient to give us confidence that the institution does indeed represent 'best practice' in the liberty stakes. It is at this point, however, that the distinction between expected and resilient liberty emerges. Resilience requires us to include in the assessment of institutions contingencies that might have happened but did not and probably will not, even over the long haul.

2. Resilient institutional regimes will involve multiple mechanisms

Risk aversion typically implies a 'portfolio' approach. So will resilience. In the case of asset choice, a clear implication of risk aversion is that it will be appropriate to invest in a range of distinct assets, since this offers a means of reducing the exposure to the risk associated with any particular asset. The point carries over to the case of resilient liberty. Unless the circumstances under which one institutional mechanism is likely to fail are the same as - or perfectly correlated with - the circumstances under which others fail, some mix of institutional mechanisms will produce more resilient non-interference than either mechanism on its own. An example may help here. A community is, we suppose, concerned about domestic violence - about the arbitrary interference of (mainly) husbands against their wives. There are two mechanisms on offer to deal with this problem. One is to establish a formal complaints mechanism which enables a spouse to appeal to a marriage protocol court. The marriage protocol court has powers to impose penalties on perpetrators of

domestic violence, once it is determined that they are actually guilty. The other mechanism is to provide ‘self-defense’ training for wives so as to equip them to meet violence with disabling manoeuvres in the event of attack. Both of these mechanisms is potentially imperfect – in terms relevant to republican freedom. The marriage protocol court will necessarily hold some discretionary power and the presence of this court and the officers who administer it, may in itself create incentives for all players to curry favour with the court. In some imaginable states of the world, the said officers will exercise the assigned power arbitrarily. This means that both potentially offending husbands and potential plaintiff wives will be subject to the protocol officer’s whims – and all will have reason to treat those protocol officers with ‘undue respect’. The lapse in non-domination will be larger or smaller depending on how likely it is that a protocol officer of the relevant type will be chosen, and just how much power to intervene in individuals’ marital circumstances the officer has. In the same way, providing wives with techniques for physical reprisal in cases where domestic violence is threatened can also be expected to create scope for exercise of violence by wives over husbands in at least some cases. The risks associated with these two institutional mechanisms are, however, essentially independent: there seems no reason to assume that the states of the world in which there are significant numbers of aggressive wives will be the same as those in which the marriage protocol officers will be particularly arbitrary. Thus, reliance on either mechanism on its own is likely to provide less resilient non-interference than using a mix of both mechanisms. And this will be the case even if one of the mechanisms is significantly more effective than the other in terms of the impact on the expected amount of domestic violence, and even if both mechanisms carry other, say, purely financial costs in a world with strictly limited resources. That is, some of the limited budget should be spent on the *less* effective mechanism, simply because it offers additional resilience - additional insurance, that is, against downside risk.

A particular instance of this result involves reliance on social mechanisms of a non-institutional kind. Suppose there are in place existing mores about domestic violence, supported not only by prevailing sense of virtue but also by the discipline of public esteem. As we noted above in relation to the ‘preference interpretation’ argument, the logic of the republican tradition would seem to argue against such ‘preference-based’ mechanisms: there appears to be a presumption that formal legal or institutional mechanisms are more reliable, perhaps because they are more susceptible to systematic public scrutiny at a higher level. For example, Pettit’s claim that republican liberty is congenial to constraints exercised via esteem sits oddly with the idea that non-interference should be independent of the preferences of potential interferers [specifically, here, their preferences for moral virtue

or esteem]. Pettit might be seen drawn to the view that slavery is acceptable as an institution provided there are in place robust moral norms, buttressed by the forces of disesteem, that ensure that slaves are not generally interfered with. Any apparent inconsistency in Pettit's position here can, however, be resolved by appeal to the portfolio analogy. And here that analogy works in two directions. Because reliance on any one mechanism is in general inappropriate, there will be a case *both* for abolition of slavery by force of law, even in cases where most slaves are well-treated most of the time by virtue of moral and esteem-based sanctions, *and* for the maintenance of those moral/esteem based norms even when slavery as such is formally illegal.

In short, considerations of resilience seem likely to require that we institute formal legal arrangements as precautionary measures even when the problem of interference is not all that great; that is one message of the portfolio argument. But equally, we would want to support the operation of 'virtue' and 'esteem' alongside any such formal institutional safeguards. That is another no less important aspect of the portfolio analogy, even if it apparently goes somewhat against the spirit of RL's predominantly institutional focus.

More generally, the portfolio notion maps into a particular case for multiple checks and balances. It suggests that the best feasible institutional arrangement will be a mass of compensating errors (much like the amateur golfer's swing). No one element in the institutional array may be ideal - and indeed the question as to which element is closest to the ideal can easily become a misleading question. There will predictably be much overlap and much contradiction in the institutional array. One mechanism will be at odds with another; the same mechanism will both increase and decrease arbitrary interference in different aspects of its operation. But such a portfolio approach to institutional design is exactly what resilience requires.

3. Resilience lends institutional design a conservative orientation.

The conservative element arises from the following consideration. Suppose you are contemplating some change in institutional arrangements. You are though uncertain as to the effects of such a change. You recognise that the world is a complex place and that action will often have unintended consequences. However, some of those unintended consequences will be good not bad - they will unexpectedly diminish arbitrary interference, rather than increase it; and indeed there seems no reason to think that the likelihood of bad effects outweighs the likelihood of good effects. In the absence of any considerations of

resilience, the uncertainty about effects gives you no reason to hold back. Provided that the net weight of considerations seems positive – even only marginally positive - you should proceed. But this is not the case if there is a demand for *resilient* non-interference. Resilience means that the downside cost is systematically greater than the upside gain. If there is a fifty-fifty chance of a gain or loss of equal size, risk aversion (or equivalently, resilience) will weigh the loss more heavily, and so reject the actuarially fair prospect. This fact does not, of course, mean that it will never pay to make institutional changes. It simply means that the test for desirable changes will, in the face of uncertainty, be more demanding, and hence that a more conservative posture on change will be warranted. You will need to have on offer significantly positive net expected gains to compensate for the uncertainty associated with the change, in order to be confident that the change will lead to an increase in resilient non-interference - or non-domination as Pettit defines it.

This point would also apply in the dimensions of resilience that relate to equality - either over time or across persons. For example, if state A involves a distribution of arbitrary interference across individuals that is more equal than state B, though *total* interference is equal in both states, the inequality aversion aspect of resilience would give us a reason to prefer state A. Here then, the 'conservatism' of the notion of resilience might be argued to map into a form of egalitarianism – egalitarianism at least in respect of arbitrary interference. Whether this requirement – or indeed the extent to which minimising arbitrary interference more generally -- translates into a more egalitarian distribution of income [or resources or capacities] is a further question which we shall not pursue here. That is a question quite distinct from the implications of resilience as such.

IV Conclusion

The object of this note has been to provide an analysis of the concept of resilience as an explicit feature of Pettit's notion of republican freedom – a feature, moreover, that Pettit sees as crucial in distinguishing the republican notion from its more standard liberal cousin. Our object has been to explore one particular formulation of the resilience concept (we think, a plausible one) and to trace out the implications of the resilience requirement by appeal to an analogy with risk-aversion. We see this contribution as providing two things to the analysis of republicanism. First, it suggests some general properties that republican institutions might be expected to exhibit. Second, and in the spirit of reflective equilibrium notions, it

gives us some grounds for assessing the weight that resilience as such should have within the overall republican scheme.