Section I

The Financial Crisis in a Systemic Perspective

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A Constitutional Moment? The Logics of 'Hitting the Bottom'

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I. COLLECTIVE ADDICTION?

IS THERE SUCH a thing as collective addiction? Do we recognise addiction as a genuine social phenomenon? What does it mean to speak of the addictive society? The usual answer would be, for example, binge drinking, or the herd behaviour of the bankers before the crisis. In fact, these are social amplifiers of addictive behaviour: they influence obsessive behaviour in the form of peer-pressure, imitation, social norms or mob mentality. But what they are concerned with is, ultimately, *only* the addiction of individuals.

Through the lens of systems theory, we look for and find something rather different. It is possible that social processes, as such, might exhibit the properties of addictive behaviour quite independently of the dependence syndromes of individual human beings. Josef Ackermann is clearly not an addict, and yet *Deutsche Bank* is in urgent need of detoxification therapy. This would amount to collective addiction in the strict sense. For Alan Greenspan, its discovery was a shock:

> those of us who have looked to the self-interest of lending institutions to protect shareholder's equity, myself included, are in a state of shocked disbelief.[1]

He would never have believed that banks would have acted against their own interests by high-risk 'gambling' practices to the point of self-destruction, that rational organisations could act so irrationally, against their own interests; yet, it was this that brought Greenspan to the painful realisation that his 'whole intellectual edifice', based entirely upon rational choice, had, indeed, 'collapsed'.

[1] A Greenspan, *New York Times*, 24 October 2008.

The addiction syndrome of a collective actor would be one manifestation of genuine social addictive behaviour. Another manifestation would be communication chains that exhibit an intrinsic compulsion to growth, which would not require the involvement of a collective actor. Independently of the addiction of individuals, communications would concatenate so that they would become caught up in compulsive engagement in an activity, despite lasting self-destructive consequences. If there is such a thing as non-individual, and thus collective or communicative, compulsions to growth, then the greed of individual bankers is not the main problem. Instead, we must look for the specific social addiction mechanisms that cause such impersonal addiction phenomena.

What does this fascinating phenomenon have to do with constitutional moments? My intention is to draw a bow from the self-harming growth compulsions of social systems, over the moment of near-catastrophe, to new orientations, which cannot be effected from the outside but, rather, only through the transformation of their 'inner constitution'. With Derrida, we might talk of the 'extremely capillary constitutions of the discourses', at which the transformation must direct itself; since it is they—and not the 'capital constitutions' of the world of states—that regulate the inner life of the social body, down to the very finest blood vessel.[2] Thus: constitutions beyond the state.

These are my hypotheses:

— In order to understand the recent global financial crisis, we should not rely on factor analysis alone. Instead, we should look for the underlying self-destructive growth compulsions of information flows—in other words, for phenomena of collective addiction.
— 'Hitting the bottom' refers to the constitutional moment when a catastrophe begins and societal forces for change of such intensity are mobilised that the 'inner constitution' of the economy transforms under their pressure.
— Plain money reform is one of several examples that illustrate a capillary constitutionalisation of the global economy, the effects of which could not be achieved through either the national or transnational interventions of the world of states.
— The dichotomy of constitutional/unconstitutional develops into a binary meta-code within the structural coupling between the economy and law, and is ordered above both the legal code and the economic code.

[2] J Derrida, *The Other Handing: Reflections on Today's Europe* (Bloomington, IN, Indiana University Press, 1992) 34.

II. COMPULSIONS TO GROWTH AND THE FINANCIAL CRISIS

II.1. Causal Factors or the Compulsion to Growth?

A variety of regulations have been proposed in reaction to the global financial crisis: the abolition of banker bonuses, enhanced equity funds for the banks, a Tobin tax, quality control of financial products, tightened national and international state supervision of financial institutions, particularly hedge funds, tightened control of capital flows and stock market transactions, and improved rules of accounting and risk-assessment.[3] Typically, these proposals are based upon factor analysis, in which individual causes are isolated, through the attribution of causality, and held responsible for the crisis. The aim of regulation, then, is to introduce counter-factors to the causal chain in order to prevent a repetition of the crisis. Their chances of success will not be disputed here; however, they do have one problem in common: *fatta la legge, trovato l'inganno*. No sooner has a law been passed than the loophole appears. The Achilles heel of such regulation is that national or international rules can always be effectively avoided; in the face of such enormous efforts at avoidance, *ex-ante* regulation is impossible.[4]

A deeper understanding of the crisis is offered by an analysis which regards the factors of factor analysis simply as interchangeable activating conditions, and which attempts to discover the underlying dynamic. This dynamic, which fuels ever newly developing avoidance strategies, should be tamed through transforming the 'internal constitution' of the global financial economy. One among several instructive examples of this is provided by the so-called plain money reform currently recommended by a number of finance experts.[5] This reform goes right to the heart of the economic constitution—the creation of money. Money creation ceased to be the prerogative of central banks, which acted to generate a money

[3] *Der Spiegel*, 14 September 2009, 108 *et seq*.

[4] W Streeck, *Re-Forming Capitalism: Institutional Change in the German Political Economy* (Oxford, Oxford University Press, 2009) 236 *et seq*.

[5] The classic is I Fisher, *100% Money* (London, Pickering & Chatto, 1997 [1935]). Today's protagonists are J Huber, *Monetäre Modernisierung: Zur Zukunft der Geldordnung* (Marburg, Metropolis, 2010); HC Binswanger, *Die Wachstumsspirale: Geld, Energie und Imagination in der Dynamik des Marktprozesses* (Marburg, Metropolis, 2006); J Huber and J Robertson, *Creating New Money: A Monetary Reform for the Information Age* (London, New Economics Foundation, 2000); See also, H Creutz, 'Vollgeld und Grundeinkommen' (2002) 133 *Zeitschrift für Sozialökonomie* 14; SA Zarlenga, *The Lost Science of Money* (Valatie, NY, American Monetary Institute, 2002); J Robertson, 'National and International Financial Architecture: Two Proposals', Inquiry into the Banking Crisis. Evidence Submitted to The House of Commons Select Committee on the Treasury, available at: www.parliament.uk/parliamentary_committees/treasury_committee/tc0708pn85.cfm; B Senf, "Bankgeheimnis Geldschöpfung" available at: www.monetative.de/wp-content/uploads/bernd-senf-bankeheimnis-geldschopfung-apr-09.pdf.

supply through paper money not tied to the gold standard. The widespread circulation of non-cash money in current accounts, the circulation of moneyless payment transactions, the new communication technologies, and—of particular importance—the globalisation of money and capital transactions, have prised the money-creating monopoly from the hands of the national central banks.[6] By virtue of these developments, it is now the globally-active commercial banks, which have assumed de facto the capacity to create money—in principle, independently of the central banks. And this is the case even if non-cash money is euphemistically referred to only as quasi-money. In Europe, the ratio of non-cash money to cash money is 4 : 1. In the UK, non-cash money accounts for 92 per cent of the total. The German Federal Bank puts it as follows on its website:

> The main source of money creation today is the provision of credit guarantees by commercial banks (active money creation): the debtor is given a sight fund (sight deposit) to the value of the borrowed sum and, as a result, the money supply of the national economy is directly increased.[7]

What is happening here is *creatio ex nihilo*. For it is absolutely not the case that the existing saving deposits of the banks cover the credit provided by commercial banks by way of non-cash money. Instead, credit is provided more or less freely according to the independent risk calculations of the individual banks. Public central banks can influence this private money creation only indirectly through the regulation of interest rates.

It is this massive creation of money by private banks that is responsible for the current excesses of the compulsion to growth in the global financial sector. It serves, through advance financing, to compel the real economy to grow to an extent that is socially harmful. At the same time, this private money creation is exploited for an unforeseen increase in self-referential financial speculation. To cite Huber:

> "The banks act like every other economic actor: pro-cyclically and in their own interest, without any concept of the whole economy and without any political or social accountability. As a consequence, the creation of money by the banks proceeds pro-cyclically, overshooting the mark. In this way, extremely exaggerated business- and stock market-cycles can be created:
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> — in the up and up of the oversupply of money and consequent price inflation, increasingly also capital market stock price inflation (investment bubbles, asset price inflation),

[6] As in the further development of the ideas of JA Schumpeter, *The Theory of Economic Development* (Cambridge, MA, Harvard University Press, 1934) 153; A Graziani, *The Monetary Theory of Production* (Cambridge, Cambridge University Press, 2003) 82 *et seq*.

[7] www.bundesbank.de/bildung/bildung_glossar_g.php.

— in the down and down of the crisis phase—following imploding stock market capitalisation/asset values and payment deficits—scarcity of money and monetary shrinking of the economy. The financial institutions themselves are as exposed as the state, the economy and society."[8]

The point of the theory, however, is as follows: the alternative cannot lie with zero growth, but instead with attacking the excesses of the compulsion to increase. 'Stability and zero growth are impossible in today's monetary system.'[9] Through the creation of value, the creation of money forces, by necessity, an increase in profits—and, in turn, the increase in profits forces further money and value creation. This results—as a matter of course—in a growth spiral. The alternative would be a shrinking of the economy, which, in the long term, would be incompatible with today's money-centric economic system. A functioning monetised economy is reliant on a certain compulsion to grow. That said, it is not the compulsion to growth, as such, which occupies the centre-stage, but, rather, the difference between necessary growth and self-destructive growth-excesses with undesirable consequences.[10]

II.2. Self-Destructive Growth-Dynamics in Communication

This distinction between necessary growth-dynamics and pathological growth-excesses is of considerable theoretical and practical interest. If growth-inducing mechanisms cause social processes that are not, themselves, pathological, to be excessively actuated, then an analogy with individual addiction-phenomena is appropriate.[11] As stated above, however, the common perception of addiction syndromes as psychological problems (and, correspondingly, of therapies aimed at individuals) leads us up a blind alley. To identify genuine social equivalents of individual addictive behaviour becomes crucial. Systems-theoretical analysis may assist us in this task, and the starting-point is the strict division of psychological from social processes, both of which are accountable for the production of meaning in their own right. Luhmann's greatest

[8] J Huber, 'Geldordnung II: Reform der Geldschöpfung. Vollgeld-Konzept und Seigniorage Reform' available at: www.soziologie.uni-halle.de/huber/docs/geldordnung-ii-reform-der-geldschoepfung-durch-vollgeld-mai-09.pdf.

[9] HC Binswanger, *Vorwärts zur Mäßigung: Perspektiven einer nachhaltigen Wirtschaft* (Hamburg, Murmann, 2009) 21. This argument marks the difference to theories of zero growth, which focus on the social and ecological limits of growth, ie scarcity of resources, ageing processes and increasing state debts; see M Miegel, *Exit—Wohlstand Ohne Wachstum* (Berlin, Propyläen, 2010).

[10] Binswanger, *Vorwärts zur Mäßigung* (Hamburg, Murmann, 2009), 11 *et seq*, differentiates between a necessary compulsion to grow and a socially-destructive urge to grow.

[11] HJ Freyberger, W Schneider and R-D Stieglitz Kompendium, *Psychiatrie, Psychotherapie, Psychosomatische Medizin*, 11th edn (Basel, Karger, 2002).

achievement was to set beside the Husserlian phenomenology of consciousness an independent phenomenology of communication (not to substitute the former for the latter!). This led to a typical doubling of phenomena, which hitherto had been understood only psychologically. Memory, for example, is not only a psychological dynamic, but also a purely socially-institutionalised communicative process. Even for complexes that were understood exclusively as individual consciousness-phenomena—such as intention, strategy, interest, preference, or understanding—a distinction must be made according to whether they occur in the consciousness of the individual, or proceed as communication processes independent of consciousness.[12]

The definition of individual addiction—compulsive engagement in an activity despite lasting negative consequences—must be re-thought for social systems in general, and for collective actors in particular. Which 'addiction mechanisms' are responsible for the fact that the autopoietic self-reproduction of a social system through the recursivity of system-specific operations reverts into a communicative compulsion to repetition and growth, bringing self-destructive consequences in its wake? Communication can be understood to suffer from an addiction syndrome when its irresistible attachment to exogenous factors engenders a compulsion to growth. Returning to our example, we might understand the non-cash money created *ex nihilo* by the commercial banks to be an addiction mechanism: the payment operations concatenate so that an excessive compulsion to growth is released in both the financial and real economies. The increased expectations of profit inherent in the supplementary creation of money through credit guarantees by the commercial banks then cause a compulsion to grow in the real economy, which further increases the expectations of profit. This releases a dynamic which can no longer be regarded as a static economy cycle, but, instead, as a rapidly accelerating growth spiral. Parallel to this, bank loans are taken according to the dynamics of money-multiplication that are never intended to finance productive investments, but are used, instead, to purchase speculative assets. If the interest payable on the bank loan exceeds the expected increase in the value of the assets, the result is the collapse of speculation, financial crisis, and eventually economic crisis. Both communicative compulsions to growth can occur quite independently of individual greed and addictive behaviour; even addiction-resistant individuals must play along with these compulsions, to a great extent, or risk exclusion from the game. That said, it remains the case that

[12] This is particularly clear in N Luhmann, *Social Systems* (Stanford, CA, Stanford University Press, 1995) 153 *et seq*; N Luhmann, 'Zeit und Gedächtnis' (1996) 2 *Soziale Systeme* 307; N Luhmann, 'Individuum und Gesellschaft' (1983) 39 *Universitas* 1.

individuals with corresponding psychological dispositions are attracted to the game, so that both individual and social addictive behaviour mutually strengthen each other.

Such a dynamic raises a fundamental question for autopoietics: How are we to conceive of the relationship between social self-reproduction and the compulsion to growth? Notions of a self-producing communication-cycle, which, so to say, flows back into itself, might appear to offer an answer; however, these are much too harmless, if not entirely misleading. The theory of autopoietic systems has already broken with the axiom of classical structuralist-functionalist theory, with the imperative of self-preservation. The connectivity (*Anschlussfähigkeit*) of recursive operations is the new imperative—autopoiesis proceeds or not, as the case may be.[13] Yet, the disquieting question remains of whether autopoiesis is not secretly dependent upon the logic of growth. Is there an affinity between the self-reproduction of social systems and their implacable compulsion to growth? And, particularly relevant to our discussion, does the recursivity of autopoiesis have inherent tendencies, over and above such normal growth, towards a socially harmful compulsion to repeat and grow? And by what means is such a 'turbo-autopoiesis' triggered? Might the infamous expansion tendencies of the function systems—the tendencies towards a comprehensive politicisation, economisation, juridification, medialisation, or medicalisation of the world—indicate such a compulsive growth-dynamics? And is it likely that a moment of excessive expectations, a type of high-risk 'credit' in future communications, lies hidden in the motivations to accept a communication created by the media money, power, law, truth and love? Is it likely that the moment can only be 'cashed in' with permanently higher payments, and with their reaction, in turn, on increasing 'credit'-expectations, so that a necessary increase-dynamic, a growth-spiral develops? In that case, the pathological growth-spiral could no longer be regarded as a phenomenon particular to the money-medium, but, instead, as a general characteristic of function systems. Such an increase dynamic goes well beyond the acceleration cycle in modern societies diagnosed by Hartmut Rosa.[14] It is not only concerned with a transformation of time-structures, contingent on social structures, ending in an acceleration-dynamics, but is also concerned with advance 'payments', generating expectations of an increase in 'payments', which, in turn, compel the next advance 'payment' in an initially stable dynamic, with the tendency to tip into socially-harmful excesses.

[13] Luhmann, *Social Systems*, n 12 above 30 *et seq*.

[14] H Rosa, *Beschleunigung: die Veränderung der Temporalstrukturen in der Moderne* (Frankfurt aM, Suhrkamp Verlag, 2005) especially 295 *et seq*; H Rosa, 'The Speed of Global Flows and the Pace of Democratic Politics' (2005) 27 *New Political Science* 445.

There is, I submit, an inherent compulsion to ever higher production in function systems other than the economy—an inherent compulsion which, on the one hand, is a necessary condition of self-reproduction, but which, on the other, can be propelled by assignable growth-inducing mechanisms to the point of transition into destructive tendencies. Can the difference between 'normal' growth and its 'pathological' forms—in other words, their addiction-phenomena—be clearly identified? In the case of law, it is quite clear that law does not simply resolve conflicts and then rests in peace. Law itself creates conflict through its own regulations, which, in turn, require more regulation. As the example of drug-related legislation strikingly shows, through its regulatory intervention in daily life, law itself produces situations that provoke conflicts.[15] And, at the same time, every norm brings with it difficulties of interpretation which cause conflicts. Ultimately, the sheer volume of norms produces internal conflicts of norms, which requires legal solutions. Is the price of the autonomy of law the fact that it necessarily contributes to an increase in conflict? Still, this would be the normal state of a moderate inflation of legal norms. What is critical, in contrast, is a type of addiction syndrome of the law in which norm production exhibits a dependency syndrome on external *stimuli*—political legislation and economic contractual mechanisms—producing, at national and transnational level, the much criticised pathologies of the excessive juridification of the world. Would these be the 'legal excesses' of late modernity?[16] In politics, the excessive compulsions of the welfare state to grow are the obvious candidate. In science, research creates ever-deeper uncertainties, which can only be dispelled by further research, which, again, causes new uncertainties. In each of these contexts, we need to differentiate between a compulsion to growth that is necessary for continuation, and increase-excesses which threaten the normal state of things.

III. THE CONSTITUTIONAL MOMENT

III.1. Hitting the Bottom

We have, then, to identify the dynamics that accelerate the growth spiral of a social sector to the point where it tips over into destructiveness by colliding with other social dynamics. Such growth accelerations of the function systems burden themselves, society and the environment with serious 'consequences of their own differentiation, specialisation and

[15] N Luhmann, *Law as a Social System* (Oxford, Oxford University Press, 2004) 139.

[16] As opposed to the legal excesses of modernity that Michael Kohlhaas exhibited in his violent fights against the feudal order; see H von Kleist, *Michael Kohlhaas: A Tale from an Old Chronicle* (New York, Melville, 2005).

high-achievement orientation'.[17] Three collision fields can be identified: (1) the collision of the growth imperative of one system with the integrity of other social sub-systems; (2) collision with a comprehensive rationality of world society; and (3) the collision of the growth acceleration of a system with its own self-reproduction. The evolutionary dynamics of these three collisions certainly have the potential to blur into social catastrophes. But there is nothing necessary about the collapse, as Karl Marx postulated, and nothing necessary about Max Weber's 'iron cage' of modernity. In this light, Niklas Luhmann is more plausible: the occurrence of catastrophe is contingent. It depends on whether growth-inhibiting countervailing structures emerge to prevent the positive feedback catastrophe within the growth-dynamic.

The experience of near-catastrophe, as opposed to the experience of its contingency as such, may be regarded as the 'constitutional moment'.[18] This is not the moment when the self-destructive dynamic causes the abstract danger of a collapse to appear: that is the normal state of things. Instead, it is the moment when the collapse is directly imminent. The functionally-differentiated society appears to ignore earlier opportunities for self-correction; to ignore the fact that sensitive observers draw attention to the impending danger with warnings and incantations. The endogenous self-energising processes are so dominant that they allow self-correction only at the very last moment. The similarity with individual addiction phenomena is again obvious—'Hit the bottom!'. It must be one minute before midnight. Only then is there a chance that the understanding will be lucid enough, the will to change strong enough, to allow a radical change of course. And this applies not only to the economy, where warnings about the next crisis are regularly ignored. It also applies to politics, too, which does not react when experts criticise undesirable developments, but waits, instead, until the drama of a political scandal unfolds—and then reacts frantically. In science, the Kuhnian paradigm shift would seem to be a similar phenomenon, in which aberrations from the current dominant paradigm are dismissed as anomalies until the point where the 'theory-catastrophe' forces a paradigm shift.

The constitutional moment is the direct experience of the crisis: the experience of a liberated social energy, yielding destructive, even self-destructive, consequences that can only be overpowered by their reflection and by the decision to self-limitation. The passage of social systems through the 'dark side' of their promise of progress is ultimately no departure from the healthy normal course of things; no error to be

[17] N Luhmann, *Die Gesellschaft der Gesellschaft* (Frankfurt aM, Suhrkamp Verlag, 1997) 802.

[18] The term is used differently here, of course, from its use by BA Ackerman, *We the People: Transformations* (Cambridge, MA, Harvard University Press, 2000).

avoided. Quite the contrary: the experience of the dark side is almost a necessary condition for the transformation of the inner constitution. It is ultimately, then, the pathologies that herald the constitutional moment: the moment in the catastrophe in which a decision is made between the total destruction of the energy and its self-limitation.

In functional differentiation, the experiment runs the risk of renouncing the unity of society and liberating a variety of fragmented social energies—each of which, since it is not limited by any in-built counter-principles, causes a massive internal growth-dynamic. The great achievements of civilisation in art, science, medicine, economics, politics and law only became possible by virtue of this process. But the dark side of these increase-principles potentially leads to moments of catastrophe, the constitutional moments which make collective-learning experiences of self-limitation possible. The year 1945 is the paradigm. This was the constitutional moment for a worldwide proclamation of human rights in the wake of a political totalitarianism: the moment in which political power was willing, worldwide, to self-limit itself. Similarly, the years 1789 and 1989 were moments in which, in the wake of destructive expansion tendencies, politics limited itself by guaranteeing the separation of powers and fundamental rights within political constitutions.[19]

Constitutional moments are not limited to politics. In the course of functional differentiation, all sub-systems develop growth-energies, which, both in their productivity as well as in their destructivity, are highly ambivalent. In many sites of society, the new constitutional question develops:

> how many inward expansions does society thereby cause, how much monetarisation, juridification, scientification, politicisation does it cause and is it able to come to terms with, and how many of these at the same time (rather than, for example, monetarisation alone)?[20]

In the late phase of functional differentiation, this becomes the central problem of societal constitutionalism. This is the real experience of late modernity following the triumphant victory of the autonomy of different sub-rationalities. No longer is the question, what are the institutional pre-conditions of their autonomy?, but rather, where are the limits of the expansion of the function systems? The economy is paradigmatic here, celebrating its triumphs and defeats in global turbo-capitalism.

[19] For a thorough analysis from this perspective, See C Thornhill, 'Towards a Historical Sociology of Constitutional Legitimacy' (2008) 37 *Theory and Society* 161.

[20] Luhmann, n 17 above 757.

III.2. Capillary Constitutionalisation

When the excessive growth processes of a social sub-system spin out of control, the following alternative exists: state intervention or inner constitutionalisation. Following the experiences of political totalitarianism in the last century, a permanent subordination of the sub-systems to the state is no longer a valid option. The political regulation of social processes through global regulatory regimes is much more viable; however, the meaning of such regulation is ambivalent. For what are the options today: Either the administrative steering of global communication processes, or the externally compelled self-limitation of the system's options? If it is correct that the defence against the three possibilities of collision is central—the self-destruction of the system, environmental damage in the widest sense (endangering the integrity of the social, human and natural environments), and threats to world society—then the second option is to be preferred. This is the message of a societal constitutionalism. A global constitutional order faces the task: How can external pressure be exerted on the sub-systems of such a force that the self-limitations of their options for action will take effect in their internal processes?

Why self-limitation and not external-limitation? Does not experience teach us that self-limitation strategies put the fox in charge of the henhouse?; that excesses can only be prevented by the external exercise of control, backed by massive sanctions? But does not it also show that attempts to steer internal processes by means of external interventions are bound to misfire?[21] Here, social constitutionalism attempts to steer a difficult path between external interventions and self-steering.[22] A 'hybrid constitutionalisation' is required in the sense that external social forces, which are not only state instruments of power, but also legal rules, and 'civil society' countervailing powers from other contexts, media, public discussion, spontaneous protest, intellectuals, social movements, NGOs or trade union power, etc, should apply such massive pressure on the function systems that internal self-limitations are configured and become truly effective. In the economy, for example, arrangements against indefensible working conditions must be found, which:

[21] On the debate regarding the limits of political regulation, see J Braithwaite, 'Enforced Self-Regulation: A New Strategy for Corporate Crime Control' (1982) 80 *Michigan Law Review* 1466; AL Ogus, 'Rethinking Self-Regulation' (1995) 15 *Oxford Journal of Legal Studies* 97; N Gunningham and J Rees, 'Industry Self-Regulation: An Institutional Perspective' (1997) 19 *Law and Policy* 363; I Ayres and J Braithwaite, *Responsive Regulation: Transcending the Deregulation Debate* (New York, Oxford University Press, 1992).

[22] The general formulation regulation of self-regulation is the result of an extended debate regarding the chances of social steering by politics and law. See W Hoffmann-Riem (ed), *Regulierte Selbstregulierung als Steuerungskonzept des Gewährleistungsstaates* (Berlin, Duncker & Humblot, 2001).

> … combine … external (countervailing) pressure—be it from the state, or unions or labour rights NGOs, comprehensive and transparent monitoring systems and a variety of 'management systems', interventions aimed at eliminating the root causes of poor working conditions.[23]

It is only possible to invent these limitations from within the system-specific logic, and not from outside.

> Every function system defines its own identity for itself … through an elaborated semantics of self-ascription of meaning, of reflection, of autonomy. The dependence of the subsystems on one another means that they can no longer subject themselves specifically to norms, can no longer legitimate themselves as a condition of order in relation to the whole society.[24]

The difficult task of mutually-aligning the function of a social system and its contribution to the environment at a sufficiently high level, can only be attempted by a system-internal reflection, which may be initiated or mandated externally, but cannot be substituted.[25] It is for this reason that an external political determination of transnational social sub-constitutions is not feasible. Only constitutional irritants, ie political impulses to constitutionalise, are possible. The knowledge of which type of self-limitation can be chosen does not even exist, as such, in advance. It cannot simply be called upon, but must be internally created. The endogenous growth compulsions themselves can only be fought with endogenous growth-inhibitors. The necessary knowledge cannot be built up from an external observation point as centrally available know-how; instead, it must be built up through the cooperation of external pressures and internal processes of discovery.

High cognitive demands are nevertheless thereby made of national and international interventions by the world of states and by other external pressures, for the very reason that they cannot simply arrange behaviour, but ought, instead, to create irritations selectively.

> The state cannot intervene directly so as to achieve particular desired situations or the assessment of 'results'; rather, it must observe the social systems, and direct its intervention more specifically at their self-transformation.[26]

When sub-systemic rationality develops self-destructive tendencies, external political interventions are, indeed, unavoidable; however, they need to be geared 'to create new possibilities through the breaking open

[23] R Locke, F Quin and A Brause, 'Does Monitoring Improve Labour Standards? Lessons from Nike', Corporate Social Responsibility Initiative, Working Paper No 24 (John F Kennedy School of Government, Harvard University), available at: www.hks.harvard.edu/m-rcbg/CSRI/publications/workingpaper_24_locke.pdf.

[24] Luhmann, n 17 above 745.

[25] Ibid, n 17 above 757.

[26] K-H Ladeur, 'Methodische Überlegungen zur gesetzlichen 'Ausgestaltung' der Koalitionsfreiheit' (2006) 131 *Archiv des öffentlichen Rechts* 643, 657.

of self-blockades; but not to super-impose a different state rationality'.[27] Political-legal regulation and external social influence are only likely to succeed if they are transformed into a self-domestication of the systemic growth dynamic. This requires massive external interventions from politics, law and civil society: specifically, interventions of the type suited to translation into self-steering.

The task would, with a bit of luck, be to combine external political, legal and social impulses with changes to the internal constitution. Again with Derrida, changes to the 'capillary constitution' itself are necessary, down to the very arteries of the communication circulation, 'where their fineness displays a microscopic form' and where they cannot be touched by the influences of the 'capital constitution' of the state.[28] It seems that Derrida was inspired here by the Foulcauldian re-formulation of the concept of power: the problem of today's societies lies not with the excesses of juridical power wielded by the political sovereign, but, instead, in the phenomenon of 'capillary power', achieved through progress in scientific disciplines and dependent on technology. This capillary power permeates the social body through to its very microstructures.[29] Nobody knows how such a capillary constitutionalisation could be concretely achieved. *Ex-ante* prognoses are, in principle, impossible. And, for this reason, there is no alternative but to experiment with constitutionalisation. The application of external pressure means that the self-steering of politics, or law, or other sub-systems, creates such irritations of the focal system, that, ultimately, the external and internal programmes play out together along the desired course. And this cannot be planned for, but only experimented with.[30] The desired course for social sub-constitutions is, as has been said, in the limitations of the endogenous tendencies towards self-destruction and environmental damage. This is the core of the constitutional *problématique*, this difficult handling of the focal sub-system's self-transformation and that of their environmental systems.

[27] K-H Ladeur, 'Abwägung'—*Ein neues Paradigma des Verwaltungsrechts. Von der Einheit der Rechtsordnung zum Rechtspluralismus* (Frankfurt aM, Campus, 1984) 60.

[28] Derrida, n 2 above.

[29] M Foucault, 'Räderwerke des Überwachens und Strafens: Ein Gespräch mit J.-J. Brochier' in Foucault (ed), *Mikrophysik der Macht* (Berlin, Merve, 1976) 45.

[30] External attempts at irritation and internal reactions must converge in the direction of a common minimising of difference. See N Luhmann, 'Grenzen der Steuerung' in Luhmann, *Die Wirtschaft der Gesellschaft* (Frankfurt aM, Suhrkamp Verlag, 1988); N Luhmann, 'Steuerung durch Recht? Einige klarstellende Bemerkungen' (1990) 11 *Zeitschrift für Rechtssoziologie* 137.

III.3. The Devil and Beelzebub

It is noteworthy that it is the political system, of all things, which has assumed a historic role as a precursor, in its own sphere, for precisely this paradoxical undertaking: subjecting its own expansion to its self-limitation. Only Beelzebub can cast out the devil! The history of the political constitutions of the nation states teaches us a lesson regarding the way in which a social system can limit its own possibilities, which is immensely increased by functional differentiation, through relying upon its own resources. It cannot be over-emphasised that these self-limitations did not arise automatically by reason of functional imperatives, but only under immense external pressure, as the result of fierce constitutional battles, instead. In this auto-limitative role, the politics of the nation states has set the benchmark of how constitutions can assist a social system to limit, for itself, its own growth compulsions.

The limitations had different lines of attack, of course, depending upon the expansion tendency of the political system. As a counter-movement to political absolutism in the early modern period, the political separation of powers was intended to divide absolute power, and to restrain the sub-powers through their mutual control. The *Rechtsstaat* principles were intended to place normative limits on the prerogative of the all-powerful sovereign. Following the separation of politics, administration and justice, the politicisation tendencies within administration and justice were supposed to be restricted. And, finally, fundamental rights were intended as the great civilising achievement with which politics would abstain from politicising individual and institutional spheres of autonomy within society. In today's changed conditions, new self-limitations are added to these classical limitations. On the one hand, fierce competition among western industrialised states and the enforced modernisation politics of the developing states have transformed the threat to the natural environment into an urgent problem of the political constitution, which can only be addressed through transnational constitutionalisation. On the other hand, politics has to respond with constitutional self-limitations to the famous/infamous 'growth-acceleration-laws' of the welfare state. To guarantee the independence of the central banks and to set effective limits to national debt is quite clearly to engage in matters of constitutional importance.[31] The constitutional importance of the question of whether subsidies and other excessive state expenditures should be subjected to a test of whether they are sufficiently connected to the public welfare is, in contrast, rather more hidden. Social-scientific and political performance reviews by authorities independent of the state (similar to

[31] N Luhmann, n 15 above, 481.

audit courts), which render errors visible and avoidable could be among the currently urgent constitutional self-limitations of the politics of the welfare state.

What does this mean for the constitutions of other social sub-spheres, in particular, for the economic constitution? In order to inhibit pathological compulsions to grow, *stimuli* for change, which follow the historical model of the self-limitation of politics, need to generate permanent counter-structures that will take effect in the payment cycle down to its finest capillaries. Just as in political constitutions power is used to limit power, so the system-specific medium must turn against itself. Fight fire by fire; fight power by power; fight law by law; fight money by money. Such a medial self-limitation would be the real criterion differentiating the transformation of the 'inner constitution' of the economy from external political regulation.

An important achievement of constitutional law for its constitutive and limitative role is to maintain the possibility of dissensus as a precondition of an independent selectivity dispersed in society. According to classical *Rechtstaat* principles, this is guaranteed by the protection of property and freedom in society. Today, this is no longer sufficient. A strengthened politics of reflection is required *within the economy*, and this has to be supported by constitutional norms. Historically, it was collective-bargaining, co-determination, and the right to strike, which enabled new forms of societal dissensus.[32] In today's transnational organisations, ethical committees of conduct fulfil a similar role.[33] Societal constitutionalism sees its point of application wherever it turns the existence of a variety of 'reflection-centres' within society, and, in particular, within economic institutions, into the criterion of a democratic society.[34] Candidates for a capillary constitutionalisation exist not only in the organised sector of the global economy, in corporations and banks, but also in its spontaneous spheres.[35]

The politicisation of the consumer: Instead of being taken as given, individual and collective preferences are openly politicised through

[32] N Luhmann, 'Politische Verfassungen im Kontext des Gesellschaftssystems' (1973) 12 *Der Staat* 1, 182 and n 94.

[33] From a legal-theoretical point of view, see G-P Calliess, *Prozedurales Recht* (Baden-Baden, Nomos, 1999) 224 *et seq*.

[34] D Sciulli, *Theory of Societal Constitutionalism* (Cambridge, Cambridge University Press, 1992); D Sciulli, *Corporate Power in Civil Society: an Application of Societal Constitutionalism* (New York, New York University Press, 2001); DM Frankford, 'The Critical Potential of the Common Law Tradition: Theory of Societal Constitutionalism: Foundations of a Non-Marxist Critical Theory by David Sciulli' (1994) 94 *Columbia Law Review* 1076.

[35] On the differentiation of spontaneous spheres and organised spheres of function systems and their relevance for the democratisation of (global) social sub-spheres, see G Teubner, 'Global Private Regimes: Neo-Spontaneous Law and Dual Constitution of Autonomous Sectors?' in K-H Ladeur (ed), *Globalization and Public Governance* (Oxford, Oxford University Press, 2003).

consumer activism, consumer campaigns, boycotts, product-criticism, eco-labelling, eco-investment, public interest litigation and other expressions of ecologic sustainability. *De gustibus est disputandum*! Such politicisation represents not simply an external intervention in the self-steering economy, but rather a transformation of the inner constitution, touching the most sensitive area of the circulation of money, namely, the willingness of consumers and investors to pay. And this becomes a question of constitutional importance. One problem is the political legitimation of such an 'ensemble politics'.[36] Another problem is fundamental rights protection in the economy: how to protect the formation of social preferences against their restrictions through corporate interests. It is at this point, and for good reason, that courts developed the doctrine of the 'horizontal effect of fundamental rights'—in cases of product-criticism, of the exposure to unsafe working conditions, and of ecologic protests against corporate policies. These legal developments protect the fundamental rights of the economic citizen from repeated attempts by economic organisations to silence the critics of corporate policies. In the era of global information networks—keyword 'companynamesucks'—such fundamental rights in the economy are set to become even more important, and to require greater legal protection.[37] And, in the future, these constitutional rights should not be oriented one-sidedly towards market-efficiency, as is suggested by the concepts of market failure, information asymmetry or incomplete contracting,[38] and should, instead, be oriented towards social and ecologic sustainability.

The ecologisation of corporate governance: What is meant, here, is not new managerial ethics, but, instead, a transformation of the internal company structure, compelled by external pressures from parliaments, governments, trade unions, social movements, NGOs, and the media; a

[36] O Perez, 'Private Environmental Governance as Ensemble Regulation: A Critical Examination of Sustainable Business Indexes and the New Ensemble Politics', Bar Ilan University Public Law Working Paper 2010.

[37] Generally, on the economic horizontal effect of fundamental rights in the transnational sphere, see K-H Ladeur and L Viellechner, 'Die transnationale Expansion staatlicher Grundrechte: Zur Konstitutionalisierung globaler Privatrechtsregimes' (2008) 46 *Archiv des Völkerrechts* 42. On the protection of fundamental rights in the internet, in particular, see V Karavas, *Digitale Grundrechte: Zur Drittwirkung der Grundrechte Im Internet* (Baden-Baden, Nomos, 2006). And, on of corporations, see G Teubner and V Karavas, 'http://www.CompanyNameSucks.com: Drittwirkung der Grundrechte gegenüber 'Privaten' im autonomen Recht des Internet' in W Hoffmann-Riem and K-H Ladeur (eds), *Innovationsoffene Regulierung des Internet* (Baden-Baden, Nomos, 2003).

[38] In the context of international private law, such arguments are made by G Rühl, 'Party Autonomy in the Private International Law of Contracts: Transatlantic Convergence and Economic Efficiency' in E Gottschalk *et al* (eds), *Conflict of Laws in a Globalized World* (Cambridge, Cambridge University Press, 2007) 177 *et seq*; H-B Schäfer and K Lantermann, 'Choice of Law from an Economic Perspective' in J Basedow and T Kono (eds), *An Economic Analysis of Private International Law* (Tübingen, Mohr Siebeck, 2006) 104.

transformation which limits the tendencies to speculation and the compulsions to grow necessarily associated with the emergence of the modern corporate structure.[39] Such a company constitution, oriented to sustainability, would demand respect for environmental concerns—nature, society, human life—accompanied by internal implementation and external controls.

Plain money: Finally, the above-mentioned plain money reform would penetrate the *arcanum* of the global financial constitution, as is proposed to combat growth-excesses:

> 'The most important measure, long-term, for the prevention of speculation excesses in financial markets damaging to the public good lies with putting an end to the multiple creation of money by the commercial banks. This would prevent the pro-cyclical excessive expansion and contraction of the money supply and replace it with a sustainable policy of money supply, oriented to the real economy.'[40]

In other words, the addictive drug, the creation of non-cash money, must be withheld from the commercial banks. This promises to be an effective detoxification therapy. Commercial banks should be prohibited from creating new money through current account credit, and should be limited, instead, to offering loans that are based upon existing credit reserves. The creation of non-cash money should be the sole prerogative of national and international central banks. Plain-money reform aims, therefore:

— at allowing only central banks to create all money, including cash money and non-cash money assets;
— at having this money brought into circulation through public issue, free of debt (without interest and redemption);
— at prohibiting the creation of money by the banks by way of current account credits.[41]

Such reform would require a simple but fundamental amendment of the law of the central banks at national, European and international level. In the Statute of the European Central Bank, the current Article 16 would be required to change as follows (as marked in italics):

'The Governing Council shall have the exclusive right to authorise the issue of legal tender within the Community. Legal tender shall include coins, bank notes and *sight funds*. The ECB and the national central banks may issue such forms of currency. Coins, banknotes and *sight funds* issued by the ECB and the national central banks shall be the only forms of currency to have the status of legal tender with the Community.'[42]

[39] This context is referred to explicitly by Binswanger, n 9 above, 150 *et seq* and 157 *et seq*.
[40] Huber, n 8 above, 4.
[41] Ibid, n 8 above; Fisher, n 5 above; Binswanger, n 9 above 139 *et seq*.
[42] Huber and Robertson, n 5 above, 24.

There is good reason for plain money reform to be instituted from the outset at European level. Given the global mobility of capital, the reform of money creation becomes the task of an emergent transnational economic constitution. It is no longer appropriate, today, to talk of a constitutional emptiness in the transnational sphere, which needs to be constitutionalised. Not only social-science analyses of 'new constitutionalism', but also economists and commercial lawyers in their long-standing investigations of the emerging institutions in the global economy indicate the exact opposite to be the case: even today, constitutional institutions have established themselves in the transnational sphere with an astounding density.[43] Despite the failure of the constitutional referendum, it is now only rarely disputed that the European Union has its own independent constitutional structures.[44] But other international organisations, transnational regimes and their networks are also, in the meantime, significantly juridified; they have become part of a global—albeit thoroughly fragmented—constitutional order. The global institutions that emerged from the agreements of the 1940s—the Havana Charter, the GATT, the Bretton Woods institutions; the new arrangements of the Washington consensus—the IMF, the World Bank, the WTO; and the recently initiated public debate concerning a 'global finance market constitution', all speak the language of a real existing societal constitutionalism on a worldwide scale. It is not the creation *ab ovo* of new constitutions in a constitution-free globality that is at stake, but rather the transformation of an already existing transnational constitutional order.

Given the existence of transnational financial markets, plain money reform requires constitutional solutions on a transnational scale.[45] Yet, even the proponents of plain money believe the chances of a global unitary solution to be low, given the likely opposition of the leading nation-states. What appears much more realistic is that some nation states might go it alone, or that some might cooperate, at least if the states are relatively strong with a stable government, a strong economy and a stable, convertible currency. Regional solutions within economic blocks

[43] On the new global constitutionalism, see, for example, D Schneiderman, *Constitutionalizing Economic Globalization: Investment Rules and Democracy's Promise* (Cambridge, Cambridge University Press, 2008); J Tully, 'The Imperialism of Modern Constitutional Democracy' in N Walker and M Loughlin (eds), *The Paradox of Constitutionalism: Constituent Power and Constitutional Form* (Oxford, Oxford University Press, 2007) 328 *et seq*. On the global economic constitution, see P Behrens, 'Weltwirtschaftsverfassung' (2000) 19 *Jahrbuch für Neue Politische Ökonomie* 5.

[44] On this debate, see JHH Weiler, *The Constitution of Europe: 'Do the New Clothes Have an Emperor?' and Other Essays on European Integration* (Cambridge, Cambridge University Press, 1999); JHH Weiler and M Wind (eds), *European Constitutionalism Beyond the State* (Cambridge, Cambridge University Press, 2003); N Walker, 'Post-Constituent Constitutionalism: The Case of the European Union' in M Loughlin and N Walker (eds), *The Paradox of Constitutionalism: Constituent Power and Constitutional Form* (Oxford, Oxford University Press, 2008).

[45] For this debate, see Huber, n 5 above, sub 4.10–4.13.

are most likely in the Eurozone, less so in the USA or Japan. Currently, the best possible solution would lie in the creation of a global financial constitutional regime through the cooperation of central banks in a 'coalition of the willing'.

In what follows, my arguments will focus on plain money. This is a matter, as Huber rightly said, 'of constitutional importance'[46]—though not of the political constitutions of the nation states, but rather of the constitution of the global economy. However, I do not intend to express a preference for transforming the monetary system as opposed to changing to corporate governance or to strengthening fundamental rights of consumers. Neither should plain money be presented as a cure-all for the financial crisis.[47] A plethora of external political regulations as well as internal changes to the economic constitution would be required for an adequate response to the crisis (particularly attractive candidates are the prohibition of proprietary trading for banks and the institutional division of powers between commercial banks and investment banks).[48] Instead, I intend to use plain money as an example to illustrate clearly what the current paradox of societal constitutionalism looks like: without the state, but, at the same time, highly political. Plain money reform aims at the centre of the economic constitution because it configures—'constitutes'—the self-limitation mechanisms of the economy, the economic medium, money, and the transnational cash-flows themselves: it does not attempt indirectly to regulate the economy externally by means of political power, legal rules, moral imperative, discursive persuasion, or public opinion. While it is presumed that external authorities have an important role to play in such a process of self-discipline, this role is limited to influencing the external conditions of the success of the self-limitation of money by money. In what follows, it will be shown whether, and, if so, to what extent, plain money reform involves constitutional functions, constitutional processes and constitutional structures, in a strict, rather than metaphorical, sense.

IV. PLAIN MONEY—AMENDMENT TO THE 'CAPILLARY CONSTITUTION'?

IV.1. Constitutional Functions: Constitutive/Limitative

From the perspective of constitutional sociology, political constitutions have the constitutive function of protecting the autonomy of politics, first

[46] Huber and Robertson, n 5 above, 38 *et seq*.

[47] On its chances of success, see Huber and Robertson, n 5 above, 61 *et seq*.

[48] N Roubini and S Mihm, *Crisis Economics: A Crash Course in the Future of Finance* (London, Penguin, 2010).

achieved in modernity, from 'foreign' sources of power (religious, economic, or military). They do this by formalising the power-medium.[49] Other social sub-constitutions—the constitutions of the economy, science, the media and public health—perform the same constitutive function by securing for each sphere the relevant medial autonomy, today on a global scale. With the help of constitutive rules, each sub-constitution regulates the abstraction of a communicative medium—power, money, law or knowledge—as an autonomous social construct within the function system.[50] At the same time, the various sub-constitutions ensure, under differing historical conditions, that the society-wide effect of their media is secure. They develop organisational rules, procedures, competences and rights within the sub-system, codify the separation from the other inter-penetrating social spheres and, in this way, shore up the functional differentiation of society.[51]

Would plain-money reform play a role in this constitutive function? The legal rules for money creation configure actors, organisational rules, competences, procedures and modes of functioning of the communication media of the economy. The decision in favour of plain money corrects the 'invisible' historical transformation of the global economic constitution, which has been caused by the development of non-cash money.[52] The introduction of paper money, as opposed to coins, had clearly been a 'visible' official constitutional decision. The monopoly of the central banks with regard to money creation had been introduced through constitutional decisions, by rendering money creation a decision of the national central banks in order to create cash money. But this followed an 'invisible' constitutional development. The rapid development of cashless payment transactions and, more importantly still, the globalisation of the financial markets relocated control over the supply of money from governments and central banks into the hands of globally-active private financial institutions. In the course of this creeping constitutional change, the autonomously developing money mechanism was institutionally privatised to 80 per cent. Without any explicit political decision, the commercial banks established themselves as the real constitutional centre of money creation, marginalising the money creation of

[49] Thornhill, n 19 above, 169 *et seq*.

[50] The role of constitutive norms is, for Lindahl and Preuß, too, the opportunity to release the term 'constitution' from its narrow relation with the state and to apply it to the constitution of a whole row of social institutions: H Lindahl, 'Constituent Power and Reflexive Identity: Towards an Ontology of Collective Selfhood', in: M Loughlin and N Walker, n 43 above, 14 *et seq*; UK Preuß, 'Disconnecting Constitutions from Statehood: Is Global Constitutionalism a Promising Concept?' in M Loughlin and P Dobner (eds), *The Twilight of Constitutionalism?* (Oxford, Oxford University Press, 2010) 40 *et seq*.

[51] This generalises, for all sub-constitutions, Thornhill's analyses of the political constitutions; see Thornhill n 19 above, 169 *et seq*.

[52] See on this point, Binswanger n 5 above, 114 *et seq*; Binswanger, n 9 above, 141 *et seq*; Huber and Robertson n 5 above, 38.

the national central banks. Now, plain-money reform places the money-creating competences of private constitutional subjects back in the hands of the public (not necessarily state organised) constitutional subjects. Thus, plain-money reform does play a role in the constitutive function of an economic constitution.

That said, the limitative constitutional function fulfilled by plain money may be more important still. Following the recent financial crisis, placing limitations on the excesses of economic commerce are high on the agenda. We could even talk of a secular displacement of constitutive constitutional functions in the direction of limitative constitutional functions. This is a necessary consequence of the global autonomous positioning of the function systems:

> We cannot pre-suppose that society will be able to exist with the environment that it creates.[53]

Plain-money reform participates in two antinomic thrusts which constitutionalise global markets. Following Karl Polanyi's analysis of the transformation of modernity, we might speak here of a double movement of transnational constitutionalism: first, the expansion of sub-systems is supported by constitutive norms, and then it is inhibited by limitative norms.[54] In the development of the financial constitution, too, expansion along purely economic lines causes counter-movements on a global scale, which aim at the reconstruction of the 'protective covering of cultural institutions'.

If we look at the political constitutions of the world of states, it becomes clear that their societal and ecologic roles are the result of the functional differentiation into autonomous sub-systems:

> The fact that they belong to society means that all sub-systems are placed under conditions of structural compatibility with respect to their own function and ability to vary. For the political system, the constitution fulfils the function of reformulating such conditions of social compatibility for its own internal use, i.e., for collective decisions.[55]

Creating structural compatibility with society in this way is not a problem particular to politics, but one which is common to all social sub-systems.[56] Similarly, the conditions of compatibility may be exacted externally but cannot be decided in their entirety from outside, since they

[53] Luhmann, 'Steuerung durch Recht', n 30 above, 169.

[54] K Polanyi, *The Great Transformation: the Political and Economic Origins of Our Time* (Boston, MA, Beacon Press, 1991 [1944]) 182 *et seq*.

[55] Luhmann, n 32 above, 6.

[56] R Prandini, 'The Morphogenesis of Constitutionalism' in M Loughlin and P Dobner, n 50 above, 312 *et seq*.

must, to a great extent, be produced internally to the system. Considerable differences between the political constitution and other social constitutions arise with regard to the respective conditions of self-reproduction. Only politics constructs its constitution according to a pattern of power-building and consensus-building to the production of collectively-binding decisions, and only politics has to look primarily to power for its self-limitation. Other social systems organise their own constitutions and limitations according to their own internal logics—the economy via payment transactions, science via cognitive operations, and the mass media via news operations. These logics shape both the constitutive and limitative rules. The original meaning of '*constitutio*', initially a medical expression for the state of the body, ill or healthy, is still present in every constitution: engagement with the inner constitution always involves both the healthy functioning of the internal organs, and the suitability of the body for living in its environment.[57]

With regard to authorities that judge whether the systems are in a healthy state, the theory of societal constitutionalism has identified 'collegial institutions' in the various social sectors, which cultivate the relevant logic of actions, and requires them to be constitutionally institutionalised.[58] Collegial institutions are reflection-centres for social self-identification, in the sense both of the rationality and the normativity of the relevant social sector, and, simultaneously, of rendering it compatible with society. The collegial institutions function as a type of think-tank for the relevant constitution, which is to be understood, for its part, as the benchmark for system/environment relations.

Plain-money reform relocates the weight of such collegial institutions from the commercial banks to the central banks. This may be regarded as a significant self-limitation of the growth compulsions of the economic payment cycle. The proponents of plain-money reform proclaim it to be an effective withdrawal therapy against the excessive addictive behaviour of the credit sector. Three expansion-limiting effects are prominent:

1. The expansionist tendencies of the private banks will be limited if they are prohibited from creating money *ex nihilo*. It is to be expected that the speculative use of current account credit will abate as a result.
2. The expansionist tendencies of the global financial markets in relation to the real economy will be limited if their relationship is regulated by the central banks and no longer by the private banks. The coordination of the financial and real economies will no longer

[57] Luhmann, n 32 above, 178.

[58] Sciulli, *Theory of Societal Constitutionalism*, n 34 above; Sciulli, *Corporate Power in Civil Society*, n 34 above.

be dependent on the profit motives of the commercial banks, but on the central banks' circumspect weighing-up of consequences for the global economy.

3. The expansionist tendencies of the economy in relation to other social sectors and the natural environment will be limited if current account credit can no longer force the increase of growth compulsions. 'It is not a question of renouncing growth, but rather of minimising the exponential compulsions to grow.'[59] The most important aspect of the externally compelled self-limitation is that the central banks block the socially-harmful compulsion to grow through its creation of money oriented to societal and ecologic effects.[60]

IV.2. Constitutional Processes: Double Reflexivity

If it is true that plain-money reform performs important constitutional functions via constitutive and limitative rules, the question remains as to whether such a reform would also institutionalise genuine constitutional processes and structures.

Though lawyers may not like to admit it, law does not play the primary role in state constitutions and other sub-constitutions. The primary aspect of constitutionalisation is always to self-constitute a social system: the self-constitution of politics, the economy, the communications media, or public health.[61] Law plays a necessary, but nonetheless subsidiary, role. An exacting definition of economic constitutionalism would have to realise that constitutionalisation is primarily a social process, and only secondarily a legal process. A useful definition of social constitutions puts it as follows:

> An instrument which, in its political function, frames the body of rules and norms which establish the formal structure, decisional competences and a hierarchically based locus of authority within a given social entity at the same time as it, in its legal function, lay down principles for the structuring of conflicts between norms within such an entity. Constitutions are in this sense laying down the enabling and the limitative rules guiding social entities.[62]

A constitution serves, first and foremost, to self-constitute a social system. Politics, the economy, science, art, the health sector and the mass media all constitute themselves as social systems which are autonomous

[59] Binswanger n 9 above, 12.

[60] For sources, see n 5 above.

[61] This aspect is emphasised in constitutional sociology: Prandini, n 56 above 316 *et seq*; Thornhill, n 19 above, 169 *et seq*.

[62] PF Kjaer, 'The Metamorphosis of the Functional Synthesis: A Continental European Perspective on Governance, Law and the Political in the Transnational Space' (2010) 2 *Wisconsin Law Review* 532.

of one another.[63] Constitutional processes are an example of 'double closure' in the sense suggested by Heinz von Foerster.[64] They are triggered when social systems develop a second-order closure, in addition to their operative first-order closure, by applying their operations reflexively to their operations. Science secures its autonomy when it succeeds in establishing a second level of cognition in addition to the first order operations oriented towards the binary true/false code. The first-order operations are then tested against the truth-values of the second level—the level of methodology and epistemology. Politics becomes an autonomous power-sphere of society when it directs power processes via power processes, and produces a double closure of politics through the provision of electoral procedures, modes of organisation, competences, separation of powers and fundamental rights. And what about the economy? It becomes autonomous when, in the money cycle, payment operations are employed in order to control the money supply itself.[65] The sub-systems define their exterior limits and interior identities by means of this double closure; this determines their autonomy in the strict sense. This procedural reflexivity produces—for every function system—the 'form, in which the medium acquires distinctiveness and autonomy'.[66]

It needs to be stressed that this medial reflexivity, together with associated cognitive and normative reflections on its social identity, does not yet generate constitutions in the technical sense. It serves the purpose, in the first instance, of self-constituting systems, rather than self-constitutionalising them. Epistemology, the overpowering of power, or the monetary steering of the money supply, do not amount, as such, to a social constitution, but are reflexive operations, instead. Constituting social autonomy is not to be equated with its constitutionalisation. We should only speak of a constitution, in the narrow sense, when the sub-systemic reflexivity of a social system—be it politics, the economy, or another sector—is simultaneously supported by law, or, more precisely, by the reflexivity of law. Constitutions do not emerge until phenomena of double reflexivity appear: reflexivity of the self-constituting social system and reflexivity of the supportive legal system.[67]

[63] Prandini, n 56 above, 310.

[64] H von Foerster, *Observing Systems* (Seaside, CA, Intersystems Publishing Group, 1981) 304 *et seq*.

[65] N Luhmann, *Die Wissenschaft der Gesellschaft* (Frankfurt aM, Suhrkamp Verlag, 1990) 289 *et seq*; N Luhmann, *Die Politik der Gesellschaft* (Frankfurt aM, Suhrkamp Verlag, 2000) 64; N Luhmann, *Die Wirtschaft der Gesellschaft* (Frankfurt aM, Suhrkamp Verlag, 1988) 117 *et seq* 117 *et seq*.

[66] Luhmann, n 17 above, 373.

[67] On the double reflexivity of constitutions, see K Ming-Sung, 'Between Fragmentation and Unity: The Uneasy Relationship Between Global Administrative Law and Global Constitutionalism' (2009) 10 *San Diego International Law Journal* 439, 465 *et seq*; A Fischer-Lescano and G Teubner, 'Regime-Collisions: The Vain Search for Legal Unity in the Fragmentation of Global Law', (2004) 25 *Michigan Law Journal of International Law* 999;

Constitutions, in the strict sense, emerge when a structural coupling of the reflexive mechanisms of law (ie secondary rules, in which rules are applied to rules) with the reflexive mechanisms of the relevant social sector occurs. This definition shares a starting point with Luhmann's definition, in that both assume that the state constitution involves the structural coupling of politics and law.[68] But structural coupling is only a necessary, and not a sufficient, condition: a whole swathe of political-legal phenomena, such as legislation or judicial review of political decisions, amounts to structural couplings of politics and law. To define constitutions more precisely, one should determine the coupling relationship both more specifically and more generally. More specifically, because not every coupling of politics and law generates constitutional qualities, for example, regulative rules, which attempt to achieve political aims via law. Only the coupling of reflexive processes within both systems does so. More generally, because a constitution emerges not only in politics but also in every social system, in so far as its reflexivity couples with secondary legal norms. In addition, a particular density and permanence of the structural coupling is required before it would conform to the definition of a constitution. In other words, we would have to distinguish between a constitution and mere loose and occasional couplings of law and the social sector. Only when the structural couplings have achieved a particular density and permanence does the development path typical of a constitution appear as the institutionalised co-evolution of the two social systems. In order to identify constitutions against other instances of structural coupling, we might wish to use the term 'binding institution' of law and social sub-system to refer to the former.

Every constitution requires secondary legal norms. Primary rules within a social sector result only in its juridification, and not in its constitutionalisation.[69] In fact, no social constitutions would ever be created if only primary rules, which prescribe behaviour, existed; similarly, only a straightforward juridification would result from rules aimed at conflict resolution, or rules aimed at the implementation of particular policies. The critical point is not reached until secondary norms regulate

G Teubner, 'The Corporate Codes of Multinationals: Company Constitutions Beyond Corporate Governance and Co-Determination' in R Nickel (ed), *Conflict of Laws and Laws of Conflict in Europe and Beyond: Patterns of Supranational and Transnational Juridification* (Oslo, ARENA/RECON, 2009) 112 *et seq*. Kjaer also presumes double reflexivity in his definition of a transnational economic constitution: see Kjaer, n 62 above, 532.

[68] N Luhmann, 'Verfassung als evolutionäre Errungenschaft' (1990) 9 *Rechtshistorisches Journal* 176.

[69] This reacts to Dieter Grimm's argument against a transnational constitutionalism; see D Grimm, 'Gesellschaftlicher Konstitutionalismus: Eine Kompensation für den Bedeutungsschwund der Staatsverfassung?' in M Herdegen *et al* (eds), *Staatsrecht und Politik. Festschrift für Roman Herzog zum 75. Geburtstag* (Munich, Beck, 2009).

how the identification, setting, amendment, and the distribution of the competence to issue and to delegate primary norms should proceed.[70] Political or social constitutions establish themselves where these two reflexive processes connect with one another. We should only talk of a constitution when this interaction of social processes and legal processes comes into play: in the language of systems theory, when the permanent and strict (as opposed to temporary and loose) structural couplings of a social system and the law are established. Only then do we find the curious duplication of the constitutional phenomenon: a doubling, which excludes the widely-held understanding that the legal orders and social orders will merge into a unitary constitutional phenomenon. A constitution is always the connection of two real ongoing processes. From the point of view of law, it is the production of legal norms, which is typically merged with the basic structures of the social systems. From the point of view of the social system, it is the generation of the basic structures of the social order, which simultaneously inform the law and are regulated by it. Under these conditions, it makes sense to talk, in the sociological and the legal sense, of elements of a political constitution, of an economic constitution, of a constitution of science, or of a digital constitution.[71]

[70] Primary and secondary norms in the sense proposed by HLA Hart, *The Concept of Law* (Oxford, Clarendon Press, 1961) 77 *et seq*.

[71] The development of a social constitutionalism in the transnational sphere is observed by G-P Calliess and P Zumbansen, *Rough Consensus and Running Code: A Theory of Transnational Private Law* (Oxford, Hart Publishing, 2010); Kjaer, n 62 above, 532 *et seq*; Prandini, n 56 above, 316 *et seq*; M Renner, *Zwingendes transnationales Recht: Elemente einer Wirtschaftsverfassung jenseits des Staates* (Baden-Baden, Nomos, 2010), fourth chapter, para C; LC Backer, 'Governance Without Government OR Government Without a State?', available at: lcbackerblog.blogspot.com/2009/06/gunther-teubner-on-complications-of.html; Ch Joerges and F Rödl, 'Zum Funktionswandel des Kollisionsrechts II: Die kollisionsrechtliche Form einer legitimen Verfassung der postnationalen Konstellation' in G-P Callies *et al* (eds), *Soziologische Jurisprudenz: Festschrift für Gunther Teubner zum 65. Geburtstag* (Berlin, Walter de Gruyter, 2009) 767, 775 *et seq*; K Ming-Sung, 'Between Fragmentation and Unity: The Uneasy Relationship Between Global Administrative Law and Global Constitutionalism' (2009) 10 *San Diego International Law Journal* 439, 456 *et seq*; D Wielsch, 'Die epistemische Analyse des Rechts: Von der ökonomischen zur ökologischen Rationalität in der Rechtswissenschaft' (2009) 64 *Juristenzeitung* 67, 69 *et seq*; Preuß, n 50 above, 40 *et seq*; H Brunkhorst, 'Die Legitimationskrise der Weltgesellschaft: Global Rule of Law, Global Constitutionalism und Weltstaatlichkeit' in M Albert and R Stichweh (eds), *Weltstaat und Weltstaatlichkeit* (Wiesbaden, VS Verlag für Sozialwissenschaften, 2007) 68 *et seq*; Tully, n 43 above; A Fischer-Lescano and G Teubner, *Regime-Kollisionen: Zur Fragmentierung des globalen Rechts* (Frankfurt aM, Suhrkamp Verlag, 2006) 53 *et seq*; Karavas, *Digitale Grundrechte*, n 37 above; H Schepel, *The Constitution of Private Governance: Product Standards in the Regulation of Integrating Markets* (Oxford, Hart Publishing, 2005) especially 412 *et seq*; G Teubner, 'Societal Constitutionalism: Alternatives to State-Centred Constitutional Theory?' in Ch Joerges, I-J Sand and G Teubner (eds), *Transnational Governance and Constitutionalism* (Oxford, Hart Publishing, 2004) 5 *et seq*; C Walter, 'Constitutionalizing (Inter)national Governance: Possibilities for and Limits to the Development of an International Constitutional Law'(2001) 44 *German Yearbook of International Law* 170.

But what is the reason behind this double reflexivity? Law enters the process of self-constituting a social system at the point where the above-mentioned closure of the social system through its own first and second order operations no longer suffices; where reflexive social processes cannot stabilise themselves; and, in particular, where they threaten to become paralysed by paradoxes. Where this is the case, the self-constituting social autonomy needs to be supported by additional closure mechanisms. Law is one of them—though not the only one. In the case of politics, the self-description 'state' plays this role. 'The political system is only capable of differentiation once it describes itself as "state".'[72] Without the formal limitation to a collective actor, the closure of institutionalised politics in relation to other power processes in society cannot be realised. Politics' structural coupling with law serves a similar role in its autonomisation. Since the reflexive use of power processes on power processes is exposed to the continual fluctuations of power, legal rules must stabilise the second order operations on the acquisition and the exercise of power. Even more important is the role of law in disarming the paradoxes of political power. While the debilitating paradox of the sovereign that binds itself is not, historically, solved by the creation of the *Rechtstaat*, it is thereby normalised.[73]

The supportive institutions that facilitate self-constitution vary greatly from system to system. In its achievement of autonomy, science can do without external stabilising influences almost entirely. Methodology, philosophy of science and epistemology can act by themselves to set the limits to the 'empire of science'.[74] In order to guarantee the scientificity of knowledge, science does not need to describe itself as a collective—the scientific community—or even to institutionalise the incorporation of that community in parallel to the formal organisation of the state. Law plays a relatively minor role in the constitution of science. It is only necessary for the guarantees of scientific freedom, and for the formal organisation of scientific activities.

The economy, in contrast, requires massive interventions from law in order to achieve self-constitutionalisation; albeit not to the comprehensive extent characteristic of politics. As is well-known, the institutions of property, contract, competition and currency constitute the cornerstones of an economic constitution. Each of these relies on double reflexivity: on

[72] N Luhmann, 'Der Staat als Historischer Begriff' in M Storme (ed), *Mijmeringen van een Jurist* (Antwerp, Kluwer Publishers, 1984) 144.

[73] N Luhmann, 'Zwei Seiten des Rechtsstaates' in The Institute of Comparative Law in Japan (ed), *Conflict and Integration: Comparative Law in the World Today* (Tokyo, Chuo University Press, 1989)); Luhmann, 'Die Politik der Gesellschaft', n 65 above, 35 and 334 *et seq*.

[74] Illuminating on this point, see R Stichweh, 'Einheit und Differenz im Wissenschaftssystem der Moderne' in J Halfmann and J Rohbeck (eds), *Zwei Kulturen der Wissenschaft—revisited* (Weilerswist, Velbrück, 2007).

applying economic transactions to economic transactions and on applying legal rules to legal rules. Double reflexivity is particularly apparent in the financial constitution. In the banking sector, the ability to pay and the inability to pay are generated simultaneously. The banking system relies on the paradox of self-reference, on the unity of the ability and inability to pay. 'The banks have the core privilege of being able to sell their own debts for profit.'[75] This paradox is disarmed where payment operations become reflexive, that is, where operations of money supply are used on operations of money supply. But this reflexivity of economic operations is unstable. It has been stabilised through an internal hierarchisation of the banking sector, supported by a 'hard' regulation by means of binding law. In this way, the law, with its procedural and organisational norms that regulate central banks in their relation to the commercial banks, contributes to the process of coping with the paradoxes of the economic cycle.

Coping with paradoxes by means of a constitution is precarious: the danger of the re-appearance of paradoxes always remains. The constitutionally-supported hierarchy of payment operations in the relationship between central banks and commercial banks has not excluded for good the possibility of the paralysis of the financial system.

> The logical and empirical possibility of a collapse of the whole system, a reappearance of the paradox and a total blockage of all operations by the primordial equation able to pay = unable to pay cannot thereby be excluded. It can, however, be rendered sufficiently improbable.[76]

That this is not 'sufficiently improbable' was evidenced by the recent financial crisis. The excessive growth-dynamic in global financial transactions appeared to allow the possibility of an inability to pay on the part of the banking sector. Plain-money reform addresses this paradox directly with double reflexivity. Without such reform, the central banks have insufficient control of the money markets. They can only indirectly 'stimulate or de-stimulate' them 'by means of intervention events'.[77] They have the ability to steer the money supply indirectly by amending prime rates and thereby rendering borrowing more or less difficult. In terms of the direct steering of the money supply, they are limited to creating paper money, and have no power over the current account money that is globally dominant today. Plain-money reform transforms economic reflexivity by restricting the secondary payment operations of money creation, generated by non-cash money, to central banks. The secondary payment operations of the central banks—their money supply decisions, their creation of cash and non-cash money, their payments to

[75] Luhmann, *Die Wirtschaft der Gesellschaft*, n 65 above, 145.
[76] Ibid 146.
[77] Ibid 117.

the state, to citizens, or to the banks—are applied reflexively to the primary payment operations (buying and lending). Plain-money reform transforms juridical reflexivity, by prohibiting financial banks, via secondary rules, from creating money through credit account money, and by establishing a monopoly over the money creation of the central banks. Through the restriction of money-creating competences, law apprehends the limitative function of an economic constitution and, at the same time, stabilises the self-reflexive relations of the payment operations, which, without being legally anchored in this way, would again disperse.

IV.3. Constitutional Structures: a Binary Meta-Code

In the end, the Gretchen question is whether plain-money reform also creates specific constitutional structures capable of channelling the constitutional functions and processes outlined above. Constitutional lawyers disagree on this point, acknowledging genuine constitutional phenomena only in the nation-state, and greeting the idea of a transnational or even a social constitutionalism with scepticism.[78] What goes under the name of 'constitutionalisation' in public or private global orders is thought only to be the juridification of social spheres, partly by international law and partly privately and autonomously—certainly not the creation of constitutions.

In order to identify truly constitutional structures, we must move beyond the understanding of constitutions referred to thus far as the structural coupling of law and social systems.[79] The endpoint of constitutionalisation—be it in politics, science or other social sectors—is not reached until an independent constitutional code—a binary meta-code—develops within the very structural coupling of law and the relevant social system: until, moreover, the internal processes of the system orientate themselves towards that code. The constitutional code is binary. It oscillates between the values 'constitutional/unconstitutional'. And it functions at the meta-level, for the reason that it subjects decisions that have already been tested as legal/illegal, to an additional test, namely, whether they correspond to constitutional requirements. What emerges here is the hierarchy between simple law and constitutional law, 'the law of laws', typical of all constitutions—for the constitutions of states, of other function systems, of organisations and of networks. The constitutional code (constitutional/unconstitutional) is ranked above the legal code (legal/illegal). The *pointe* of the meta-code lies, however, in its hybridity: it is not only ranked above the legal code, but, at the same time, also above the binary code of the relevant social system. It exposes

[78] Grimm, n 69 above.
[79] Luhmann, n 68 above.

its binary-encoded operations to the additional test of whether or not they conform to the principles of public responsibility of the social system.

This connection between structural coupling and its hybrid meta-code can most readily be observed in the state constitutions of modernity. There, the distinction constitutional/unconstitutional is explicitly adopted as the binary meta-code of law and of politics, ie of two, for their part, binary coded systems. Through this meta coding, law and politics do not merge into one single system, and the constitution itself does not develop into an autonomous social system.

The constitution of the global economy also operates with such a hybrid meta-code. It serves as a fictitious unitary formula for two quite different constitutional operations within the economy. The meta-code requires that it be ranked above the legal—as well as the economic—binary code. In each of the two sides of the economic constitution, the meta-code generates different meanings according, in each case, to whether it is attempting to control the economic code-operations or the legal code-operations. On its economic side, it serves the reflection of the societal function of the payment operations and searches for forms of economic activity that are environmentally viable. On its legal side, it institutes the separation of simple law from superior constitutional law, and judges legal acts according to whether they correspond to constitutional values and principles.

Although the constitutional code presents itself for the economy as the one and only *distinction directrice* 'constitutional/unconstitutional', it operates either as an economic meta-code or as a legal meta-code, depending on the context. Here, we have an interesting example of an 'essentially contested concept', characterised by the fact that the same term is interpreted in different and highly controversial ways in different contexts.[80] The Janus-headed character of the meta-code has to do with the above-mentioned fact that the economic constitution (as the structural coupling of two social systems closed off from one another, economy and law) is not, in itself, a social system, but a distinct discursive process either within the law or within the economy. Constitutional operations—ie the decisions and arguments of central banks, on the one hand, and constitutional courts, on the other—do not merge the two systems into a single economic constitution, but remain, instead, tied to their respective operational contexts, to the law or to the economy. Correspondingly, the distinction 'code-compliant/code-non-compliant'

[80] This much discussed expression originates with WB Gallie, 'Essentially Contested Concepts' (1956) 56 *Proceedings of the Aristotelian Society* 167. In our context, it is used to indicate that different social systems use the term 'constitution' and, at the same time, ascribe to this term rather different meanings.

is only a common umbrella formula for all possible constitutional decisions and arguments, capable of assuming completely different meanings according to their respective context. The constitutional code is an observation scheme, which takes on different forms in both law and the economy.

These differences necessarily influence distinct programmes, which emerge under the direction of the constitutional code in both legal and in economic practice. These two types of programmes irritate one another to the point where they cause a specific co-evolutionary path of legal and economic structures within the economic constitution.[81] Where the differential legal/illegal is subordinate to the meta-code of the economic constitution, a re-entry of the distinction law/economy into the legal system occurs. Fundamental principles of the economic system are re-constructed as legal constitutional principles (according to the particular historical situation: property, contract, competition, social market economy or ecologic sustainability). Law 'translates' the fundamental principles of the economy into legal principles, and concretises them as legal rules of constitutional law. Here, we find the reason why constitutional law cannot be reduced to certain decision-making procedures, but, instead, demands substantive legitimation through inner constitutional principles. Without this re-entry of the fundamental principles of the focal social system into the legal system, this would be incomprehensible or, worse, would be conceived as 'natural law' in the age of positivism. Whether and, if so, how constitutional law is bound to the values of the relevant social system is clearly not pre-determined by natural law. Rather, it is the historically variable result of reflexive processes in the constitutionalised social system, reconstructed in law as an *ensemble* of constitutional principles.[82]

In the opposite direction, something comparable occurs: the meta-code allows the re-entry of law into the economic system (again, historically variable: mandatory rules of contract law, the social obligations of property, the limits of competition, rule of law principles in economic

[81] On such a connection between structural coupling and co-evolution, using the example of the production regime, see G Teubner, 'Eigensinnige Produktionsregimes: Zur Ko-evolution von Wirtschaft und Recht in den varieties of capitalism' (1999) 5 *Soziale Systeme* 7. More generally on the co-evolution of law and the economy, see M Amstutz, *Evolutorisches Wirtschaftsrecht: Vorstudien zum Recht und seiner Methode in den Diskurskollisionen der Marktgesellschaft* (Baden-Baden, Nomos, 2001).

[82] Here, we find the explanation for Kumm's important hypothesis that (transnational) constitutional law must legitimate itself by means of internal constitutional principles, and not just by means of procedures. Kumm is unable to explain, however, how these principles, for their part, legitimate themselves. This requires recourse to the reflexive practices in the social system itself. The removal of paradoxes by means of a constitution again takes effect here. See M Kumm, 'The Best of Times and the Worst of Times: Between Constitutional Triumphalism and Nostalgia' in P Dobner and M Loughlin, n 50 above, 214 *et seq*.

decisions or fundamental rights within corporations). Thereby, constitutional law binds economic operations.

The mutual re-entry opens two different 'imaginary spaces' of the economic constitution;[83] two different (but inter-related) constitutional programmes, one in the economy, one in law, which are both oriented, albeit separately, towards the constitutional code. This double meaning is particularly apparent in property and contract, in the traditional institutions of the economic constitution. Economically, property means the interruption of demands for consensus for particular communication results. Legally, property is defined as a subjective right, for example, in Germany in Articles 903 and 906 of the Civil Code and Article 14 of the Constitution. And, although they are closely inter-related, an economic transaction cannot be identified with a legal contract. Transaction and contract are not just two sides of the same coin, but are distinct social phenomena, instead.[84] The economic constitution, as such, can be understood as one language game with a particular double structure under the control of the *distinction-directrice* of a meta-code. But the language game does not strengthen into an independent social system with its own unitary language acts, structures and boundaries. Rather, it forms what one can call a 'binding institution' in which law and the economy are closely coupled structurally, and permanently irritate one another. A 'bi-linguality' thereby develops, requiring continual efforts at 'translation'.

Now, plain-money reform would transform constitutional programmes both in the law and in the economy. In the economic context, it would formulate anew the public principles of money creation for the central banks: To which ends should the central banks direct the creation of money: at combating inflation, or at limiting excessive growth compulsions? In the legal context, it would transform the legal principles of the economic constitution: under a plain-money regime, money creation by the private banks would not just be simply illegal, it would be economically unconstitutional.

To summarise, plain money reform would reach deep into the capillary constitution of the global economy. In all three respects, it corresponds to the definition of a constitution outlined above. First, plain money fulfils constitutional functions, constitutive and, particularly, limitative. Second, it takes part in the double reflexivity of the legal and the economic system by issuing rules governing money creation. Third, it subjects the

[83] On the connection between re-entry and imaginary space, see GS Brown, *Laws of Form* (New York, Julian Press, 1972) 56 *et seq*.

[84] On the double character of institutions in the structural coupling of law and the economy, see G Teubner, 'Legal Irritants: Good Faith in British Law or How Unifying Law Ends Up in New Divergencies' (1998) 61 *Modern Law Review* 11 *et seq*.

activities of commercial and central banks to the hybrid meta-code of the economic constitution by transforming economic, as well as legal, constitutional programmes.

V. THE POLITICS OF SOCIETAL CONSTITUTIONALISM

IV.1. Constitutionalisation by the State?

But does social constitutionalism aiming at extensive autonomy of the social sub-systems not imply an extensive de-politicisation of society?[85] In that case, is the constitutionalisation of the economy, for our purposes through the introduction of plain money, not, in itself, a politically explosive concern? To both questions, the definitive answer is, yes and no. As indicated above, societal constitutions are paradoxical phenomena. They are not part of the political constitution of society but, at the same time, they are highly political social concerns. The paradox can be solved with the help of a double conception of the political. This is understood in a variety of ways,[86] but here, the double meaning of the political is understood as follows. First, by 'the political' is meant institutionalised politics: the political system of the world of states. In relation to this notion, the social sub-constitutions 'go the distance'; they require extensive autonomy against the political constitution. And, with regard to the participation of the political system in the process of the social sub-constitutions, particular 'political restraint' is required. Second, the concept can also indicate the political in society outside institutionalised politics. In other words, it can indicate the politicisation of the economy itself and of other social spheres; the politics of reflection on the social identity of the social system involved. In this respect, the particular social constitutions are highly political, but they are beyond the state.[87]

Let us return to plain money. Jefferson demanded as early as 1813, 'that the right to issue money should be taken from the banks and restored to the people'.[88] But who are 'the people' when it comes to money? How

[85] This is the most important critique raised against societal constitutionalism, emphasised in particular by Brunkhorst, in 'Legitimationskrise der Weltgesellschaft' in M Albert and R Stichweh (eds), *Weltstaat und Weltstaatlichkeit* (Wiesbaden, VS Verlag für Sozialwissenschaften, 2007) 76 *et seq*. Other authors use the critique flatly to deny the existence of constitutions outside the state: see, for example, R Wahl, 'In Defence of 'Constitution'' in M Loughlin and P Dobner, n 50 above, 240 *et seq*.

[86] On the extensive debate regarding *le politique* and *la politique*, see E Christodoulidis, 'Against Substitution: The Constitutional Thinking of Dissensus' in M Loughlin and N Walker, n 43 above, 191 *et seq*.

[87] Kjaer, n 62 above, 522 *et seq*, attempts a careful explanation of the political dimensions of the social sub-constitutions.

[88] T Jefferson, 'Thomas Jefferson to John Wayles Eppes, June 24, 1813' in PL Ford (ed), *The Works of Thomas Jefferson. Federal Edition* (New York, GP Putnam's Sons, 1813).

can the creation of money be restored to the people? After all that has been said, the answer can only be that money creation belongs in the public sphere, though not in the domain of the state. Ought we to subject the creation of money to state control?—No. Ought we to render it to the public sphere?—Yes. By the public sphere, what is meant in this context is not an intermediate sphere between state and society.[89] An accurate definition of 'the public sphere' today requires that the public/private distinction as a means of de-limiting social sectors be deconstructed and simultaneously reconstructed within each of these social sectors.[90] Money creation is clearly among the most important public functions of the economy. It belongs in the public infrastructure of the economic sector. It is a public good. Money creation is a genuine component of the constitution of the economy because it takes part in determining the public function of the economy. It follows, then, that money creation ought to be removed from the private profit-oriented commercial banks and restored to the monopoly of a public, though non-state, institution, namely, the central bank.

But why should the political constitution not assume control of this task of regulating the internal structures of social sub-spheres?[91] This was already discussed above in the context of internal versus external regulation. Now, the matter raises itself as an aspect of democratic theory, as the collective accountability of democratic politics to society. If it is ultimately the greatest privilege of the democratic sovereign to grant a constitution to society, why favour the auto-constitutionalisation of social sectors and not a political dictate? The answer can only be alluded. The basic social structures of modernity make it necessary to re-define the relationship between representation, participation and reflection. In the functionally-differentiated society, the political constitution cannot fulfil the role of defining the fundamental principles of other sub-systems without causing a problematic de-differentiation—as occurred in practice in the totalitarian regimes of the twentieth century.[92] In modernity, society can be constitutionalised only in such a way that every sub-system acts reflexively to develop its own constitutional principle for

[89] H Ridder, *Die Soziale Ordnung des Grundgesetzes* (Opladen, Westdeutscher Verlag, 1975); A Rinken, 'Geschichte und heutige Valenz des Öffentlichen' in G Winter (ed), *Das Öffentliche heute. Kolloquium zu Ehren von Alfred Rinken* (Baden-Baden, Nomos, 2002).

[90] On this point, in more detail, see G Teubner, 'State Policies in Private Law? Comment on Hanoch Dogan' (2008) 56 *The American Journal of Comparative Law* 835; G Teubner, 'After Privatisation? The Many Autonomies of Private Law' (1998) 51 *Current Legal Problems* 393.

[91] This would be the consequence of conceptions of constitutionalisation, which admit a variety of social sub-constitutions, but then postulate a primacy of the political constitution: see, for example, Joerges and Rödl, 'Funktionswandel des Kollisionsrechts', n 71 above, 767, 775 *et seq*; For the nation state, this might be more or less realistic, but it is no longer so for transnational relations: see, for example, Kjaer, n 62 above, 517 *et seq*.

[92] On this point from a constitutional-theoretical perspective, see Thornhill, n 19 above, 188 *et seq*.

itself, and these cannot be prescribed by politics. Such de-centred reflexivity is necessary since the *maiores partes* no longer represent the whole, while the *minores partes* participate, as was the case in the old society. Instead, modern society regards participation and representation as identical and, at the same time, abolishes them. We must give up the notion that, in the state, politics represents society and other social spheres—people or sub-spheres—participate therein. No social subsystem, not even politics, can represent the whole society. Instead, it is characteristic of the condition of development that:

> … psychic and social systems must develop their own reflexive processes of structure selection—processes of thinking about thinking, or of loving love, of researching into research, regulating regulation, financing the use of money or overpowering the powerful.[93]

And its democratic legitimation must, indeed, come up in relation to society as a whole—though it need not proceed through the channels of institutionalised politics.[94] However, on this, space does not allow me to elaborate further.[95] It must suffice to point to participation of the general public in the decision-making of transnational private regimes.[96] For example, the Åarhus Convention made an impact by declaring three principles of public participation: (1) access to information; (2) public participation in decision-making procedures; and (3) access to justice in environmental matters. The collaboration of the administrative apparatus of public and private regimes is thereby:

> to be integrated into the creation of forms of action in the social substrate, that is, in the global economy itself (and not its political system, i.e., the international community [of states]). Similarly decision-making (in the legislative, executive and juridical apparatuses) and discussion (in the global sub-publics) have to be structurally coupled with one another, such that the democratic-theoretically meaningful duality of spontaneous- and organised spheres of the creation of the social constitution can be established.[97]

[93] Luhmann, n 17, above, 372.

[94] This would correspond with the views of the early Habermas, who after a fundamental critique of parliamentarianism, called for the democratic potential of societal processes outside institutionalised politics to be tested. Apparently, this insight has been lost by the later Habermas (and his followers: J Habermas, *The Structural Transformation of the Public Sphere: an Inquiry into a Category of Bourgeois Society* (Cambridge, Polity Press, 1992) last chapter).

[95] S Bredt is informative here; see *Die demokratische Legitimation unabhängiger Institutionen: Vom funktionalen zum politikfeldbezogenen Demokratieprinzip* (Tübingen, Mohr Siebeck, 2006), 248 *et seq*.

[96] For details on public consultation in cases of Corporate Social Responsibility, see Perez, n 36 above.

[97] A Fischer-Lescano and M Renner, 'Europäisches Verwaltungsrecht und Völkerrecht' in JP Terhechte (ed), *Verwaltungsrecht in der Europäischen Union* (Baden-Baden, Nomos, 2011 359); on spontaneous and organisational spheres, see Teubner, n 35 above.

IV.2. in the Shadow of Politics

The state should not prescribe the constitution of the economy and other social sub-systems, but it should produce constitutional irritations for them. As has been stated above, institutionalised politics, together with other actors, particularly civil-societal actors, must exert massive external pressure in order to compel changes in the capillaries of the payment cycle of the economy. This would be the appropriate division of labour. Social systems have the best constitutional chances where they can develop their own constitutions in the shadow of politics.[98]

In this context, Moritz Renner proposed that the economic constitution should be conceived of not only as binding the economy and the law, but also as a trilateral structural coupling of economy, law and politics.[99] Indeed, numerous structural couplings of institutionalised politics and the economy and law do exist, for example, the taxation system or the lobbying of economic organisations. Typically, however, these do not become concentrated into what we called above 'binding institutions', as is emblematical of constitutions in comparison with all other structural couplings. If we look closer at how politics works its way into economic constitutions, then we can see that there is, in truth, no real trilateral coupling, but, instead, two sets of bilateral coupling: one in the relationship of economy/law, involving the institutions referred to above, property, contract, competition and currency, and the other in the relationship of law/politics involving constitutional legislation and adjudication. In the relationship of politics/economy, the existing structural couplings are not so strict that they assume the quality of binding institutions. The constitutionally relevant political interventions are never directly performed as a conversion of power into money, but are, instead, almost always indirectly performed via the legal system by way of legislative acts. And even these do not create a permanent binding in the institutionalisation of constitutions, but only an occasional one, which is being dissolved again by the de-coupling of the economy from politics. Political interventions in the economic constitution, which do, of course, exist, ought not to be understood, then, as genuine operations of a binding institution, but as external constitutional impulses, instead.

The most important external impulses from politics are released during the foundational act of the relevant constitution, but are usually transmitted by the legal system. To establish a financial constitution would require political impulses, which would have to work their way into the internal structure of the economy. Generally, it is the case that an

[98] This formulation is close to the position adopted by Grimm, n 69 above, 81, who allows societal constitutionalism a limited chance of success only 'in the shadow of public power'. Nevertheless, there remain important differences in assessing the primacy of institutionalised politics.

[99] Renner, n 71 above, ch 3 para BII.

autonomous economy requires a strong political system. The *Mafiosi* conditions in Russia after 1989 offer ample illustration of the negative effects that are produced when a capitalist economy is introduced by a 'big bang' without rule of law constraints. To date, transnational politics has reacted most convincingly when, in the moment of the financial crisis, an international coordination of 'first aid' measures was put into effect. To that extent, it can be concluded that social constitutions are politically imposed. However, the internal re-construction of the political impulses is decisive for the sustained functioning of a specific constitution. Without this, the constitutional irritations of politics and society fade out. But it is also true that, without them, there is no chance of a sustained transformation of the economic constitution. It is not the 'big decision', the mythical foundational act, that is relevant for the existence of a constitution but rather 'long standing chains of communicative acts, bound to one another, of the successful anchoring of a constitution as the "highest authority"'.[100] The political irritations decisions should be absorbed in such a way that they are channelled into the capillaries of the payment cycle. Only then can a specific constitution 'come into force' beyond its formal validity. The political impulse limits itself to the formation act and fundamental changes; over and above this, high constitutional autonomy is required in relation to politics.

The phrase, 'in the shadow of politics' has an additional meaning. Societal constitutionalism always depends on law; Law, for its part, depends on the physical monopoly that politics has over power. Economic and social sanctions alone are not sufficient to stabilise the constitutional norms. Plain-money reform, too, requires politically-backed legal sanctions in order to prohibit, as forgery, the unauthorised creation of money by commercial banks, and to counter-act avoidance strategies.[101] However, such political support does not transform the economic constitution into a state constitution. It is only the instruments of state power which law mediates, de-politicises, and places at the disposal of the economic constitution.

Yet the shadow must remain a shadow. The high autonomy of the central banks in relation to politics is essential. Discretionary interventions by politics in concrete decisions regarding money creation must be excluded. The political independence of the central banks is, indeed, a requirement of constitutional importance.[102] The reason why the power games of institutionalised politics must be excluded from money creation

[100] T Vesting, 'Politische Verfassung? Der moderne (liberale) Verfassungsbegriff und seine systemtheoretische Rekonstruktion' in G-P Callies *et al*, n 71 above, 613.

[101] On questions of detail regarding avoidance and means of combating it, see Huber and Robertson, n 5 above, 51 *et seq*.

[102] See also, Binswanger, n 9 above 147; Huber, n 5 above, sub 4.3; Huber and Robertson, n 5 above, 38 *et seq*.

is the acute danger of inflation that arises as the typical long-term temptation of politics and, in particular, democratic politics. 'Where democratic governments have unlimited political power in respect of money, it is impossible to resist inflationary pressures.'[103] Unusually, this observation of Friedrich von Hayek's is correct, though the conclusion that he draws from it, that the creation of money must be totally privatised, is not.

IV.3. Politicising the Economy

In contrast, the politicisation of the economy itself is high on the agenda of societal constitutionalism. Above, we have already seen the political dynamic released in the market by the politicisation of consumer preferences, and by the ecologisation of corporate governance.[104] With a monopoly on the creation of money, the central banks perform an important political role. Politicising the economy means intense reflections on the social consequences of the extension or limitation of the money supply, undertaken by science and the general public, consumers and corporations, ending in the decisions of the central banks. Here, it is fiercely discussed and finally decided whether, in a concrete situation, the growth compulsions released by the creation of money are excessive or not. The political decision of whether to submit the financial system to withdrawal therapy cannot be allowed to depend on private profit motives. It can only be decided by the central banks, orientating themselves with exclusive reference to the monetary system and its compatibility with the whole society.

Clearly, central banks make wide-ranging political decisions regarding the creation of money. But they do not, thereby, become part of the political system. They do not participate in the production of power and consensus to make collective decisions. Nor are they part of the power-cycle of politics, which runs from the public through the parliament, the administration, the interest-groups and back again to the public. Their position can most readily be compared with that of constitutional courts, which stand right at the hierarchical peak of the legal system, and are responsible for making highly-political decisions without thereby becoming part of the political system.[105] The 'Guardians of the constitution'—

[103] FA von Hayek, *Denationalization of Money: an Analysis of the Theory and Practice of Concurrent Currencies* (London, Institute of Economic Affairs, 1978) 22 *et seq*.

[104] Currently strengthened to an extraordinary political dynamic outside of institutionalised politics, this must cause authors such as Brunkhorst or Wahl to re-consider their vehement criticism of social constitutionalism, that it de-politicises society: Brunkhorst, n 71 above, 76 *et seq*; Wahl, n 85 above, 240 *et seq*.

[105] As a matter of fact, where they are highly dependent on politics, they transform themselves into hybrid institutions. Then, the central banks practice a double politics. Their

this is the appropriate metaphor. And just as constitutional assemblies and constitutional courts are the guardians of the political constitution, so the central banks and the constitutional courts are the guardians of the economic constitution. And their constitutional politics requires a high degree of autonomy.

Central bankers tend to present themselves as apolitical experts, strictly bound by their mandate when taking decisions *lege artis*. It is, nonetheless, obvious that central banks make genuinely-political decisions within the economic system. Decisions regarding the supply of money cannot be reduced to a straightforward technocratic implementation of arithmetical calculations. Central banks have a great deal of political discretion; they are exposed to the risk of great uncertainty; they are reliant on deliberative justifications before the public; and they are responsible for the correctness of their decisions. This is the eminent political content of reflexive processes within the economy, which balance the relation between social function and contribution to the environment. For this reason, a politics of money *independent* of institutionalised politics must be transparent and accountable.

Yet, the taboo must not be broken.[106] No discretionary interventions on the part of the political system! Even if that system disposes of higher democratic legitimation. The autonomy of the central banks in respect of politics is a necessary pre-condition of the functioning of the plain-money reform. Alongside the traditional executive, legislative and judicative powers, the central banks act, as a neologism nicely puts it, as the 'monetative' power, as the constitutional institution of the economic system.[107] Here, the meaning of an autonomous financial constitution is revealed, which must control its own logic and cannot, despite its highly political character, be delivered by institutionalised politics. The analogy with constitutional courts is, again, appropriate. This is a principle not of the political, but of the *societal* separation of powers.

While decisions on money creation as such are the exclusive prerogative of the central banks, the related question of how the profits generated by money creation should be used is clearly a matter for the political system. Whether these quite considerable sums (accrued, to date, by the commercial banks without any quid pro quo) should be paid to the

promise of an independent reflection-politics is contradicted by the fact that they are enmeshed in the power games of the political system. Thus, they are similar to the politicised constitutional courts that commonly exist where the separation of powers is not sufficiently developed.

[106] K-H Ladeur, 'Die Autonomie der Bundesbank: Ein Beispiel für die institutionelle Verarbeitung von Ungewißheitsentscheidungen' (1992) 3 *Staatswissenschaften und Staatspraxis* 486.

[107] Senf, n 5 above; Binswanger, n 9 above, 147.

Treasury, made available to the banking system, or used to finance tax cuts or individual earnings, is not a question for the central banks, but for the political process.[108]

The dynamics of external political impulses and the internal politics of the 'capillary constitution' are, as we stated above, not an automatic consequence of functional imperatives. They develop only in crisis phases, and are themselves caused by excessive growth compulsions. These are the constitutional moments, when social energies will be activated of such intensity that catastrophe will be averted. From a historical point of view, it is clear that the Great Depression in 1929 was such a moment. Then the nation states were faced with a constitutional decision: to abolish the autonomy of the economy via the totalitarian politics of either a socialist or fascist inclination, or to inaugurate the 'New Deal' and the welfare state as a limitative constitutionalisation of the national economies. And today? Was the banking crisis of 2008 system relevant? Was it so threatening that it amounted to a new constitutional moment, now of the global economy, raising its self-limitation through a global financial constitution within the realm of the possible? Or had 'the bottom' not yet been reached? Will the fading of the crisis herald the global return of the old addictive behaviour, which is untreatable with nation-state withdrawal cures?

[108] Binswanger, n 9 above, 147 *et seq*.