

Contextuality and Non-substantialist Stance in Dynamic Choice: Reflection on a Case Study in Analytical Philosophy

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I. Introduction

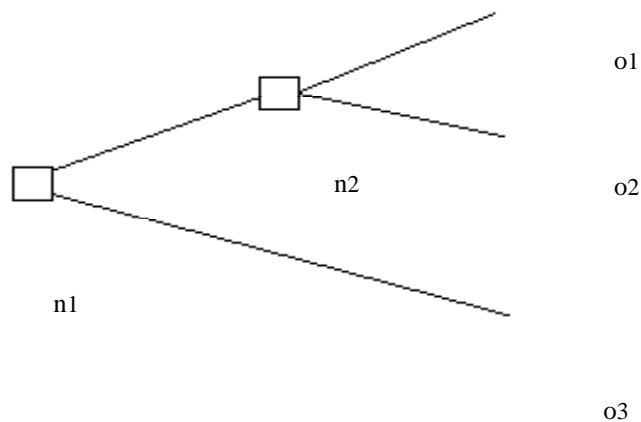
What I shall draw on in this paper is a certain feature of Chinese contextual mindset as opposed to some corresponding one in Western atomic mindset and, I hope, this paper will shed interesting light on some non-substantialist theme underlying Chinese ways of perceiving or engaging the future and of dynamic choice based on such perceptions. The context-sensitive, or route-relevant feature I'm going to delineate seems to have obvious conceptual links to the notion of Field-Being as possibly embodied in the practical domain of human actions (esp. dynamic choices). The focus of the paper, however, is rather on illustrating through contrastive examples some concrete sense in which the above-mentioned feature may be called non-substantialist.

More specifically, the illustration will consist of the following steps: (1) Introduce a well-known ancient western story to show the point of the targeted position of Edward McClennen. (2) Introduce two ancient Chinese stories to show the feature mentioned above as a paradigmatic non-substantialist stance in Chinese culture, which limits, if not directly falsifies, the universalistic claim of validity in McClennen's theory as a representative western approach in this domain. (3) Provide a few comments on the potentially general non-substantialist character of Chinese culture the above examples seem to suggest.

II. A Case Study in the Area of Dynamic Choice Theories

1. A paradigm western example to show the superiority of McClennen's resolute approach to dynamic choice

The story about Ulysses in Homer's epic *Odyssey* is well-known. One of the most fascinating parts of the story is his way to deal with the lure as well as the potential danger of listening to the sirens' song in the middle of his sea-crossing journey back to his long-missed home. Ulysses' successful strategy is to bind himself to the mast in order to forestall the foreseeable preference change brought about by the lure of the sirens. Binding oneself in advance had then become a metaphor or a paradigmatic example of the strategy of pre-commitment for resolving the dynamic problem of preference change.¹ Let's use this example to get some vivid sense of what the three approaches mentioned above would amount to. The choice pattern of this example can be drawn into the following decision tree.



McCledden's (formally generalizable) argument for the superiority of resolute choice is sound only insofar as the following implicit premise hold: All outcomes are terminal, i.e., at the termination of each choice route. If, otherwise, the outcomes were dispersed over (some range of) the route, it would not be clear whether the kind of argument sketched above is still applicable.

Let's consider the following two examples, both of which are adapted from Chinese idioms based on ancient stories of real historical figures. What will emerge from some interpretation of these examples, I hope, will be a different paradigmatic schema than the Ulysses one and good evidence for my contention previously proposed.

EXAMPLE 1:³ Cao Cao (曹操 ca. 200 A.D.), the founder of the Wei Dynasty, who is well-known both for his political and military strategic talents and for his literary gift. Once upon a time, he led his troop to trudge over a long distance in a rapid march. It was high noon when the sun was at its fiercest, and beads of sweat kept rolling down the soldiers' faces. Everybody was desperately thirsty, but not a single drop of water was left in the kettles. Seeing this situation, Cao Cao had a brainwave and found a good solution. He told a story to the soldiers around him and let them spread the words to others. It was about how he as a child stole the neighbor's plums and enjoyed their very special taste. He vividly emphasized that the plums were so sour that his saliva couldn't help dribbling from the mouth. His description is so vivid that every listener produced too. He then pointed forward, "there is a wood of plums not far ahead. Let's speed up!" Everybody (perhaps except Cao Cao himself) felt saliva in the mouth and thirst quenched by imagining and anticipating to eat the wonderful plums during the rest of the march.

An important point of the example is that the soldiers really believed the existence of plums ahead, and at the moment n_1 of hearing Cao Cao's (invented) information they truly preferred eating plums to doing anything else at n_2 , i.e. the moment they arrived (see Figure 2 for the diagram of a decision tree purporting to capture the structural features of the example).

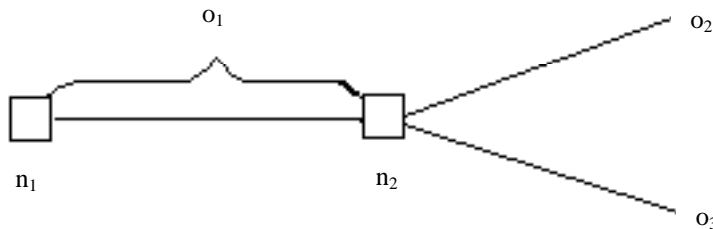


Figure 2

Here o_1 represents the dispersed outcome of producing saliva or quenching thirst, o_2 access to a real wood of plums, o_3 no access to plums. We could certainly imagine different possible scenarios at n_2 for the original story: (a) o_2 was false, i.e., there was no wood of plums in the first place, as the story-based idiom "Wang Mei Zhi Ke" (望梅止渴) seems to imply. (b) On the troop's arrival at n_2 , they coincidentally found a wood of plums, but they did not have time to pick them, because the preparation for the battle was urgent. (c) Although there was a wood of plums and no immediate battle waiting for them at n_2 , they didn't choose to pick (or buy from the landlord) plums for some other cost-efficient considerations, among which the most important one was, thanks to their earlier anticipation, now they were no longer so thirsty. And so on and so forth.

Space doesn't allow me to dwell upon each and every possible scenario. However a common lesson

seems to be clear. It is not hard to see that a sophisticated soldier could predict that he would no longer need real plums at n2; but this foresight would in turn prevent him from slaking his thirsty at n1 through genuine anticipation of eating plums at n2. This is a real dilemma for the sophisticated approach. For a resolute soldier, once he resolved at n1 to choose to eat plums at n2 for the sake of genuine anticipation on the way, he would carry out his plan (i.e., pick or buy plums) no matter how much he felt at n2 that the situation required him not to do so — all the options of the situation at n2 are by assumption not new information with respect to n1 (except for scenario (a)). Yet even though they are not new, they won't prevent the myopic choosers from changing their minds at n2, as this is exactly what "myopic" means. What a myopic chooser fails to know is not any part of future choice settings but rather his own mind at a future point. Obviously neither sophisticated nor resolute agents would do as well as the normal, in this case myopic, soldiers did in the story. (I leave the question open whether in reality everyone or most of us must behave similarly in this case; or, in other words, whether it is true that nobody can be always sophisticated or resolute.)

EXAMPLE 2:⁴ A literati Wang Hui-zhi (王徽之) in the Eastern Jin Dynasty (317-419 A.D.) had a close friend Dai who lived a dozen miles away from Wang, with a scenic brook threading through their county villas. They often visited each other in a free and unconstrained manner. One summer night, the moonlight and everything immersed in it looked so beautiful that it aroused Wang's irresistible desire to meet Dai, with an eye to unbosoming and sharing his wonderful feelings of the moment. Although it was already near midnight, he ordered his servant to sail a small boat, carrying good wines on it, floating all the way down the brook. During the several hours on the way, seeing the splendid and mysterious scenery under the moon, imagining the coming intimate talk with Dai and its fascinating content relating to what was being watched now, he enjoyed himself a great deal. When finally Dai's villa was dimly visible, he suddenly changed his mind and let the boat to turn around and go back home. The servant felt confused and asked the master the reason. Wang said: " Arrive in high spirits and depart after enjoying myself to my heart's content -- this is the purport of visit. Why do I have to see Dai if I have already got it?" (“乘興而來，盡興而返.何必見戴?” Thereafter this saying has been on everybody's lips for generations, even though many no longer know the original story.)

Having noticed the choice setting of this story (which also fits the diagram in Figure 2), the following points can be made. Firstly, seeing and talking with Dai in expectation is a necessary constituent of the enduring (and spread) enjoyment in the whole journey to Dai's house. Removing the element of genuine belief in the occurrence of this future event would no doubt undermine or discount the enjoyment. Secondly, it does not have to be the case, as the narration might imply, that the actual night scenery added any new information in Wang's (re)evaluation of the terminal outcomes. It might as well be assumed, without changing the essential nature of the story, that it was not the first time Wang boated under the moonlight along the brook; he had been familiar with almost every piece of grass and rock on both sides of the brook; and what he saw tonight did not fall outside of his general expectation, etc. Everybody may have experiences such as this: he or she used to enjoy a certain dish and familiar with every meticulous taste of it while still wanting to enjoy the special sensation of the moment. Thirdly, had Wang been sophisticated or resolute in character and had the foresight of changing his mind on his arrival at Dai's house, then either he would not have started this trip at all or enjoyed so much as was actually the case, or he would have knocked at the door of Dai's house before dawn -- neither of these results would be as good as the actual one from the overall perspective of Wang's interests. I take this example and its generalizable schema as strong evidence in favor of myopic choice at least under certain dynamic situations.

I have no intention to exaggerate the practical importance or significance of myopic character. I don't even want to claim for the comparative advantage of the myopic approach (as a rule of practice) against other ones in any global sense. But, to express my point, there is another old and very telling Chinese idiom: " Lose at sunrise and gain at sunset--- make up on the roundabouts what you lose on the swings (失之東隅,得之桑榆)." The wisdom behind this idiom seems to be that every surviving (or long-lasting) thing

has its subtle mechanism of reaching balance. My own view is that although the balance may not be always stable or invariable, and may change over time, at each particular moment it implies certain organic or ecological trade-off between loss and gain. With this in mind, it is better for us to resist any temptation to extend a relatively valid or limited proposition into an unconditional or unlimited one.

3. A conclusion drawn from the Chinese examples above

Compare Figure 2 with Figure 1. Formally and superficially, the difference is just some additional dispersion of outcome over part of the whole choice route. The decision tree in Figure 2 itself is not able to denote the following distinctive feature: Although the terminal outcomes *per se* are invariable ("objective" in this sense), their effect on the agent may vary with respect to what termination the agent aims at during the process of consuming the dispersed outcome. Put differently, the effect of dispersed outcome can vary a lot (in EXAMPLE 1, say, the felt thirst from 100% to 0) depending on which terminal outcome it is meant to be associated with by the agent. More specifically, the outcome o1 in Figure 2 dispersed over the section n1-n2 may have different rewarding effects with regard to (or in context of) different terminal outcomes o2, o3 to which the section n1-n2 may lead.

What is the implication of this feature for any realistic theory of dynamic choice? According to the standard theory of expected utility, which all existing theories of dynamic choice presuppose, given any outcome there must be a definite expected utility for a particular agent at a particular time. But the problem here is that there is no independent value (or expected utility) of o1 *per se*.

The key point of the type of choice settings exemplified by the Chinese examples is the following property of dispersed outcome o1: the expected utility (or subjective effect) of o1 depends at least partly on which terminal outcome it does or will (in expectation or association) connect with. In other words, the forward-looking reference is value-relevant. Precisely because of such a property and its probable existence in some domains, the relative advantage of the myopic disposition can be secured in these domains.

Such a conclusion may sound surprising to many scholars who happen to be familiar with only one paradigmatic type of dynamic choice situations. But if we understand certain underlying features of the choice settings as well as the dynamic preference of agents, which jointly make the conditions for the conclusion possible, the surprising appearance may disappear. My following observations are just a few attempts at explicating these features.

I III. Some Observations on the Contextual and Non-substantialist Aspects of Dynamic Choice

My first observation is on the contextuality of certain kind of dynamic rewards, which is quite straightforwardly derived from the above-mentioned property, i.e., the value-relevance of the forward-looking references. More specifically, the reason why there is such a property is that the some rewards, e.g., the non-terminal or dispersed outcome in our case, are not context-free or independent from other outcomes down the route. For this kind of rewards, we may say that there is no predetermined, objective substance hence utility to them despite the fact that the larger decision trees in which they are embedded are preset and fixed. They only have "contextual utilities," whose actual amounts are decided by the properties of other outcomes in sight (say, at the terminals) as well as the subjects' own characteristics of thinking (e.g., types of association of imagination, existence or degrees of self-knowledge, etc.). All these deciding factors, internal or external, structural or habitual, belong to what I mean by the "contextual aspects" of dynamic choice. And to the extent that these contextual aspects make it the case that there is no fixed substance corresponding to certain processive rewards, we may call the latter non-substantialist or field beings.

My second observation concerns the possible relationship between such field-being-like rewards and other

“more normal,” fixed rewards or outcomes. A “normal” and quite readily formed idea about the relationship is this. One should take the more familiar kind of fixed rewards as starting points or basic bricks and then try to derive those field-being-like rewards from some combination (including chemistry-like combination) of these bricks, perhaps plus certain external structural features which are equally fixed in advance. In other words, the idea is reductive: ultimately there is only one kind of basic fixed rewards to which all other kinds should be reduced or reducible.

Although I don't want to deny that this reductive idea is useful in some respects, I doubt that it could be successfully carried out as a thoroughgoing ontological project. One implicit (often unaware) premise of doing this project must be the belief that the dynamic agent's preferences for the basic fixed rewards/outcomes are also fixed or invariable from one moment to the next. Without such a premise, it's impossible to reduce every relevant aspect of the field-being-like rewards to the basic fixed rewards and other equally fixed elements – for the former rewards obviously need the mediation of subjective preference to take effect. But the fact is that there is paramount evidence for almost all organisms' preference change over time of the same fixed rewards.⁵ On the other hand, I believe that we have good evolutionary epistemological reasons to hold an opposite view: i.e., young individuals (animal and human alike) learn to recognize (/remember), accommodate, and adapt to new things gradually through dynamic processes of successive motivational states, which typically have ups and downs (like what happens from starvation to satiation and to starvation again later); and at some higher stage of evolution, rewards with (not just physical properties but) “objective values” are constructed by rational animals out of their repeated, relatively stable desire-satisfying effects; later, they are regarded as denoting fixed, substantialist entities which are even prior to all our experiential dynamics. My point here is not on any detailed evolutionary picture or judging its accuracy. Rather it's simply about a possible, alternative conception of the relationship between two kinds of rewards, fixed vs. processive ones: it is the latter, i.e., the non-substantialist, field-being-like rewards that are not merely empirically prior to, but also logically capable of (re)constructing the former. In short, my contention is that substantialist, fixed entities/rewards are nothing but logical constructs of non-substantialist field beings in the form or appearance of dynamically interactive motivational states. Correspondingly, a derivative thesis might be this: a cultural mindset that largely has conceptual ingredients with distinct, static, separable, and fixed properties is probably a limit case, or a petrified form, of some other more primordial, fluid mindset that has stayed close to processive, holistic, field-generated and field-generating modes or components of being.

My third observation links the features in the above two observations, i.e., the contextuality of choice and the primacy of dynamic preferences. The link can be summarized as follows. The surface, effectual characteristics of contextuality in the domain of dynamic choice are bought about by some underlying spontaneous process of successive motivations of the agent, who constantly faces options and problems set by external environments of contingent factors as well as his internal psychic environment which is both the result and the determinant of the above process. For instance, in one of our stories above, Wang Hui-zhi's internal psychic environment was such that his motivations to see Dai at different moments of the journey underwent dramatic changes, which in turn made visible the contextuality of his dynamic behavior: From the beginning to some point in the middle of journey, his imaginative prospective dialogue with Dai (a context) was chemically reacted with the momentary scenic views so as to yield increasing gratification up to that maximum point at which the contextually stimulated rewards began to decline but would be still positive for a while. The moment when Dai's house was dimly in sight was the turning point where the so-far positive rewards fell below the level of costs (such as time, energy, inconvenience etc.) possibly involved in visiting Dai and thus became net negative. You could bet that on his way back home, no longer having any future context of prospective exciting conversation (plus his fatigue after the earlier satiation in the imaginative dialogue), Wang could not nearly have a similar rewarding experience even though the external scenery objects remained the same in his returning journey. Thus it can be seen how much difference a context could make. And also we can see that such contextuality of dynamic preferences wouldn't lead to any behavioral phenomena like Wang Hui-zhi's were there no internal psychological law underlying spontaneous successive motivations such as the law-like sequence “deficiency-desire-satiety.” Perhaps ultimately, what is exhibited in such underlying psychological laws

delineates the subjective/sentient side of the fundamental field-being relations under the structural constraints of certain world situations in which agents may find themselves.

My last, quick observation is about the following question: i.e., if differences of cultures, in the sense of deep and systematic orientations of action as well as thought, are somehow reflective of different modes of access to the same underlying field-being flux, then can some empirical studies of a particular culture help to suggest more aspects and levels of field-being picture? If a positive answer sounds plausible, we may have stronger reasons to pay special attention to cultures with certain salient features like contextuality. More concretely, e.g., sensitive readers may have already noticed that the spontaneous spirit or character tendency behind our stories of Cao Cao and Wang Hui-zhi is a contrast to that of Ulysses (and related talks in the West) -- in the latter a high degree of stress on self-control, rational pre-commitment even to the verge of making maximum use of physical force, and dynamic consistency based on original intention, etc.,⁶ all remind readers of some strong and persistent thread of intellectualistic voluntarism which many believe is typical of western culture. I don't mean to claim any empirical validity for the simplified generalization in the last sentence and to deny that in Chinese culture it's possible to find occasional examples to the effect similar to Ulysses'. Again, my modest claim points only to the empirical possibility of exploring higher-level cultural features with an eye or special reference to field-being relations.

Notes

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- ¹ The characterization of “pre-commitment” as a category of strategies in well-defined dynamic choice-settings can trace back to R. H. Strotz, “Myopia and Inconsistency in Dynamic Utility Maximization.” *Review of economic Studies* 23 (1956), 173. Yet the most well-known work on this topic is Jon Elster, *Ulysses and the Sirens: Studies in Rationality and Irrationality* (Cambridge University Press, 1979).
 - ² Recommendation of resolute choice, as opposed to both myopic and sophisticated ones, is a main thesis of Edward F. McClennen, *Rationality and Dynamic Choice* (Cambridge University Press, 1990), esp. Chapter 11.
 - ³ Both of this and the next example were recorded in a famous Chinese classic Shi-shuo-xin-yu (世說新語) The book is a collection of literary notes and anecdotes, compiled by Liu Yiching (劉義慶 402-444A.D.). It involves a lot of marvelous depictions of various life styles and interesting dispositions of literati and knights during the Wei and Jin (魏晉) Dynasties and the first few decades of the Epoch of Division between North and South, which was one of the most magnificent period in Chinese literature and personality development. For the original Chinese text of Cao Cao's story, see Liu Yiching, *Shi-Shuo-Xin-Yu Yi Zhu* (世說新語譯注), Zhang Wang Qi & Liu Shang Ci, trans. & eds. (Beijing: Zhonghua Shuju (中華書局), 1998), 856.
 - ⁴ For the original Chinese text of this story, see Liu Yiching, 753.
 - ⁵ See, e.g., George Ainslie, *Picoeconomics* (Cambridge University Press, 1992). This groundbreaking, interdisciplinary work is based on more than three decade (since 1960s), empirical studies of preference change over time of various animals as well as human beings.
 - ⁶ The central status of the Ulysses' example as one of the paradigm cases for many attempts of theorizing on dynamic rationality is not exceptional. Other famous examples of this kind include Prisoner's Dilemma in game theory and Kavka's Toxin Puzzle for action (or intention) theory. As a matter of fact, Toxin Puzzle can also be used to show the relative optimality of myopic choice in a context of midway, non-terminal outcome. Due to space constraint, I can't do it here. But for some related discussions, see G. Kavka, "The Toxin Puzzle," *Analysis* 43 (1983), 33-34; M. E. Bratman,

Intention, Plans, and Practical Reason (Cambridge, Mass.: Harvard University Press, 1987), 101-106;
and McClennen, 227-231.