

# Agents of Change

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**Abstract** Evolutionary accounts in economics have offered a new look at economic development. Advancing on the limited cognitive capacities, they have shown that structural change follows technological, institutional and ideological paths. The present examination suggests an add-on to this cognitive portrayal of change. Drawing on Schumpeter's theory of innovation and Adam Smith's theory of knowledge, it analyzes human motives as important drivers of development. It brings in the dynamic nature of human motives and particularly discusses the human will as a requirement of change.

"The difficulty lies, not in the new ideas, but in escaping from the old ones."

(John Maynard Keynes: (2010[1936]) *The General Theory of Employment, Interest and Money*)

"Der bloße Gedanke allein genügt nicht und setzt sich nie 'von selbst' durch... Der Vorgang ist vielmehr in der Regel der, dass der neue Gedanke von einer kraftvollen Persönlichkeit aufgegriffen und durch ihren Einfluss durchgesetzt wird.

Jahrhundertlang kann eine neue Möglichkeit, trotzdem dass sie in recht weiten Kreisen bekannt ist, ein unfruchtbares Schattendasein führen, ohne irgendeine Wirkung nach außen zu haben."

(Joseph Alois Schumpeter: 1911–12: *Theorie der wirtschaftlichen Entwicklung*)

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# 1 Introduction

The economic agent in evolutionary economics is often characterized in contrast to the standard neoclassical view, and hence in contrast to rational choice (Vanberg 2002). In particular, evolutionary accounts stress fundamental uncertainty in decision making and consider imperfect information. Human action is defined in terms of rule following, and therefore is seen as the result of the past, rather than of the outcome of forward looking calculation of consequences; also, it does not impose optimization as a selection criterion.<sup>1</sup> Decision making and action are rule governed, and these rules are seen as the outcome of long run evolution of human action and individual learning.

With these assumptions, very important results about structural - economic and institutional - change have been gained. One of these is that economic development is path dependent: it follows technological (Nelson and Winter 1982; Arthur 1994), institutional (North 1999) and ideological paths (Denzau and North 1994; Denzau et al. 2007). Individual agents who are constrained by these paths can resist changing and contribute to inertia (and lock-in). Against this background, the manifestation of innovation is seen as a break from prevailing routines (Nelson and Sempat 2001: 44).

These analyses in general do not reveal much about the individual agent. This is because the focus of evolutionary analysis is meso and not micro (Dopfer 2006) and the attention is on the results of interaction among individuals within a population. The individual remains much of a black box, as Nelson and Winter (1982) make clear, since, for their purposes, it is not necessary to dig deeper into individual persons, that is, their character, and to know more about their preferences and beliefs (cf. also Vromen 2001).

Nelson and Winter (1982) emphasize that heterogeneous agents affect economic development and institutional change. They focus on competitive markets or other institutions to which the agent adapts or learns to adapt and in which bounded rationality in the sense of rule following has taken the place of perfect optimizing rationality as a selection mechanism. While approaches to path dependency assume heterogeneity of agents - for example, that some of them are more willing to change and break with the rules than others - the basis of their heterogeneity, including the manner in which their motives are formed and ways in which they might change, is typically not further explored. As a consequence, the human agent is moved to the background. And yet, it is finally the motivation of the agent that influences his decision to break eventually with the rules and routines and change.

Ideologies and institutions do not only shape individual agents and their preferences, as is typically recognized from an evolutionary and institutional perspective

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<sup>1</sup> There is a shift of emphasis from an outcome oriented view, which relies on the rational prowess of agents and their deductive capacities, to a procedural view of the economy, in which the diversity of agents, their multiple expectations and beliefs as well as learning processes are the focus.

and against the standard view of rational choice in which stable agents with given preferences are assumed (Bowles 1998; Denzau and North 1994). Individual agents also shape and chose their ideologies and institutions. Accordingly, North (1999 [1990]) argues that the change of preferences played at least some role in the abolition of the economic institution of slavery. This view holds the promise that a better understanding of human motivation can also increase our understanding of change.

The present paper is motivated by this reverse causation. It attempts to dig a little deeper into the motivational foundations of change. To see clearer on this issue on which most economists today have little to say,<sup>2</sup> I will bring in Joseph Schumpeter and Adam Smith - two eminent economists of change and economic transformation - because of their strong views on the problem. Their historical accounts are seen here as treasure troves of ideas (Kurz 2006: 476) that can be used in “new combinations” (Schumpeter 1963[1934]: 66, 64) with a view to enriching current debates. I will by example draw on the entrepreneur of Schumpeter’s *Theory of Economic Development* (1911–12, 1927, 1934) and the poor man’s son of Smith’s parable in *The Theory of Moral Sentiments* (2001[1759]).

One essential requirement of innovation and change is to break with the past - with previous thought and habits - and it is certainly the case that the human imagination is crucial in this regard.<sup>3</sup> This is so because, thanks to the imagination, the human agent can “entertain a world view that no longer relies exclusively on experience,” as Dopfer puts it. In contrast to other primates, the human agent is free to “image a future that is disconnected from the past” (Dopfer 2004: 190). The human agent is capable of “originating, adopting and retaining novel rules” (Dopfer and Potts 2008: 30), and hence “of becoming generically different” (31). In this generic view, the human agent “creates, alters and abandons new rules” or knowledge (Grebel 2008: 7).

On the other hand, having this capability does not mean that the agent will use it when necessary. There is indeed nothing - from an evolutionary perspective at least - that guarantees that the agent will also carry out his unique capability.

My discussion of historical accounts suggests that knowledge in and of itself is not sufficient. What is also essential is the will. For an agent of change, therefore, it is not sufficient to know that, when and how to break with existing rules and routines, but he also must be *willing* to do so.

That the new is connected with the elimination of the old has been repeatedly affirmed: in his study on the principles leading to the advancement of

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<sup>2</sup> Economists have long shown little interest in a better understanding of motivational foundations in general (Giocoli 2003; Klamer 1989). They usually apply a narrow concept of motives (Blume and Easley 2008; Loasby 2009a: 38).

<sup>3</sup> The recognition of the foundational role of the human imagination today is most prominently associated with the George Shackle (Shackle 1972; cf. also Loasby 1994). That change necessitates paying more attention to the imagination and going beyond rational choice has recently also been acknowledged by Denzau and North (1994) and March (1995). Cf. Augier and Kreiner (2000) and Patalano (2007) for further discussion.

understanding, Adam Smith emphasizes that the new system of Copernicus plainly “*destroyed the system of Ptolemy*” (1980[1795]: 84, italics by the author). Shackle likewise acknowledges that “new knowledge is in part destructive of old knowledge” (Shackle 2009[1970]: 21; cf. also Loasby 1994: 523) — since it is genuinely new, it “must subvert to some degree what has been accepted as knowledge hitherto” (Shackle 2009[1970]: 21). When maintaining in this context that the “vital aspect of the process of ... innovation is its destructive effect” (Shackle 1967: 295), Shackle almost strikes the Schumpeterian chord.

But yet, old knowledge or rules do not disappear effortlessly. Merely because something has become obsolete does not mean that it will also give way. The process of destruction generally creates resistance. The old and obsolete fights against losing its significance - against being eliminated, transformed or circumvented. For change and innovation to occur, therefore, it is essential that the resistance of the past is overcome. As Shackle makes clear in relation with theoretical innovation, the theoretician needs to “overturn the intellectual dwelling places of hundreds of people, whose first instinct will be revenge and resistance” (1967: 295).

For that reason, extra effort of the will is needed. The present examination of human motives can, therefore, also be seen as an inquiry into the significance of the human will and should be understood as complementary to work in which the stress is on processes of thought.<sup>4</sup> To be sure, it in no way neglects the significance of cognition. As has been argued above, the recognition of the limitations and capacities of human cognition is important to understanding economic behavior.

Hence change here is seen as willed. This implies that it is not the consequence of changing constraints as claimed by standard accounts. It is also not the result of error, history or chance. But change, at least to some degree, also involves an element of choice. One purpose of the paper, more generally, is to call attention to this ‘some degree’ which involves the will.

Schumpeter was fervent in defending the will. To set the scene, I will therefore discuss his theory of innovation. Adam Smith made the case for the advancement of human understanding. To emphasize the will’s part in his theory of knowledge, I will particularly discuss the economic setting to which Smith connects it in *The Theory of Moral Sentiments* (2001[1759]).

The remainder of the paper proceeds as follows. Section 2.1 refers to Schumpeter’s entrepreneur and discusses the resistances against the improvement of economic services. Section 2.2 refers to the poor man’s son of Smith’s parable and discusses the resistances against the advancement of understanding. Section 3 considers complementarities and contrasts between both theories. Section 4 concludes.

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<sup>4</sup> Morrison and Potts (2008) refer to systematic cognitive biases or errors of human thought to explain why innovation processes are subject to failure. They suggest that these biases explain why it is very hard – and, in many cases, perhaps too hard one could advocate - for the agent to innovate. For a discussion and appraisal of the domain limitedness of knowledge and its evolutionary foundation in the human mind, cf. Loasby (2003: 33-5).

## 2 Willing to Change

### 2.1 Schumpeter's Entrepreneur and Economic Development

The breaking with routines is at the heart of Schumpeter's conception of agency. He develops this conception in contradistinction to rational behavior at the foundation of Walras' equilibrium theory of perfect competition. For Schumpeter, Walras' conception of rational behavior should be seen as a result of behavioral routines. The "assumption that conduct is . . . rational is in all cases a fiction. But it proves to be sufficiently near to reality, if things have time to hammer logic into men" (1963 [1926]: 80).<sup>5</sup>

Economic agents on this view act according to routines or rules that are, to a great extent, based on the experience of the past: "The individual household or firms acts, according to empirically given data and in an equally empirically determined manner. Obviously this does not mean that no change can take place in their economic activity. The data may change, and everyone will act accordingly as soon as it is noticed. But everyone will cling as tightly as possible to habitual economic methods and only submit to the pressure of circumstances as it becomes necessary. Thus the economic system will not change capriciously on its own initiative but will be at all times connected with the preceding state of affairs" (1963 [1926]: 8-9).<sup>6</sup>

Similarly, in the first edition of *Theorie der wirtschaftlichen Entwicklung* (1911–12), Schumpeter refers to agents who are not interested in change as follows. "The data which have ruled the economy in the past are known, and if they remained stable, the economy would repeat itself in the same way. If the data change, this is not known in the same way, but the agent responds to them as well as he can. The agent does not change . . . anything on his own" (translation by the author).<sup>7</sup>

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<sup>5</sup> "Annahme eines Verhaltens, das der Beobachter als prompt und rationell begreifen kann, ist eine Fiktion auf alle Fälle. Aber sie bewährt sich dann, wenn und weil die Dinge Zeit haben, Logik in die Menschen zu hämmern" (Schumpeter 1926: 118).

<sup>6</sup> "Das Wirtschaftssubjekt handelt also nach erfahrungsgemäß gegebenen Daten und in einer ebenso erfahrungsgemäß gegebenen Art und Weise. Natürlich heißt das nicht, daß keine Veränderungen in seiner Wirtschaft eintreten können. Die Daten derselben können sich ändern, und jedermann wird sich danach richten, sobald er es merkt. Aber dann wird jedermann nicht etwas schlechthin Neues tun, sondern möglichst viel von seiner gewohnten Wirtschaftsweise festhalten und dem Drucke der Verhältnisse nur soweit nachgeben, als nötig ist. Und auch dieses 'Nachgeben' wird er nach den Regeln der Erfahrung vollziehen. So würde sich das Bild der Wirtschaft nicht willkürlich ändern, sondern sich in jedem Augenblick an den vorgegebenen Zustand anschließen" (Schumpeter 1926: 7–8).

<sup>7</sup> "Die Daten, die die Wirtschaft in der Vergangenheit beherrscht haben sind bekannt, und wenn sie unverändert blieben, so würde die Wirtschaft in derselben Weise wieder ablaufen. Die Veränderungen, die sie erleiden mögen, sind nicht ganz so bekannt, im Prinzipie folgt ihnen das Wirtschaftssubjekt so gut es kann. Es ändert . . . nichts selbsttätig" (1911–12: 32).

According to Schumpeter, standard economics describes the manner in which economic agents react to given constraints, and he shows that these reactions are predetermined. In a static economy, which is based on what we today call rational choice theory, nothing new can happen, since agents can only passively adapt to the data. Even if the data change, nothing new can arise, because the agents (“Wirte” in Schumpeter’s terminology) optimally adapt to these changes. They satisfy their wants given the constraints they face. They are in a circular flow, Schumpeter contends, populating an economic environment that is “resting” and “passive”, a “static, stationary economy determined by the circumstances (1911–12: 87) (translation by the author).<sup>8</sup> These attributes are metaphorical because the circle does not exclude accumulation and growth. But Schumpeter emphasizes that economic growth as a result of growing wealth or population will not result in a change of routines. It will primarily result in behavior that adapts to the change in data. Such an economy is populated by people who always remain the same, and of goods that always are reproduced in the same way (Gerschlager 1996: 117–8).

From this follows the notion that innovations, if they appear at all in the economic system, are disruptive of these behavioral routines, and hence the economic system. The disruptive, disturbing, and finally always destructive nature of the new figures prominently in his theory of the business cycle (1934[1963]: 216, 252).

Schumpeter draws attention to the evolving character of the economy. He seeks to explain the structural changes that are observed in economic history and interprets these as movements away from equilibrium. He is interested in the shifting of equilibriums and in discontinuity (1926: 99).

For Schumpeter, the challenge, therefore, is not to “combine materials and forces within our reach... but to produce other things, or the same things by a different method, means to combine these materials and forces differently” (1963 [1934]: 65).<sup>9</sup> Form and content of development is defined in terms of “carrying out of new combinations” (66).<sup>10</sup> This involves new goods, new methods of production, new markets, new resources, new organizational structure, i.e. the creation or breaking up of a monopoly position (66).

Against this view of the agent, he brings in the entrepreneur as the agent who realizes the new combinations and triggers change. He is not a dreamer but a “Mann der Tat” (1911–12: 32) - a man proceeding to action. He has to swim “against the stream if he wishes to change its channel” (79–80),<sup>11</sup> and what “was formerly a help becomes a hindrance. What was a familiar datum becomes an unknown. Where the boundaries of routine stop, many people can go no further, and

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<sup>8</sup> “ruhend, passive, von den Umständen bedingte, stationäre, statische Wirtschaft” (1911–12: 87).

<sup>9</sup> “vorhandene Dinge und Kräfte kombinieren” ... “anderes oder anders produzieren heißt diese Dinge und Kräfte anders kombinieren” (1926: 100).

<sup>10</sup> “Durchsetzung neuer Kombinationen” (1926: 100).

<sup>11</sup> “gegen den Strom, wenn er dessen Bahn verändern will” (1926: 118).

the rest can only do so in a highly variable manner” (80).<sup>12</sup> According to Schumpeter, leadership exists because “every step outside the boundary of routine has difficulties and involves a new element” (84).<sup>13</sup>

The difficulties arise from limited information and uncertainty, particularly in dealing with the new data. “Now he must really to some extent do what tradition does for him in everyday life, viz. consciously plan his conduct in every particular. There will be much more conscious rationality in this than in customary action, which as such does not need to be reflected upon at all; but this plan must necessarily be open not only to errors greater in degree, but also to other kinds of errors than those occurring in customary action. What has been done already has the sharp-edged reality of all the things which we have seen and experienced; the new is only a figment of our imagination. Carrying out a new plan and acting according to a customary one are things as different as making a road and walking along it” (85).<sup>14</sup>

Another difficulty is related to the fact that the agent of change has to overthrow two principal forms of resistance. First, he has to fight against the reluctance to change that arises from within his own person: “In the breast of one who wishes to do something new, the forces of habit rise up and bear witness against the embryonic project. A new and another kind of effort of will is therefore necessary in order to wrest, amidst the work and care of the daily round, scope and time for conceiving and working out the new combination and to bring oneself to look upon it as a real possibility and not merely as a day-dream. This mental freedom presupposes a great surplus force over the everyday demand and is something peculiar and by nature rare” (86).<sup>15</sup> Second, he has to overcome the resistance from the social

<sup>12</sup> “dort Stütze war, wird hier Hindernis. Was vertrautes Datum war, zu einer Unbekannten. Wo die Grenze der Routine aufhört, können deshalb viele Leute nicht weiter und der Rest kann es nur in sehr verschiedenem Maß” (1926: 118).

<sup>13</sup> “jeder Schritt aus dem Bezirk der Routine Schwierigkeiten hat, ein neues Moment involviert” (1926: 124).

<sup>14</sup> “Wohl handelt er auch nach einem Plan; es wird sogar viel mehr bewußte Rationalität darin stecken als im gewohnten, der als solcher überhaupt nicht ‘überlegt’ zu sein braucht; aber dieser Plan muß erst erarbeitet werden. Und deshalb enthält er nicht bloß graduell größere, sondern auch andere Fehlerquellen als der gewohnte. Der gewohnte hat die ganze scharfrandige Realität der Vorstellungen von Dingen, die wir gesehen und durchlebt haben; der neue ist eine Vorstellung von Vorgestelltem. Nach ihm handeln und nach dem gewohnten handeln sind so verschiedene Dinge wie einen Weg bauen und einen Weg gehen: Und das Bauen eines Weges ist so wenig ein bloßes gesteigertes Gehen, als das Durchsetzen neuer Kombinationen ein bloß graduell vom Wiederholen der gewohnten verschiedener Prozeß ist” (1926: 124-5).

<sup>15</sup> “In der eigenen Brust dessen, der Neues tun will, erheben sich die Elemente der gewohnten Bahn und legen Zeugenschaft ab gegen den werdenden Plan. Eine neue und andersgeartete Willensaufwendung wird dadurch nötig, außer jener, die schon darin liegt, inmitten der Arbeit und Sorge des Alltags um Raum und Zeit für Konzeptionen und Ausarbeitung der neuen Kombination zu ringen und sich dahin zu bringen in ihr eine reale Möglichkeit und nicht bloß Traum oder Spielerei zu sehen. Diese geistige Freiheit setzt einen großen Überschuß von Kraft über das Erfordernis des Alltags voraus, ist etwas Einzigartiges und ihrer Natur nach selten” (1926: 126).

environment. It is a feature of every social environment to have a general tendency to condemn “any deviating conduct by a member of a social group” (86).<sup>16</sup> The entrepreneur has to find “the necessary cooperation” (87)<sup>17</sup> to overcome opposition particularly from those “groups threatened by the innovation” and from “the difficulty in winning over consumers” (87).<sup>18</sup>

The function of leadership does not lie in “find[ing]” or “creat[ing] new possibilities.” These new possibilities, according to Schumpeter “are always present, abundantly accumulated by all sorts of people”; for the most part “they are also generally known and being discussed by scientific or literary writers” (88) - but the leader’s function is to “do... the thing” (88).<sup>19</sup> Schumpeter stresses that leadership concerns the bearing that change has on others. In other words, others have to follow and change, too. “The type of the leader is characterized by his specific way to look at things - and thereby not his intellect is important but his will, his energy, to tackle certain things and to see them as [if they were] real -, his ability to go on his own and to go on ahead, not feeling uncertainty and resistance as counterarguments, and finally the effect he has on others” (translation by the author).<sup>20</sup>

Schumpeter’s thick description of the entrepreneur has to be understood in the light of his attempt at formulating the laws of action within the larger framework of a theory of action (1911–12: 134).<sup>21</sup> He maintains that, in relation with change, the economic agent is to be conceived differently than in a static economy. Gossen’s laws and the rationality of the satisfaction of wants they imply - that the intensity of the agent’s wants would decrease with increasing quantity of the good consumed for example - are only pertinent in a static context but are secondary in a changing economy. In the latter, economic behavior is to be seen as depending on the evolution of the agents’ wants.

Change can be better understood, according to Schumpeter, if we attribute greater significance to individual motives. This is in contrast to the analysis of the

<sup>16</sup> “mißbilligt” ... “jedes abweichende Verhalten eines Gliedes der sozialen Gemeinschaft” (1926: 127).

<sup>17</sup> “erforderliche Kooperationen seitens der Leute zu finden, die man braucht” (1926: 127).

<sup>18</sup> “durch das Neue bedrohten Gruppen” ... “in der Schwierigkeit die Konsumenten zum Mitgehen zu bringen” (1926: 127).

<sup>19</sup> “Der Führer als solcher “findet” oder “schafft” die neuen Möglichkeiten nicht: Die sind immer vorhanden, reichlich angehäuft von Leuten im Lauf ihrer gewöhnlichen Berufsarbeit, oft auch weithin gekannt und, wo es Literaten gibt, auch propagiert.” ... “Die Führerfunktion besteht darin, sie lebendig, real zu machen, *durchzusetzen*” (1926: 128, italics in original).

<sup>20</sup> “[D]er Typus des Führers ist charakterisiert einmal durch eine besondere Art die Dinge zu sehen – dabei wiederum nicht so sehr durch Intellekt (und, soweit durch diesen, nicht einfach durch Weite oder Höhe, sondern gerade durch eine Enge bestimmter Art) als durch Willen, durch die Kraft, ganz bestimmte Dinge anzufassen und sie real zu sehen –, durch die Fähigkeit, allein und voraus zu gehen, Unsicherheit und Widerstand nicht als Gegengründe zu empfinden, und sodann durch seine Wirkung auf andre” (1926: 129).

<sup>21</sup> “aus den Motiven ein Verständnis und mit ihm ein Gesetz des Handelns zu gewinnen“ (1911–12: 134).



circular flow, “where the importance of examining motives is very much reduced,” since “the equations of the system of equilibrium may be so interpreted as not to imply any psychic magnitudes at all, as shown by the analysis of Pareto and of Barone” (1963: 90-1). Motives also characterize the behavior in question. In this light, Schumpeter calls the entrepreneur “most egotistical of all” (1963: 91) and “reckless” (translation by the author).<sup>22</sup> He “is more self-centred than other types because he relies less than they do on tradition and connection” (91-2).<sup>23</sup>

When making the decision to carry out new combinations, “he must consciously plan his conduct in every particular” (1963: 85), because he can no longer rely on knowledge and rules of conduct within the accustomed channels. In Schumpeter’s perspective, the entrepreneur, therefore, is not only the most egotistical but also the “most rational of all,” since to carry out “new plans, requires more conscious rationality than the mere running of established business... which is largely a matter of routine” (92). The entrepreneur as Schumpeter sees him will not act, unless he also can “seize a gain” (214). A “tolerably reliable calculation” of “new possibilities more advantageous from the private economic standpoint” (214) is therefore imperative. Schumpeter is well aware that calculation necessitates economic stability. In times of disturbance - when economic development comes to a halt - the entrepreneur cannot obtain the security he needs to know that it is worthwhile to move ahead.

That the new should, therefore, not be seen in direct contrast to the old as Schumpeter claims, but as depending on it, has been repeatedly urged (Festré and Lazaric 2004). Neither the calculation of an advantage of new combinations (Loasby 2003: 176) nor their imagination is possible without “the background of relevant stability”; for “change cannot [even] be recognized” without it (Loasby 2005: 14).

Indeed, the stability of (old) rules or knowledge is significant; it is also an important precondition for what most interests me here in relation with entrepreneurial action: the human will. For, if rules did not importantly exist, the will to break with them would be pointless.<sup>24</sup>

We might, therefore, wonder whether Schumpeter has given “adequate consideration to the elements of continuity which are necessary to carry even radical transformation” (Loasby 2005: 14)? In this light we should also be inclined to ask whether Schumpeter’s depiction of his protagonist was not “too dramatic,” as

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<sup>22</sup> He refers to the entrepreneur as an egoist, in the sense of “gesteigertem Egoismus” and “Rücksichtslosigkeit” (1926: 134).

<sup>23</sup> “His characteristic task ... consists precisely in breaking up old” ... “tradition” and although “this applies primarily to his economic action, it also extends to the moral, cultural, and social consequences of it” (1963: 92).

<sup>24</sup> When making the case for the precedence of norms over rational choice Elster applies a similar argument: if people did not believe in the existence of norms, he says, there would not be anything for them to manipulate (1989: 34-5).

Penrose puts it (quoted by Loasby 2003: 180). I think that, besides effective rhetoric (Loasby 2003: 177), Schumpeter's insistence on contrasts and "the drama" (1911–12: 502) of change he vividly and repeatedly portrays are well founded after all. Since they are based, I believe, on the realization that destruction is quite real in change, the resistance it breeds needs to be overthrown. From the point of view of the innovator as a destructor, the new truly *is* in sharp opposition to the old. After all, his job is to destroy and hence to bury old hopes and values forever (Schumpeter 1963: 217).<sup>25</sup>

Schumpeter therefore insisted on the special effort of the will. For "doing the thing" for "setting up new production functions," as Schumpeter also put it in his *Business Cycles*, the will is needed to overthrow those "who . . . will fight hard to preserve their culture and status" (McCraw quotes Schumpeter 2006: 242).

This ambivalence of change leads to a fairly disgraceful description of its protagonist. The "entrepreneurial kind of leadership" . . . "has none of that glamour which characterises other kinds of leadership", Schumpeter assesses, and it "consists in fulfilling a very special task which only in rare cases appeals to the imagination of the public. For its success, keenness and vigor are not more essential than a certain narrowness which seizes the immediate chance and *nothing else*. . . . He renders a service. . . not so easily understood by the public at large as a politician's successful speech or a general's victory in the field, not to insist on the fact that he seems to act - and often harshly - in this individual interest alone" (1934[1963]: 89, italics in the original).

Therefore, insisting that the job of destruction is to be done is different from glorifying it. Schumpeter makes clear that he does not intend to "style every entrepreneur a genius or a benefactor to humanity nor . . . to express any opinion about the comparative merits of the social organisation in which he plays his role, or about the question whether what he does could not be effected more cheaply or efficiently in other ways" (1934[1963]: 90fn1).<sup>26</sup>

The emphasis on contrasts and oppositions notwithstanding, stability and instability, i.e. order and disorder, depend on each other, and I think this is the case in Schumpeter's account, too. Schumpeter further develops this in his theory of the business cycle, with reference to the necessary interplay between periods of boom and depression. On this view, situations of stability or boom are succeeded by situations of economic instability or depression in which subjects are constrained to adapt to the new standards the boom introduced. Not until these and hence stability and a new equilibrium are reached (1963: 244–5) can the entrepreneur "see" future

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<sup>25</sup> The "economic system needs rallying before it can go forward again. Its value system needs reorganizing. And the development which then starts again is a new one, not simply the continuation of the old. It is true, experience teaches that it will move more or less in a similar direction to the earlier, but the continuity of the 'plan' is interrupted. The new development proceeds from different conditions and in part from the action of different people; many old hopes and values are buried forever, wholly new ones arise" (1963: 217).

<sup>26</sup> His aim was to distinguish his agent of change from that of a "robber" for example (1934[1963]: 90fn1).

profits. In the meantime, the impossibility of calculation is enough to inhibit entrepreneurial activity, even of the strongest willed.

For Schumpeter, the destruction of old values and the ensuing economic instability is unavoidable, since the “new requires that those who wander along their well known paths change their ideas” (translation by the author).<sup>27</sup> This is why “neither profits in a boom nor losses in a depression are meaningless and functionless” (252-3). “[T]hey are essential elements of the mechanism of economic development and cannot be eliminated without crippling the latter” (253). Schumpeter’s analysis of the business cycle is generally seen as important argument against Keynesian claims for intervention.

In contrast to Keynes, however, Schumpeter was reluctant to give unmistakable policy advice. In his view, his analysis can “be used to derive practical conclusions of the most conservative as well as the most radical complexion.” As McCraw (2006) reminds us, Schumpeter is eager to point out that it did not lend support “to any general principle of *laissez faire*” (with reference to Schumpeter’s *Business Cycles*, vol. 1, vi: 237 f. 14, italics in original).

Moreover, despite the fact that Schumpeter insisted on destruction as part of economic development, he does not tell how important the destruction has to be. In the final pages of his *Theory of Economic Development*, he emphasizes that losses and destruction can also be “meaningless and functionless” (1963: 253). By so doing, he also leaves potential room for new forms of intervention to mitigate if not to avoid some of the destruction deemed useless. I will, however, not further discuss policy perspectives here as Schumpeter was not importantly concerned with them.

Let us therefore disregard the question whether the process of destruction has to be completed entirely or in degree; but let us assume that order and stability set in with or without intervention. Let us further assume that the general conditions for innovation are met. The entrepreneur can see the gain his idea will bring “immediately before his eyes” (214).

Even now, this is not sufficient. Schumpeter emphasizes that the entrepreneur must also “break up” (92), i.e., he must be willing to destroy; for if not, the new will not find approval, as “it would be objected or it would only receive such weak and vague acceptance that can never be successful and fertile” (translation by the author).<sup>28</sup>

According to Schumpeter, the motivation of the entrepreneur is different from that of most other agents (1926: 134). “The typical entrepreneur does not ask whether his effort is gratified. He does not care about the hedonic satisfaction that can be derived from his deeds. He works restlessly because he cannot do otherwise, he does not live for enjoying what he has acquired. Should this wish arise, then it is

<sup>27</sup> Für die Aufnahme von etwas Neuem ist ein Prozess des Umdenkens für alle in statischen Bahnen Hingleitenden nötig (1911–12: 543–4).

<sup>28</sup> “er würde auf Ablehnung oder doch nur auf jene matte, vage Art der Zustimmung stoßen, die zu wirklicher Fruchtbarkeit nie führen kann“ (1911–12: 543–4)

an indication of an end and not an interim target, heralding physical death rather than satisfaction" (translation by the author).<sup>29</sup>

On Schumpeter's view, the type of the entrepreneur is best to be identified by his "Motto," which is "plus ultra" (1926: 137). Plus ultra is first motivated by "the dream and the will to found a private kingdom . . . a kingdom that provides for the sensation of power and independence . . . and which is specially strong for people who have no other chance of achieving social distinction" (1963[1926]: 93).<sup>30</sup> Second, Schumpeter refers to "the will to conquer: the impulse to fight, to prove oneself superior to others, to succeed for the sake, not of the fruits of success, but of success itself."<sup>31</sup> Exemplary for this motivation is to look at economic action in terms of sports: "there are financial races, or rather boxing-matches" (1963[1926]: 93) also involving "social ambition" relating to the first motivation.<sup>32</sup> Finally, Schumpeter emphasizes a third family of motives: "the joy of creating, of getting things done, or simply of exercising one's energy and ingenuity" (93). For the entrepreneur, change is seen as an art pour art. He "seeks out difficulties, changes in order to change, delights in ventures" (93-4).<sup>33</sup>

All of these motives are active and this is what, according to Schumpeter, distinguishes them from the standard view in which the agent is primarily seen as reactive, i.e. reacting to internal or external constraints. The entrepreneur does not adapt to the environment, but attempts to change it in the first place. This change is to be understood in relation with these motives.

Since the theory of concrete interest fails in Schumpeter's view, he explores whence the "enduring disposition [of the entrepreneur] seizing upon one opportunity as eagerly as the next" (1966[1919]: 6). He shows that this disposition is driven by some instinctive "urge to action." The entrepreneur's "urge to domination" (12), for example, springs from the "capacities and inclinations that had once been crucial to survival" (33; cf. also Festré and Lazaric 2004: 19-20). The entrepreneur is "never satisfied by the fulfillment of a concrete interest, as would be the case if fulfillment were the motive. . . . Hence the tendency of such expansion to transcend all bounds and tangible limits, to the point of utter exhaustion." In his

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<sup>29</sup> "Der typische Unternehmer fragt sich nicht, ob jede Anstrengung, der er sich unterzieht, auch einen ausreichenden 'Genußüberschuß' verspricht. Wenig kümmert er sich um hedonische Früchte seiner Taten. Er schafft rastlos, weil er nicht anders kann, er lebt nicht dazu, um sich des Erworbenen genießend zu erfreuen. Tritt dieser Wunsch auf, so ist das Erlahmen und nicht eine Station auf bisheriger Linie, Vorbote des physischen Todes und nicht Erfüllung" (1926: 137).

<sup>30</sup> "Traum und Wille, ein privates Reich zu gründen. . . ein Reich, das Raum gewährt und Machtgefühl. . . und dessen Faszination gerade für solche Leute besonders wirksam ist, die keinen Weg zu sozialer Geltung haben" (1926: 138).

<sup>31</sup> "Siegerwille, Kämpfenwollen einerseits, Erfolghabenwollen des Erfolgs als solchen wegen andererseits" (1926: 138).

<sup>32</sup> "Finanzieller Wettlauf, noch mehr aber Boxkampf." "[S]ozial Steigenwollen" (1926: 138).

<sup>33</sup> He changes the economy "um des Änderns und Wagens und gerade der Schwierigkeiten willen" and because of "Freude am Werk, an der Neuschöpfung als solcher: Sei das nun etwas Selbständiges oder ununterscheidbar von der Freude am Tun" (1926: 139).

“objectless disposition to expand ... without limits”... the modern captain of industry for Schumpeter resembles the warrior and hunter” (1966[1919]: 29 [fn 1: 171]). The predominance of instincts in the mentality and the “unrestrained will to gratify these instincts” (33) are seen as remnants of previous forms of social organization, the “warrior nation[s]” of the past (1966[1919]: 37).

Hence, the Schumpeterian agent of change is unconscious and driven by instinct rather than rational deliberation. For him, “instincts and interests” are the same (24). Schumpeter well understands that “human motivation” is “infinitely complex, and we are never aware of all its elements” (32).

Ideas are secondary in Schumpeter’s account; first comes the agent and his will. Schumpeter is not really interested in knowledge (Pavitt 1998; Dopfer 2006) and has been criticized for not telling whence the entrepreneurial vision. However, considering that he was convinced that new knowledge existed in surplus (Schumpeter 1963[1934]: 88) it seems only natural that he did not give priority to explaining it. While Schumpeter is aware that entrepreneurship is not always successful (1934[1963]: 85, 222) - he acknowledges that “error must play a special role ... [in economic development]” - he is not really interested in failure, another lacuna for which his theory has been critically assessed.

Yet, Schumpeter makes clear why in his analysis “no ‘error theory’ will be found.” (1934[1963]: 227). To explain the “blunders and destruction” (252) of the business cycle, error in his view “is indeed a supporting and accentuating circumstance, but not a primary cause necessary to the understanding of the principle. There would still be cyclical movements - though in a milder form - even if no one ever did anything that could be described as ‘false’ from his point of view; even if there were no technical or commercial ‘error,’ or ‘speculative fever,’ or groundless optimism and pessimism; and even if everyone were gifted with wide foresight. The objective situation which the boom necessarily creates explains exclusively the nature of the thing” (227-8).

Schumpeter is clearly conscious of the proximity between success and failure in a wider context, of which the term “creative destruction” he coined also bears testimony (1942[1975]: 81-6). It is true, though, that Schumpeter lacks a theory of knowledge generation. He confers little space to (failure as a consequence of) false knowledge and does not especially appreciate the positive conception of error key to the evolutionary understanding, to wit, making ‘good mistakes’ and making efforts to ‘fail in a better way.’

Just as because Schumpeter does not proffer a theory of knowledge, Adam Smith has been criticized, not the least by Schumpeter (1954), because of a lack of a theory of innovation, that is, the absence of an explanation as to how new knowledge is effectively carried out.<sup>34</sup> But maybe Smith is of the opinion that “undertakers” and those people “who live by profit” (1997[1776]: 66, 265) were around in abundance anyway, and an account of entrepreneurial action is not considered as urgent.

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<sup>34</sup> For a very insightful critique cf. Pesciarelli (1989).

On the other hand, and in contrast to Schumpeter, Smith was puzzled by the growth of knowledge. This was also appreciated by Schumpeter who is also more reconciling with his insights into human understanding, describing his early *Essay on Astronomy* (Smith 1980[1795]) as a “pearl” (Schumpeter 1954).

This *Essay*, which will figure as the point of departure of the next section, bears testimony of Smith’s interest in the principles that lead man to advance his knowledge and ideas. In evolutionary accounts of economics, Smith is regularly used to fill the ‘knowledge gap’ Schumpeter left (Dopfer 2006; Pavitt 1998).

As we will see, for Smith, the difference between truth and falsity is important. In contrast to Schumpeter’s theory of innovation, Smith’s theory could even be seen as building on the significance of errors, i.e. false knowledge.

This also excludes the Humean skepticism about the possibility of establishing universal truths. Smith surely believed in the possibility of improvement, including the improvement of knowledge given appropriate motivation which is part of the human potential, and conditions.<sup>35</sup>

So, how can the inquiry into human motives increase our understanding of knowledge? And if so, how can this advance the present case made for the will?

## 2.2 *Adam Smith’s Poor Man’s Son and the Development of Ideas*

Long before Smith inquired into *The Wealth of Nations* (1997[1776]) and the economic utilization of knowledge, he elucidated its mental underpinnings. In the 1750s, he wrote an *Essay* on the principles that lead and direct “the natural progress of the mind in the investigation of truth” illustrated by the *History of Astronomy* (1980[1795]).

For Smith, reason and reflection are not enough to account for the occurrence of the new. His theory of knowledge growth is based on the imagination. What’s more, it elaborates on the mental stimulus compelling the agent to use his imagination, when necessary.

According to Smith, the mind is well when it continues to think as it has always thought, for this is comforting. As Smith puts it, the imagination is “indolent” (1980 [1795]: 86). The mind, therefore, has a strong motivation to *not* innovate and change. To get going, a stimulus is needed. Smith makes clear that the agent will only use his mind if he perceives some discontinuity - “a gap, or interval” with the past. The ensuing “difficulty” (41-2), or discontent works as a stimulus for the mind to search for (new) ideas that re-establish continuity.

Smith depicts the contradictory motivations to innovate and not to innovate as complementary. Since the change can only be noticed against some continuity that is provided by the past. As noted above, this complementarity is also apparent in

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<sup>35</sup> I owe the specification of this paragraph to the anonymous referee.

Schumpeter, whose entrepreneur needs the confidence that others will continue to rely on the past, in order to break with it. With his system of mental stimulus and response, Smith defends a dynamic account of knowledge founded on the limitations and capacities of the human mind. In this view, the human mind cannot help creating; it cannot help forever imagining new knowledge. Thus, ideas are abundant.

However, this is only one side of the coin. The other side is that the development of ideas can be importantly distorted or hindered. Smith is aware of “prejudices” (1980[1795]: 76) such as authority (67) and the reference of the past (Raphael and Skinner (1980[1795]: 14), which is why the French took so long to discard the Cartesian system, although Newton’s system was closer to the truth; the “education” (76) and “the imagination” (86) or the “sense” (77) which sustained the belief that the earth is motionless, for example. As Raphael and Skinner note, these prejudices are indicative of “a certain unwillingness” and “even resistance” (1980 [1795]: 14). They hinder the advancement of understanding and, as a consequence, false knowledge abounds.

In *The Lectures on Rhetoric* (1983[1762]), Smith identifies a further prejudice: the “Newtonian method” according to which we “may lay down certain principles known or proved in the beginning, from whence we account for the severall Phenomena, connecting all together by the same Chain” (22). This superior method, first attempted by Descartes, particularly appeals to the human mind, giving “us a pleasure” (22).

At the same time, Smith warns that the apparent attraction of this method does not guarantee that the insights it supplies are without flaw and closer to the truth than the those supplied by other - perhaps less ingenious - methods such as the Aristotelian “unconnected method [Smith discusses in comparison], where everything is accounted for by itself without any referen[ce] to the others” (136). The problem he identifies is that “the Cartesian Philosophy . . . tho it does not perhaps contain a word of truth . . . nevertheless [has] been so universally received by all the Learned in Europe at that time” (136).

However, Smith was aware that advancement of understanding depends on the elimination of false knowledge. Otherwise, progress is impossible, as knowledge, although abundant, will not advance but deteriorate.

Smith’s inquiry into the mental foundations of knowledge importantly analyzes the hindrances that are in the mind’s way to understanding the world correctly. I will now turn to *The Theory of Moral Sentiments* (2001[1759]) because this allows me to discuss a singular hindrance to the growth of knowledge which as yet has not been mentioned: strong human motives. I bring in Smith’s *Theory* because it is the treatise in which Smith most profoundly examines human motivation. I should mention here that this is also the treatise in which Smith concentrates on the way in which motives affect *moral* judgment, but here I am more interested in the effects they can have on human thinking, and the generation of knowledge in general.



Adam Smith is routinely seen as the originator of the economic agent who incessantly pursues his self-interest. Although this description of the agent is an inadequate simplification of the variety of human motives Smith acknowledges (Skinner 1996: 70; Rothschild and Sen 2006), it is clear that Smith also attributed much attention to the self-interested motives. I particularly concentrate on these to emphasize the difficulties they can bring about for the growth of knowledge. To specify what Smith had in mind when he referred to self-interest, I would like to recall that he uses the term interchangeably with self-love<sup>36</sup> the former denoting a desire for wealth, the latter for social approval and position. Most people are first and foremost concerned with themselves; in other words, according to Smith they seek approval, they want to be well established, and they want to be well-off; for Smith, all of this is only natural, since man is also “recommended by Nature” to his “care and attention” (Smith 2001[1759]: 219).

On the other hand, this concern can turn into an important difficulty, if it gets out of control. Vanity, avarice and ambition are cases in point. These strong motives are not indications of self-love or self-interest tout court, but of man’s tendency to excess. These “extravagant passions” (2001[1759]: 149), as Smith also calls them, can deceive their subjects. Unlimited pursuit of wealth is indicative of avarice and insatiability regarding status and approval indicate ambition and vanity. The mind under the influence of these passions makes erroneous evaluations of outcomes of alternative actions. “Avarice overrates the difference between poverty and riches; ambition, that between a private and public station; vain-glory, that between obscurity and extensive reputation” (2001[1759]: 149).

In particular, the overestimation of approval, position and wealth results in the erroneous belief that these ‘goods’ exist without any bounds. Typically, ambitious and vain men are ignorant regarding the limits of position and approval. Besides, Smith also observes that their “misfortunes” arise “from their not knowing when they were well”. According to him “the distress of disappointed avarice and ambition” is best summed up in “the inscription upon the tomb–stone of the man who had endeavoured to mend a tolerable constitution by taking physic; . . . *‘I was well, I wished to be better; here I am’*” (150, italics in the original).

The concentration on human motives has allowed us to dig deeper regarding the origin of false beliefs. Accordingly, systematic errors of perception regarding wealth, approval and position find their origin in excessive self-love or self-interest. This is also why Smith refers to them as “delusions of self-love” (159). These false beliefs are primarily the result of the agent’s character, and not of his mind.

I believe that such concern for human motives is at the heart of what I suggest calling Smith’s ‘deception theory’. It highlights strong motives and their influence on the human mind, and so further specifies the forces that are opposed to

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<sup>36</sup> To wit, his famous statement: “It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their *self-love*, and never talk to them of our own necessities but of their advantages” (1997[1776]: 26-7, italics by the author).



knowledge growth. Smith's deception theory of *The Theory of Moral Sentiments* could therefore be seen as a special case of his theory of knowledge.

Smith develops his theory of mental stimulus and response with reference to scientific progress. He exemplifies the historical progress of our understanding of the movement of the celestial bodies and the earth by reviewing the merit and demerit of alternative theories which existed in the past. His theory, therefore, chiefly - but not exclusively - was conceived for the man of science or the philosopher as he is "particularly subject to . . . [it], partly as a result of superior powers of observation and partly because of that degree of curiosity which normally leads him to examine problems . . . which are to the ordinary man so 'familiar' as not to require any explanation at all." Smith considered that his mental account of making new connections was "typical of all men" (Campbell and Skinner 1997 [1976]: 2).

In view of that, I will discuss the poor man's son as an illustration of Smith's deception theory. The poor man's son seems an "ordinary man," as he does not aspire to wisdom but primarily is attracted to approval and position. He is not a learned man either, nor a scientist or philosopher. And yet, he attempts to better understand his situation and starts asking questions. Asking questions, Dopfer also asserts from the knowledge perspective distinguishes man from primates (2004: 191). I would think that this also involves the ability to ask questions of oneself.

But let us finally take a look at the story:

"The poor man's son, whom heaven in its anger has *visited with ambition*, when he begins to look around him, admires the condition of the rich. . . . He is displeased with being obliged to walk afoot, or to endure the fatigue of riding on horseback. He sees his superiors carried about in machines, and imagines that in one of these he could travel with less inconvenience. . . . He thinks if he had attained all these, he would sit still contentedly, and be quiet, enjoying himself in the thought of the happiness and tranquillity of his situation. He is enchanted with the distant idea of felicity. It appears in his fancy like the life of some superior rank of beings, and, in order to arrive at it, he devotes himself for ever to the pursuit of wealth and greatness. To obtain the conveniences which these afford. . . . He studies to distinguish himself in some laborious profession. With the most unrelenting industry he labours night and day to acquire talents superior to all his competitors. He endeavours next to bring those talents into public view, and with equal assiduity solicits every opportunity of employment. For this purpose he makes his court of all mankind; he serves those whom he hates, and is obsequious to those whom he despises. . . . through the whole of his life he pursues the idea of a certain artificial and elegant repose which he may never arrive at, . . . if in the extremity of old age he should at last attain to it . . . it is then, in the last dregs of life, his body wasted with toil and diseases, his mind galled and ruffled by the memory of a thousand injuries and disappointments . . . that he begins at last to find that wealth and greatness are mere trinkets of frivolous utility, no more adapted for procuring ease of body or tranquillity of mind, than the tweezer-cases of the lover of toys. . . . In his heart *he curses ambition*, and vainly regrets the ease and the indolence of youth, pleasures which are fled for ever, and which he has foolishly sacrificed for what, when he has got it, can afford him no real satisfaction. In this miserable aspect does greatness appear to every man . . . [who] observes with attention his own situation and . . . consider[s] what is really wanting for his happiness" (Smith 2001[1759]: 181-2), italics by the author).

The protagonist of the parable clearly belongs to the breed of ambitious and vain men of the economy of "wealth and greatness" (2001[1759]: 181). Smith uses the

story of the poor man's son in an important chapter of *The Theory of Moral Sentiments* directly related to economic development and the progress of human-kind. I will come back to Smith's use of the parable at the end of this Section.

The poor man's son works hard. He succeeds in realizing his ambitions. Not only has he become rich, but he has also acquired status and social approval, and this, as he expected in his youth, has made his life more comfortable. Hence, we would expect that he "sit[s] contentedly." But despite social and economic success, he doesn't.

The puzzle of discontent of Smith's protagonist first and foremost interests me from the perspective of knowledge.<sup>37</sup> Smith tells that the poor man's son is disturbed, since his beliefs regarding position, approval and wealth have become obsolete, hence the discontent of his mind.

This cognitive discontent manifests itself in the realization of the false belief. The poor man's son becomes aware that his beliefs about wealth, approval and position no longer fit; he is mistaken to believe that approval and wealth are without bounds. His problem does not lie in not knowing what would be able to satisfy his ambitions, but in not knowing when these are satisfied. As Smith says, he did not know *when* he was "well, when it was . . . proper for him . . . to sit still" (2001 [1759]: 150, italics by the author).

We can dig deeper and inquire into the causes of his deception. From the perspective of Smith's deception theory, his false belief does not originate in biased cognition but in a biased character. The absence of limits is a difficulty that is essentially connected with ambition and vanity, for these extravagant passions are insatiable by nature. They are never satisfied, but grow with their stimulation. The parable, therefore, confronts its protagonist with his most profound inclinations. He understands that the passions that moved him ("he devotes himself for - ever") can also deceive him.

According to Smith's account of knowledge, the discontent of the poor man's son - the "gap" he presently experiences to his previous thought and action - should stimulate the mind to generate and to adopt new and more adequate ideas. But what precisely are these new ideas able to "soothe his imagination"? (Smith 1980[1795]: 46)

We do not know, since, we are not told what our protagonist does next. The story leaves us wanting with regard to his future projects. However, while incomplete with regard to the adoption and retention of new combinations, the story already makes a strong point with regard to the focus that is adopted here. It shows that false beliefs can hinder the agent in advancing his understanding. The story is instructive with regard to the abandonment of the past as determinant of change, and it also shows that abandoning obsolete ideas is not straightforward. Just because the agent knows that his beliefs have become obsolete this does not mean that he will also get

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<sup>37</sup> That the parable is to be seen in the context of Smith's theory of knowledge has been pointed out by Loasby (2009b: 8-9).

rid of them. Just because the agent feels that his ideas are inadequate does not guarantee that he will lose them.

This is a possibility Smith seriously considers. He imagines that the poor man's son is rather inclined to treat his discontent as temporary, which "in time of sickness or low spirits is familiar to every man". But when "in better health and in better humour, ... [he] ... will never fail to regard" ... ["those great objects of human desire"] ... "under a more agreeable aspect" (2001[1759]: 183). In this case, everything remains the same, and the poor man's son does not change track. Progress, here as anywhere, is not inevitable. Advancement requires an extra effort. The advancement of knowledge requires that the poor man's son is ready to abandon his old beliefs.

Obviously the solution to the problem the poor man's son faces lies in his person. To abandon his false beliefs, he has to abandon his tendency to excess; he has to overthrow ambition and vanity. To change his beliefs, he has to put an end to his original determination; he has to change himself.

Indeed, this is exactly what the poor man's son has done. The man who looks back in the parable is no longer the same. Whereas in his youth he is "visited with ambition," in his old age he "curses ambition". The 'new man' of the parable has abandoned his extravagant passions.

Given that his strong motives completely occupied our protagonist - Smith unequivocally states that "nature imposes upon" (2001[1759]: 183) him - the question at this point is how he manages to get rid of his delusions at all. How does he overcome the resistances of his extravagant passions?

New ideas are clearly not sufficient here. These were probably around in his youth already. To adopt new ideas, it is vital that old ones be overthrown. Thus the will is needed. In the special case of the parable, this requires changing oneself, and hence the special effort of the will to "pull off the mysterious veil of self-delusion" which covers from the poor man's son the "deformities" of his own character (2001[1759]: 158). I contend that Smith's protagonist also experiences a crisis of identity indicative of his change. The man who applies self-scrutiny and changes his character must not be deficient of will, since the resistances he has to overthrow are obviously significant. Smith compares these to the challenge a surgeon faces when he does an operation on his own body (2001[1759]: 158).

It has been noted that the deliberate questioning of assumptions is one of the general principles involved in the generation of new ideas (Loasby 1996: 25). The parable also illustrates that such questioning can hardly succeed if the agent is unwilling to overthrow the resistances against change.

The poor man's son, therefore, does not change his mind by accident. Nor is his change the result of some changing conditions, I maintain, but is motivated by the will to break with the past. The parable does not suggest that the poor man's son reacts to constraints when he pulls off his delusions. He does not *have* to change, or to know. The poor man's son changes, not because this makes him better off - actually he is not as his state of crisis shows; or because he thinks as he thought in the past - actually he thinks differently now; his change is also not the result of sudden caprice, but is a manifestation of his will.

Recent commentaries of Smith's parable often discuss the challenge it constitutes for the evaluation of welfare, a theme that clearly is involved, and with which many readers might also be more familiar. In particular, the intricate relation between wealth and happiness to which Smith alludes in the parable continuously raises attention.

On this view, the parable of poor man's son is to instruct the reader - in contrast to what most people are inclined to believe nevertheless - that wealth finally does not make them happy. Smith has the poor man's son realize that he was wrong and that he has ruined his life, as Loasby (2009b: 8) vividly puts it, since "foolishly sacrificed for what, when he has got it, can afford him no real satisfaction" (Smith 2001[1759]: 182).

Hence, on this view the deception of the poor man's son is seen in his mistaken belief that wealth can make him happy. The subject errs with regard to the true properties of the object. His error is seen to find its origin in his cognitive limitations. While recent developments have made much progress by also clarifying the nature of cognitive limitations,<sup>38</sup> the question whether wealth can make people happy is as yet unsolved. Consequently, differing opinions on this issue persist.<sup>39</sup>

Besides these ongoing and important concerns for the growth of happiness, the present account of the parable has focused on the growth of knowledge. Accordingly, it has also emphasized man's desire to know.

With a view to further clarifying the case, I will emphasize additional insights it can provide.

First, I have reinterpreted the nature and the origin of the deception involved in the parable. The poor man's son as I see it is not wrong about what the objects can do for him, nor is he wrong about his desires. But he wrongly believes that these objects do not have any limits. I have argued that the origin of this belief lies in the motives of the subject. The poor man's son disregards the existence of limits. His false belief results from his insatiability and does not find its origin in the limitations of human thought as familiar interpretations routinely claim.

The advantage of taking the motives of the agent as a starting point also is that we deal with an authentic agent whose motives are 'true', in the sense that they belong to him. This is contrary to familiar interpretations in which cognition comes first and in which false motives as a consequence of false beliefs are assumed. The poor man's son's "desire for wealth. . . [is] deluded", as it was recently put from the perspective of the history of economic thought (Brewer 2009). Modern accounts in this tradition routinely refer to agents who do not know, or fail "to maximize their 'true' utility" (Fleurbaey 2009: 1059).

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<sup>38</sup> Behavioral accounts have further specified the nature of this false belief, for example in the form of a forecasting error regarding the transitoriness of happiness that can be derived from riches (Ashraf et al. 2005) or in the form of a focused illusion (Kahneman et al. 2006).

<sup>39</sup> To wit, the recent critique of the Easterlin paradox by Betsey Stevenson and Justin Wolfers.

As has been repeatedly pointed out, this conjecture is problematic. After all, who is in the position to know better than the agent what his true wishes are? My argument does not run into these difficulties. The ambitious agent of my interpretation is truly voracious. His avarice is not seen as the result of mistaken beliefs, but as a very real trait of his personality.

I am coming to the lesson to be taken from the present re-interpretation. That the agent is truly ambitious does not mean that he has to remain ambitious throughout his life. That his motives are authentic does not mean that they are also consistent. In fact, a man does not have to stay ambitious and vain throughout his life. He does not have to remain the person in his old days that he was in his youth. It is indicative, I think, that Smith has the poor man's son of his parable "curse ambition" but not wealth. In addition to the assumption of stable agents essential to modern welfare economics, the present account also brings out the dynamic character of human motivation.

The growth of knowledge is essential to economic development. I therefore think that it makes sense to analyze the hindrances in the way of knowledge growth. As has been shown, motives can hinder this growth. A better understanding of human motives is therefore essential.

My above analysis focused on knowledge change. In addition, it has been suggested that a person cannot only challenge and change his knowledge, but also his motives. I submit that the argument presented in relation with knowledge change can be extended to motivational change.

Motives are themselves patterns that give comfort. His motives have guided the poor man's son well. One would therefore not expect him to be a candidate for change. However, giving comfort is not equivalent to change. Change requires the will to overturn resistance. In case of the parable, it is the resistance of the 'old man' who does not want to change. To create a 'new man' - to establish a new identity - the poor man's son must also be willing to get rid of the 'old man'; he must be willing to abandon his old motives and cope with the discomfort (of crisis and depression) caused by change.

It is true that neither Schumpeter nor Smith sought to develop the idea of changing motives; nonetheless, this is not incompatible with their theories. It might reasonably be asked whether the idea is realistic at all. Can a man challenge his own success? Can he change himself?

I think that recent developments can be brought in to strengthen the case. A growing breed of poor men's sons (as 'stylized type') actually is occurring.

Personalities such as Bill Gates, Warren Buffet and Nicolas Berggruen are cases in point. They are considered among the richest men in the world thanks to the big fortunes they have made by carrying out economic innovations. They have also become well known for having given away the greatest part of their fortunes to improve the administration and growth of public wealth, and for so leading the means of production into new, public instead of private, channels of production.

Their different visions as to how and what there actually is to do notwithstanding, Berggruen has more political visions for reform of the political system than Gates, who is focused on technological advancements in care and health, what

makes them interesting for us here is that these visions for a better society are carried out by men who perfectly corresponded to the picture of the Schumpeterian entrepreneur. This was before they changed and started to look out for new combinations stimulated by some discontent or crisis. Before they were able to establish new ideas, they had to abandon some of the old. Substituting public for private wealth, I believe, also requires that at least some personal change is involved.

As the fortunes that are transferred into these new channels are ever more important and ever growing, thanks to the swarm like imitation by other entrepreneurs with big fortunes around the globe and in many instances have become more important than the public money that is distributed by national and international institutions, these new men - and the new ideas and institutions and technologies they have chosen - fulfil many functions that have previously been fulfilled by the state, with ensuing consequences for the future development of the social and economic system. The relevance of the parable therefore to understand recent developments seems obvious to me.

The reader familiar with the parable of the poor man's son may also find that the parable I have presented is not Smith's but my own.

A parable is a didactic story told for instructing the reader about some truths in life. A parable normally contains different layers the truths of which are to be revealed by the reader. In contrast to the presentation of plain facts, a parable is never straightforward. It is also always an invitation to the reader to explore further perspectives. I have used the parable to accentuate Smith's deep understanding of motives in relation with the growth of knowledge. I do not make any claims that this corresponds to Smith's intentions when using the story.

Smith's parable is embedded in an important chapter of *The Theory of Moral Sentiments* in which he does not dwell on personal change, but instead emphasizes the beneficial social consequences of ambition, vanity and greed. The following passage is generally seen as indicative of Smith's view of human progress depending on the harnessing of strong motives. These strong motives and the "deception" ensuing "first prompted. . . [man] . . . to cultivate the ground, to build houses, to found cities and commonwealths, and to invent and improve all the sciences and arts, which ennoble and embellish human life; which have entirely changed the whole face of the globe, have turned the rude forests of nature into agreeable and fertile plains, and made the trackless and barren ocean a new fund of subsistence, and the great high road of communication to the different nations of the earth" (Smith 2001[1759]: 183-4). Harnessing these strong motives is promising, according to Smith, since, in combination with social influences reinforced by a system of justice, we can expect them to produce a tolerably satisfactory situation and an environment which encourages economic development.

Here is not the time and space to discuss this particular variant of what has later been dubbed 'the argument of the invisible hand.' It should only be mentioned that the idea that strong motives can be used by society to produce economic development was important also to Schumpeter's theory of innovation.

### 3 Comparison

My discussion of Smith's theory of knowledge confirms Schumpeter's claim on the significance of the will. The poor man's son as discussed here shows that change importantly requires the removal of resistances. On this view, Schumpeter's claim, therefore, does not only apply to economic development, but also to the foundational level of human nature.

Furthermore, the example of the poor man's son suggests that the advancement of understanding can sometimes require not only will, but extreme will. Indeed, if the advancement of understanding requires changing oneself, extensive effort is needed. It is well known that the hardest obstacles to overcome are often within oneself. This is why people generally tend to resist changing their own views (Patalano 2007; Boulding 1956). Resistance will even get stronger when personal change is required.

My discussion of the poor man's son also enriches Schumpeter's claim in two ways:

First, it provides a rationale for personal change and, by doing so, extends our insights into the motivational structure of the agent, since to understand better, and this is implied in the story of the poor man's son as emphasized here, it can be necessary to change oneself. To improve his understanding, the poor man's son has to throw off ambition, vanity and greed, i.e. the "delusions of self-love".

Second, it reveals that the will can manifest itself in various qualities and degrees of sophistication. Whereas Schumpeter's entrepreneur is fully occupied by his instincts, the poor man's son is also moved by reason and reflection. Whereas the entrepreneur is excessive, as Schumpeter reminds us when he depicts him as the "most egoistical of all", the poor man's son is able to correct his deepest inclinations. This also implies that "'unbound Prometheus' of modern capitalism" is more complex than the "almost self-evident 'stylized fact'" of the "profit motivated innovator" typically assumes (Dosi et al. 2006: 1110).

I think that Schumpeter's and Smith's theories should be seen as complementary. Then the story of the poor man's son could be understood as a sequel to the Schumpeterian account of the entrepreneur.<sup>40</sup> We would deal then with one - albeit evolving - agent and not with two, since a man is not the same at the beginning and at the end of his endeavor.

At the beginning, both agents are much alike: they both are determined to realize their vision. They both aspire for success, power and wealth, and they are ignorant of any bounds, since they are excessively concerned with their own person. At the end, however, these two agents could not be more different.

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<sup>40</sup> In contrast to Schumpeter, who assumed that the weakening of strong motives by rationalist criticism (1966[1919]: 34) would lead to the end of entrepreneurial action, I do not believe that this is necessarily the case. If personal change happens at all, it would rather render obsolete a particular type of entrepreneur, namely the entrepreneur Schumpeter portrayed.

In contrast to the protagonist of the parable, Schumpeter does not consider that the determination of his agent ever comes to an end. If it does, this heralds his soon death in his view. But, after all, as Smith's parable also suggests, the entrepreneur is not forbidden to be disturbed in the mind and to realize the obsolescence of his beliefs with regard to approval, position and wealth. He also is not forbidden to get rid of what he considers obsolete, and hence to change his mind and motives.

So, considering that there is a sequel of events, and that agents can change and that at the end the agent is no longer the same as he was at the beginning, the parable leads us to think about the possibility that the agent finally has got enough. The poor man's son suggests that limits in the end do exist after all - albeit these are not necessarily identical with the existing limits of society and morality.

Under these circumstances, we may also ask whether other motives - motives less strong and eventually 'higher' than ambition, vanity and greed — could do the job that Schumpeter writes about at all, namely the job that has been particularly emphasized here: breaking with the resistance of the past.

I think that this finally has to remain an open question. Schumpeter, for, example is not sure either whether greed, i.e. excessive monetary compensation is needed as an assistant for the will to break with the past. He thinks that other motives (and distinctions) can also do in principle, but he also thinks that we need to think about it more specifically. In particular, he maintains that curiosity and social ambition do not have to involve the acquisition of wealth. "Pecuniary gain is indeed a very accurate expression of success, especially of relative success, and from the standpoint of the man who strives for it, it has the additional advantage obeying an objective fact and largely independent of the opinion of others. . . . Nevertheless it is true that entrepreneurial motives may in principle be taken care of by other social arrangements not involving private gain from economic innovation" (Schumpeter 1963: 94).

More recently, Dosi et al. (2006), in his empirical study, also objects that excessive profit orientation brings about more - not to mention better - innovation. It should also be remembered that the poor man's son as discussed here is not about abandoning the profit motive altogether – it is about abandoning its excesses.

## 4 Conclusion

There have been continuous endeavors to understand better the conditions and principles of the new, but it is probably fair to say that as yet the state of cognitive sciences has not significantly advanced (Denzau and North 1994: 21) on this theme and that "the process of origination of new combinations . . . necessarily [remains] something of a mystery" (Loasby 1996: 26).

Against this background, the present paper has suggested that we can further advance our understanding if we take a closer look at the motivational foundations of the subject: the agents of change. I have shown that our insights into cognitive processes involved in the development of ideas are not sufficient and should be



completed by a thorough analysis of the human will. I have argued that change involves the special effort of the will to overcome resistance. Hence, ideas as driving forces of economic and social development (as Potts puts it, for example, 2008) alone will not do. As Schumpeter understands, for change and innovation “New Men” (1963[1934]) are needed.

The discussion of historical accounts also adds greater definition to the processes of change and innovation: destruction is more real and I understand less mystical than creation, and so is the will. The will cannot be taken for granted, but it develops, if at all, by countering the opposition to the resistances in the way of change.

As a result, processes of change of ideologies, institutions, and technologies also involve a volitional element and this implies it is also not solely a result of error or history. The agents of change do not simply adapt to their environment when they break with the past. This resonates with the standard appreciation of change as path dependent, in contradistinction to path determined (cf. for example Hermann-Pillath 2002). I have particularly brought the active element to the fore which I consider to be the most important point in relation with change that Schumpeter actually made.

As has been shown in my discussion of the mental foundations, the existence of crisis or discontent, in Smith’s wording “pain” or “difficulty,” is not sufficient to bring about change, their obvious significance for the stimulation of human curiosity and the search for the new notwithstanding. Else crisis would automatically be followed by renewal. As can be readily observed, this is not always the case. I think that the open ended character of the story of the poor man’s son also points in this direction. We do not know what he will do next. Hence we do not know the new combinations he will perhaps find worth carrying out. From the perspective that has been emphasized here, the sequel of the story will depend not only on the capacity of the poor man’s son, naturally scarce and unequally distributed among men and domains, to discover or carry out some new combinations, but also on his will to get rid of old ones and, if need be, to also change himself as a person.

The possibility of agents to change their motives - and hence virtually also change themselves - is important because it can provide a further prospective for change and development, a prospective that should not be ruled out given that a reverse causation exists according to which agents are not only affected by their ideas, institutions and technologies but also affect and choose their ideas, institutions and technologies. My analysis of the poor man’s son has recalled this neglected possibility of change and development depending on the person.

The present focus on the person and personal change should be seen as proffering additional options for the further development of social arrangements. It acknowledges that motives are effective movers, but can also distort and hinder change and economic development. As both Smith and Schumpeter suggested, strong motives should certainly be used if possible, but it seems reasonable to consider as well correcting them in case of obsolescence or if they no longer fulfil their function.

The accounts of motivation discussed here go far beyond standard views in economics which have not been conceived to deal with the complexity and change of individual motives. Evolutionary economics with its focus on new developments and change holds an adequate sensor to capture their importance.

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