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Face Value Only?

A Review of *Personality Inventories: Fiction, Fact, Future*, by Jane Bozarth (2019) *Peter Geyer*

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This paper examines the content and method of Jane Bozarth's recent publication on personality inventories in the workplace, available at www.LearningGuild.com which has been provided to me for evaluation and comment. While there are many errors and misjudgements contained within, ranging from historical and other facts to research methodology, there are also questions asked deserving consideration.

Preamble – How do we know and is it of sufficient interest?

When a little girl climbs trees,
it is, according to Adler,
just to show her equality with boys;
it does not occur to him
that she likes to climb trees
Simone de Beauvoir
(quoted in Aaronovitch 2016)

When people think about personality, whether it be the person in the street, or a professional or academic of some kind, there are presumptions, conscious or otherwise, about what that might entail. The neighbour stating that people are all the same, might be saying something about herself and a desire that everyone should hold the same belief or perspective, but you'd have to ask in order to be certain.

The linguist David Adger (2019), reviewing a text that appeals to him as it relates to Noam Chomsky's idea of a universal grammar – in part, as he says, because we all know where to put an adjective – tells a relevant story. During an interview for an academic position he was asked which theories of syntax he had studied. He had studied the topic over many years thinking there was one perspective, his teachers neglecting to inform him otherwise. John McWhorter (2009) plausibly presents a quite different idea in his book on the origins of modern English and where adjectives get placed.

This doesn't mean one idea is necessarily right and the other wrong – they might both be incorrect or inadequate – but it's useful to know there are different perspectives, and even different definitions of the same word. The latter is crucial in the area of personality and personality measurement.

A person conducting a training course which involves a perspective on personality might not be attached to the idea at all, simply using the model (if it is one) to get people to think about difference. This seems extremely dubious to me, but I have taught people in authorised accreditation/certification courses who have taken that perspective. What such differences mean, when discovered, as well as possible consequences may be unexamined. Isabel Briggs Myers' working title for her *Gifts Differing* was an appropriately direct *Consequences of Psychological Type*.

Equally dubious to me are those who attach themselves to an idea as a belief system, but never get past an associated enthusiasm. It's always handy to know what you're talking about, and to be able to answer questions and test the claims and limits of the idea. This can happen at any level, anywhere.

These perspectives also exist outside training courses, whether it be the researcher – in their laboratory or elsewhere – asking for advice, learned and otherwise, or trawling the internet for answers, without knowing the questions. William Poundstone (2016) points out the need to know something about what you're looking for in order to be able to distinguish between what is accurate or useful, and what is simply dross.

These disparate examples are directly related to the topic chosen by Jane Bozarth, what she says about it, and the basis on which these comments are made, including declared sources.

Should this document and its author be considered authoritative?

For me, the answer is clearly "no" on many grounds, a number of which are, unfortunately, all too obvious. Here, I investigate Jane Bozarth's report, its content, method and claims, providing a critique that includes many examples.

Introduction - Names and Labels

The title of a document is usually carefully selected, for better or worse, giving a guide to the intentions of its author. Here, Jane Bozarth's incompletely alliterative *Fiction, Fact, Future*, suggests a particular scepticism permeates this report, whether about personality inventories, personality itself, or even the motives of certain publishers and users. Is it all a kind of fiction? An ex-boss of mine used to place emphasis on the first two syllables of "inventory" – unwittingly implying something made up, in this case an accounting document, listing tangible facts such as the contents of a warehouse.

Calling something a *personality inventory* implies a particular perspective or experience. An umbrella term is *psychological instrument*, a scientific questionnaire, administered and interpreted by someone with appropriate qualifications, often its developer. Some users are appropriately supervised. Developing questionnaires of many kinds to give to people is a small industry within academia, as well as in the world of consultants and trainers. These have a variety of purposes and vary in robustness, perceived or otherwise.

Personality is one of many topics and so other terms are *personality test*, or *personality assessment*, which may cause problems of interpretation and understanding in particular circumstances.

As an example, the *Myers-Briggs Type Indicator®* (*MBTI®*), one of the instruments or ideas under scrutiny in this report, is these days identified as a *personality assessment* by its publisher, on legal advice according to discussions I had many years ago with one of its then owners.

Whilst ostensibly well-meaning, it can obscure the intent of its prime author, Isabel Briggs Myers, by using a label with a meaning similar to the word "test" – technically true, but problematic in interpretation. Myers claimed that it wasn't a test because it wasn't asking a person what they could do. It wasn't a clinical inventory, so had no lie scale, or answers that indicated a clinical issue. Strictly speaking, the MBTI is an *indicator* – a term deliberately selected by Myers – requiring a particular perspective on administration and interpretation.

My point is that it's important to pay attention to names and labels e.g. *personality* – a somewhat unruly term.

What is Personality?

"Personality" is a word with a wide range of meanings. In the public eye, and the media, "personalities" are celebrities of one kind of another, in which the public at large is presumed to be interested in what they do and how they live. Interest may be focused on appearances, romance, even a curiosity about scurrilous behaviour, or tragedies. One can be a "personality" in this way, sometimes unwillingly. A person I spoke to at a professional meeting many years ago asked me if teaching about personality was about "how to get more." This kind of identification predates the modern media by several centuries, and may even be considered archetypal. Celebrities offer the prospect of projection, at any rate.

In the last century or so, researchers of various kinds have sought to measure or quantify personality in some way, e.g.

- by observation, such as in an anthropological or ethnographic sense, or in a laboratory setting under controlled conditions, particularly with students;
- by questionnaire, according to a particular view of human beings, perhaps from a moral perspective, or business and educational productivity, achievement etc.

The prevailing, although contested, means of quantification has been through observable behaviours, generally identified as *traits*, leading to statistical and social norms and averages.

The philosopher Quassim Cassem (2019), writing about conspiracy theories, mentions a *Conspiracy Mentality Scale*, commenting "in psychology there's always a scale" – originally a foible of American culture, since expanded to all corners of the globe.

The idea of *individual differences* is intended to be seen this way, rather than different kinds or types of individuals. Types of people are routinely claimed to possess essentialist characteristics, better seen as predispositions i.e. something unique to a particular grouping and not others. The earliest typologies go back at least 2500 years, with various presumptions and criteria.

C.G. Jung, whose psychological types have spawned a number of interpretations, including temperament-oriented ones, thought that the classical temperaments were unsuitable for developing a critical psychology as they were based on moods and emotion. Many of the people presenting models and courses using either Jung's labels, or the codes of Isabel Briggs Myers, offer material that is some distance from the ideas of both these people.

Ideas about personality have also been predominantly about pathologies i.e. negative characteristics. Even Jung's typology was arrived at from clinical observation and other studies in seeking to identify and encourage a person's normal behaviour, which could differ from societal norms and presumptions.

The usual solutions for redressing pathological behaviour (as defined) include behaviour modification strategies, adjustment through counselling, training or other coursework, and medication of various kinds, prescribed following a diagnosis undertaken, sometimes literally, according to prescriptive models or views.

Here's a random selection from some older texts on the topic of what personality might entail:

- The style a course of behavior takes on (Joseph Rychlak)
- A term used to designate some aspects of behavior of complex individuals (Julian Rotter)
- Coherent traits and action patterns that arise repeatedly...
 behavioral differences between individuals (Robert J. Gregory)
- Almost wholly changeable and formed by life history and social influences...
 Its fundamental structure is relatively constant (T. Takuma)

Takuma's comments are an explication of what has been identified as a specifically American perspective.

While it is presumed that personality is an important component of psychology studies, this has not always been the case; high school and similar students can still experience bewilderment at the lack of reference to personality in courses on psychology, in favour of what might be called mechanistic, physiological or neobehaviourist perspectives

True personality is always a vocation...an irrational factor that destines a man to emancipate himself from the herd and its well-worn paths.

C.G. Jung

Jung's view of personality was unusual, certainly not behaviour oriented. To him it was a complex problem; everything said about it was "curiously unsatisfactory and inadequate." It wasn't a given, it had to be attained, and not everyone became a personality. Here, his ideas of consciousness are relevant. A person may discover they are one of the 16 types identified by Isabel Myers by agreeing with their four-letter code results, but that says nothing about whether they are a personality according to Jung's way of thinking.

Finally, language and terms/constructs in personality don't have an agreed meaning.

So *extraversion* means something different if you're looking at Jung's ideas, what MBTI and related applications say, or with various trait measurements where there are a lot more negative words and descriptions of what others might call "normal" behaviour. It's also spelt (bad Latin according to Jung) as *extroversion*. *introversion* is often seen as pathological. *Intuition* is often seen as a type of decision-making, *thinking* and *feeling* have different definitions depending on perspective, the latter being associated with *emotion*, and there isn't agreement on what they are either.

So a reader or researcher has to be alert and informed so they know what they're looking at, as well as being aware of their own particular perspective. Many people attribute a particular expertise and knowledge to a published journal article, particularly if it's in a respected journal; yet every journal has policies which change over time. A media commentator, social and otherwise, doesn't necessarily have expertise to go with their presented opinion; some are, literally, *reporters*. In some respects, Jane Bozarth acts as a reporter, a longer version of what might appear in a magazine like *Psychology Today*, for instance, where there are contributors with relevant qualifications, but not necessarily an adequate level of knowledge. Research studies have their limits.

Personality Inventories

Personality Inventories is a term usually applied to statistically-derived instruments or questionnaires that claim reliability and validity according to particular standards. Measurement methods and presumptions differ according to interests and aims. Sometimes there is authorised training available, other times a particular qualification is required for access. Technical manuals are provided, of varying quality. Whether this is sufficient or not is open to continuous debate. Sometimes reports are published comparing one inventory with another and these deserve careful scrutiny.

This report uses the term to also cover quizzes and questionnaires of any kind and quality whatsoever, reminding me of a number of organisational practices and practitioners I've experienced and observed over the decades. The opinions of individuals who take this view are quoted, sometimes based on particular experiences. This is a false equivalence. Whilst these views are of personal and cultural interest, they're not about personality inventories *per se*, but about knowledge and ethics of practice in a particular field.

The Research Report

The Learning Guild website gives a date of July 24 2019 for *Personality Inventories: Fiction, Fact Future*. I was first informed of its existence in November 2019 and received a copy in that month, producing a large yet incomplete draft, which was set aside for a number of reasons, including that there might be a revised edition available. At the very least, it needed tidying up with some basic proofreading. Consequently, I received a copy of the report on 16 April 2020, which appeared completely unrevised.

The page from which the report is downloaded offers the following:

People have always had a tendency to categorize and oversimplify themselves in order to pin down the complexity that comes from being human. An example of this is personality testing—a method that organizations continue to pursue despite the lack of value and validity.

This research report, *Personality Inventories: Fiction Fact, Future*, by Jane Bozarth reviews key literature on personality assessments and discusses why organizations continue to use them. The report explores the appeal of personality assessments, the problems that arise, and dives into popular assessment tools.

This statement may safely be read as the core claims of the report. Almost every one of these claims is highly contestable, particularly those about key literature; those that are not are insufficiently examined. A careful reading of this document, and an earlier report by Bozarth on learning styles (2018) suggest that she likes to begin with a judgement or conclusion and marshal selected evidence accordingly.

Here, it's also unclear whether she has adequate in-depth knowledge of the subject at hand, relying instead on what Jung called *negative thinking* (1921/1923), which doesn't necessarily mean that the person concerned is unfamiliar with thinking as he defines it, but that it suggests a lack of consciousness and facility. A decent personality inventory, perhaps one of those critiqued here, might be of assistance here, in tandem with an administrator with nuance, knowledge and interpretive skill. A person like that never takes results of anything as gospel, but as indicative and to be tested and confirmed, listening to the person who completed the inventory. I'll return to this issue later on in the paper.

As an example of Bozarth's approach, she claims in the *Introduction* to the report there is "scant evidence that most personality assessments measure anything useful in a way that is either valid or reliable." This may surprise quite a few people who have researched and published in the area, as well asmany others who have read these publications. What "valid" and "reliable" might mean is partly discussed later in the report in a more than faintly ethereal manner that doesn't seem to connect with anything. There's no examples other than unsubstantiated opinions, invariably from people who may not have done their homework, for instance David Pittenger on the MBTI (1993).

Somewhat vaguely, Bozarth goes on to say that the report is "more about the personality assessment industry in general." What this particular industry might comprise – practitioners, consultants, businesses, corporations – is unstated. There are allusions to purported activities of the MBTI publisher(s), particularly around profit. No other organisation of this kind is mentioned for any of the other questionnaires under scrutiny, or mentioned in passing, without reference.

If this is a report on the use of such questionnaires, then nothing is said about training, licensing, or even the kind of applications, apart from the costs of the MBTI Certification program which purportedly compel those who complete it to sell it, so they can get their money back. I've read this elsewhere and it seems completely illogical to me, particularly as someone who ran such programs in the past, before the courses currently available. Unfortunately, the role and associated ethics of practice of an administrator and interpreter of a personality inventory of any kind are not examined. Inclusion of these would make for an interesting report of great value to many, including this reviewer, who would readily contribute.

The Report's Research Method

Bozarth's stated research method involves a review of "prominent literature in the field." apparently guided by others. How this was arrived at is unstated. If "prominent" means popularity of online access, then it becomes problematic. The economist Tim Harford (2009) refers to this problem in the context of following star ratings in making particular decisions, including rating the performance of a service, giving the book reading site *Goodreads* as an example. Research many years ago suggested some people don't vote for the extremes, a scoring problem for Likert scales and similar methods. However true it is for the population as a whole, I'm one of those people. Citations also have their issues. Something can be referenced for various reasons, including that others have done so. In my experience, sometimes a reference doesn't appear to have been understood, or even consulted, just placed as a matter of course. This report appears to be in this bracket, as are some of the references.

The author also claims that, due to the large number of articles on the MBTI, other resources were consulted from the media i.e. newspapers and blogs. Paradoxically, these involve the MBTI. They are: a newspaper interview with the elderly owners of the MBTI (Cunningham 2012); a diatribe against the MBTI (Eveleth 2013); a 30+ year-old article announcing personality tests were back (Moore 1987); two pieces from a blogger on workplace learning (Thalheimer 2006; 2008), one of which argues that the action of the MBTI publisher in funding research projects must be biased by definition; and an online piece about the "questionable MBTI test" (Burnett 2013). The last-named is the only one of these deserving attention and worthy of general consideration, as it reports on what its author calls the surprising results of asking for readers' experiences with the MBTI.

To me, It's fair to conclude that a major aim of this report is to do with the MBTI. Overall, these media pieces hardly add to the objectivity of the exercise, in fact suggesting the opposite. The MBTI seems to attract that kind of thing, and there's more to come.

As an example, Bozarth makes much of the use of the word "caution" in three separate articles, two of which use the term in quite different ways with regard to the MBTI. One, by James Michael (2003), recommends caution because you need to know what you're doing when using it, which seems fair enough. Apparently, though, the word itself is more important than what it means in context.

Another, by David Pittenger (2005) (called "Richard" by the author later in the report) is in the context of his general critique of the MBTI for not doing what it doesn't claim to do in the first place. Surprisingly, to me anyway, this person is routinely mentioned in MBTI comments, suggesting that his critique is more valuable than any accuracy it might contain.

Both of these authors are repeatedly referred to or quoted throughout this report.

The outlined research method is questionable regarding any serious examination of the content selected and, in addition to what I mentioned earlier, I could find no indication this topic has been a previous area of study for the author. An online search indicated some relationship with leadership; nothing on the subject of her doctorate. The assistance of Clark Quinn, a learning technology practitioner, is acknowledged.

A Personal Investigation of the Report

An interesting part of research of any kind is an often blind acceptance of the content of an article or book simply because it has been published, usually in a reputable journal, although this isn't always the case e.g. Pittenger. This appears to happen at all levels of inquiry. A different theme is the rejection of an idea because it is too different, or challenges accepted norms. The sociologist of science Bruno Latour provides an informative exposition of how this can apply, where "the cost of disagreeing is too high" (1987). I found his approach directly relevant to the field of personality and personality assessment, particularly the MBTI (1995).

In investigating this report, I used a method of ascertaining research plausibility (2013), which can be applied to any field – read the text, see what it says, how plausible that might be, and then check the references to see if they say what is claimed.

54 references are listed under "Resources" at the end of this report. A number of references not included in this list, perhaps 16, are given in the text, some extensively quoted. Not all of the listed references located under Resources were available to me under free access; some given links didn't work although I managed to locate these. Many of these were already personally held; others were located by using Google Scholar. In all, 7 out of 54 listed references were unable to be read. Restrictions on free access meant I retrieved approximately 90% of the total references; other references were also consulted, listed at the end of this review.

Significantly, there are no fundamental texts of any kind referenced in the report, particularly on psychology, personality, or tests and measurement. Costa and McCrae's *NEO* Manual from 1992 is the only such document. No *MBTI* Manuals are listed, notwithstanding the attention paid. Other areas under examination – DiSC; Emotional Intelligence are also unrepresented in this way, although a Google search located some Manuals.

This lack, and others besides, make for several implausible or incorrect claims scattered throughout the report, enhanced by a number of the listed resource texts. The author seems unaware that there can be a distinction between a best seller or a frequently-mentioned piece and its actual accuracy and worth.

This doesn't mean the topic area doesn't deserve attention or consideration. It does mean any valid points are almost completely swamped by routinely-occurring misinformation. Two possible explanations for this

situation are lack of both a suitably in-depth research method and demonstrated fundamental knowledge, as I've suggested earlier.

Research Challenges for the Author of the Report

Bozarth mentions several challenges for her research, and these are worthy of comment:

There is a claimed lack of literature "addressing the use of personality assessments explicitly for "workforce development efforts". What these "efforts" might be is not explained, and I could find no expressed view as to what is appropriate or inappropriate. The *Type Research and Practice Collection*, which I manage, has many thousands of articles and presentations on the use of several personality assessments in organisations, including the ones notionally under scrutiny here *viz.* the MBTI; DiSC; Five Factor instruments, several emotional intelligence tests and random instruments developed by researchers and consultants for various reasons.

She also writes that there is "a paucity of literature addressing personality assessment in learning and development." This is a bewildering statement to make, at least as far as my own experience and the *Collection* is concerned. There are papers from across the globe, a large number from software engineering, nursing, teaching and training, consulting etc. I suppose it depends on where you look as well as where relevant papers and presentations might be presented e.g. conference proceedings, webinars etc.

Another claim is that "a good deal of the available literature has to do with tools being used in ways they were never intended." This is a curious statement to make as the extensive list she provides in support of her contention all seem plausible uses related to aspects of personality, however defined. Nothing is provided in support of this statement.

In addition she considers "that some researchers have a tie to a particular product, including presenting at a conference where the publisher is a sponsor." No supporting data is provided, including whether employees of a particular company are necessarily non-objective, or that their audiences are necessarily compliant. I've attended a few presentations over the decades with some robust exchanges, along with some obeisance. There's also quiet listening. If you're using a particular method or inventory, it's important to be up-to-date.

This claim also mistakes sponsorship of an event for a power of veto on who presents and why. I have never heard of this being in operation in over 25 years of presenting at MBTI or type related conferences in the USA and Australia, where authority for accepting proposals lay with other groups, not a publisher, sometimes with conflicts between the latter and the former. That's not to say there haven't been attempts.

In Australia, at any rate, publisher sponsorship of type-related events is rare, except when they run their own: these have a different intent to the other events.

To be fair, it's also true there are possible red flags, as Bozarth suggests. The same can be said of articles published in academic journals across all disciplines with an expressed or implied party line (e.g. Hergovich *et al* 2010). Knowledge is a key.

As mentioned earlier, conference attendees are given to sometimes harsh assessments on the quality and content of presentations, or of the behaviours of sponsors for that matter. Presenters can leave in tears, or head to the bar to reflect on what has just occurred.

Bozarth wonders why personality questionnaires are appealing, including quizzes and the like, not just the inventories that are the purported subject of her report. This sounds more like a comment from a person in the street – a *layperson* as Avril Thorne might put it (2007) rather than that of a professional. Her answer seems an entangled amalgamation of people liking to complete personality quizzes and organisations wanting to assist understanding of others. Mats Alvesson and Andre Spicer point out other possible reasons (2016), including a more brutal version of keeping up with the Joneses.

People can also do the same thing for different reasons.

An interesting addition is the Barnum Effect, where Bozarth references Forer's 1949 research regarding responses to personality descriptions, an argument regularly put forward by those skeptical of the MBTI, Annie Murphy Paul the most prominent example in recent years (2004), and there are some relevant comparisons regarding referencing and objectivity. Claims about the similarity of brief descriptions of type codes are easily falsified by reading them. This is simply trivia, and lack of thought. To be fair, this is an argument routinely put forward, usually as a jibe of sorts. On the other hand, these days it may depend on the quality of the materials used and presented to clients.

Technical Issues

Bozarth makes several technical claims about personality inventories with little, if any, substantiation or explanation. Here are some examples:

Reliability and Validity. On this issue, mentioned earlier, she provides basic but not complete information in a kind of scattered way. There isn't direct mention of correlations or internal reliability for instance, and a narrow view of predictability that presumes humans are robots or other kinds of automata, admittedly a presumption by some behaviourists in the past which still has some purchase in areas within and without psychology. Nuance, sophistication, measurement error are not approached. This is particularly relevant given the inventories under scrutiny. Quoting from an undergraduate text on the topic might have been more complete and accurate.

There are no explanations of differences in scoring and scoring methods or their rationale, key differences between types and traits (these days somewhat muddied). The MBTI for instance is a sorting device where high and low scores and amounts in general are not the point. No distinctions are made between scoring platforms e.g. hand-scored or template scoring; machine or computer scoring; online scoring.

Self-Report Formats. Criticisms here relate to situational issues surrounding completion, among the first things to check on when providing feedback on results. A person can complete a questionnaire differently at home, at their desk at work, in a training room, even online, although there's mixed evidence regarding this in the literature.

Some years ago, a person known to me for decades completed a questionnaire (not one discussed here) at his desk at work. He was part of a research project I was undertaking, and responded according to his location rather than his person, ignoring explicit instructions on the matter. He vigorously defended his results notwithstanding agreeing that who he was differed from them in a particular way.

Jerome Kagan is the most prominent critiquer of self-report instruments (2019 etc), largely because too many things can be "controlled for" that are relevant – location, education, social status, culture, gender etc. His arguments and comments are well worth reading.

For an interpreter, particularly one attending to the ethics of profession or practice, these are among the criteria for discussing the results, observing the respondent and providing advice to them. This should not be an issue for an experienced and knowledgeable practitioner. It is, unfortunately, a continuing issue.

Dichotomous rather than continuous scores. This is essentially a key argument against type instruments which operate as category sorts (mentioned earlier) because the intent is to measure by selecting between two proposed psychological opposites. This also means that the language of the items has a different prime purpose and intent than if used in a trait context.

Type instruments are not trait instruments and they are not intended to measure behaviour. Paradoxically, this is good science, as the appropriate measurement for the task is selected, rather than a one-size-fits-all method for anything and everything presuming traits and amounts. "High" or "low" scores are therefore irrelevant, other than as levels of confidence in the results expressed by the person receiving them.

Isabel Myers also allowed omissions, so that people didn't answer things they didn't want to answer. For feedback, this was excellent, less possible with computer-driven scoring, where extra information from the respondent is needed (Geyer 2009).

Forced choice methods, as used in the MBTI, can also be confused with Yes/No responses as used elsewhere. Isabel Myers avoided this as she knew that some people liked to say "yes", others "no" – a reason for her omissions policy. Alternatively, a neutral response on the Majors type inventories, which use a modified Likert scale, means that item is eliminated from the scoring, as though it had never been asked.

Bozarth continues with her jeremiad against self-report and forced-choice, unaware that the alternative of continuous scores is also simply a method with its own presumptions and limitations.

"Faking" is also mentioned as something easily done here; interestingly she doesn't really highlight this with the MBTI, although a number of her sources do. Unless there's a lie scale, faking is easy on anything and this is where a feedback component comes in. There are training and feedback techniques that test these things out. My earlier example of situational response is relevant here. There are several inventories that focus on how a person operates at work, thus avoiding this problem, although perhaps skating by an issue where a person's work behaviours differ from who they might be, or elsewhere if you prefer a social roles perspective.

In making this kind of criticism, Bozarth seems to be demanding that personality inventories be perfect, magical almost, and to be any good they must provide the right answer, whatever that may be.

More technically, Bozarth also mentions an article by Bess and Harvey (2002) in the text. Unlisted in the Resources, it relates to MBTI scoring methods, and although it's unclear which version is being examined (possibly Form F, which hasn't been the standard form since 1977), it questions the bi-modality of the instrument. Interestingly, comparisons are made with relevant Five-Factor Model trait constructs, with which there are high correlations, but very different definitions and descriptions (Geyer 2014).

The latter is relevant when considering all of Jung's opposites, as he used terms already in use and provided different definitions, not wishing to set up a specific vocabulary. So for Jung, thinking and feeling are opposites and he explains why; feeling isn't emotion for instance, whereas it is in other ideas about feeling.

The assessments typically do not score one's personality traits relative to other people and do not acknowledge how one individual is unique from others. This is absurd, as they're filled out by individuals and scores can't be compared with another individual because items can be answered differently yet result in the same score. This is apart from standard deviations, where for some instruments norms are established. But that is a clinical approach.

Naturally the MBTI doesn't measure traits, but there has been research available regarding how people of different types answer an MBTI Form differently. This kind of information, if available, should be located in a Manual. The Collection has examples of such research conducted by the Center for Applications of Psychological Type (CAPT) and so available through their library.

David Pittenger (1993) appears again, applying "trait" to type results in the MBTI. Forer is referenced as well, for no apparent reason. The MBTI doesn't score one's personality traits, notwithstanding a number of published articles making that claim. No properly trained and knowledgeable type person would claim sameness from the same scored results. Type descriptions are supposed to be written that way using words like "tendency" or "may". Anyone can write one, of course, so discernment through knowledge and experience is required. Type preferences are content free. It is false to claim that MBTI-related material stereotypes people, notwithstanding that the MBTI is used by some to stereotype.

Lack of regard for cultural or socioeconomic differences. This is a core issue for Kagan, mentioned earlier, with regard to research. It is relevant to be aware that personality research has been overwhelmingly American and it may be the case that personality inventories reflect its values, or business and other values. Bozarth's use of the contestable "marshmallow" exercise as an example of research strategies not translating to other cultures is fairly meaningless i.e. has anybody claimed that it's a universal exercise? It has nothing to do with personality inventories.

On the other hand, inventories like the MBTI (as well as Big Five and Emotional Intelligence models) have been extensively translated and reported on in journal articles and at various professional conferences. I have a substantial, if limited, collection and cannot make an in-depth assessment. The various MBTIs have had specific reading levels, allow the items to be read out (without expressions of affect) and have been translated into many languages, starting with Japanese. There are various translations of Five-Factor Model inventories. There are also global versions of these inventories.

Claims for universality amongst humans of all kinds are contingent on many factors. The claim of universality of Jung's typology is separate from any measurement application. There are also people, from many cultures, including my own, who define themselves as a member of a group, as opposed to being an individual. This doesn't mean that a personality inventory won't give them a meaningful result, just that other things may be more personally relevant. A personal experience with an indigenous woman at a course I conducted for counsellors reflected such a view. She responded according to how she operated in the non-indigenous world, while discussions using related ideas had some relevance in her dealings with her culture.

History isn't a strong point of this report, unfortunately, although that may simply be my bias. In fact the research method ignores the historical perspective in its selection of texts. General bewilderment about the nature of questionnaires and why people appear interested in answering them could be informed by Martha Banta's *Taylored Lives* (1994) for instance, about the importance of measurement in American culture.

Lack of historical knowledge, or perhaps the interest in finding out, leads to places where the author opens a section on *Problems* with "Tools like the MBTI and the Rorschach tests were used by organizations for decades, until the Civil Rights Act of 1964 shone a new light on problems with using personality tests for selection and promotion."

The second part of this sentence is hardly related to the first part, whether regarding the Act or the purported misuse of these two methods in selection and promotion. Stephen Jay Gould's *Mismeasure of Man* (1992) is more to the point regarding the Act and intelligence testing; the MBTI, commercially unavailable until 1976, had become considered by its main author as not suitable for selection, a point that appears lost on some currently associated with it (Mary McCaulley *vs.* documents – private collection). This is also the only mention of the Rorschach in the report. Damion Searls' book on this test (2017) doesn't mention the Civil Rights Act at all.

Even the history-oriented piece by Gibby and Zickar (2008) which points out a pre-World War II emphasis on "adjustment" (intended clinically) in the industrial and organizational psychology field doesn't allow an observation by the author about the different kinds of constructs around currently, and the different qualifications and interests of those using personality inventories. None of the tools assessed below by Bozarth require a psychologist to administer them; 30 years ago, clinical instruments like the CPI and the MMPI as well as the FIRO-B and 16PF were used by industrial psychologists only, andafter a limited fashion, in my country at least. It's important to be aware of this background when seeking to understand the activities of the present.

Popular Personality Assessment Tools

Bozarth discusses 4 different kinds of measurement: two individual ones (MBTI; DiSC) and two groupings (Five-Factor Model; Emotional Intelligence). It's important to note that the former two, particularly the MBTI are not dependent on measurement and were not derived from measurement, the Five-Factor Model is derived from measurement and Emotional Intelligence inventories followed articles and books on the idea. She appears to think the generic term is EQ, which may refer to a specific use or specific inventory. My collection of relevant articles tends to use the full term.

The MBTI takes up most of this section and really the other inventories or categories operate more as an afterthought, or perhaps a result of the research method undertaken. As this paper is written for a type association, I'll comment accordingly.

Myers-Briggs Type Indicator

The MBTI takes up two complete pages of the report and, as noted earlier, is mentioned throughout, to the extent that one might plausibly argue that a main aim of this document is to criticise the MBTI. This becomes problematic when the references/resources are examined. Apart from online excoriation there is nothing recent, and the quality of commentary or assessment varies. Some decent historical investigation wouldn't go astray either

Critiquers of the MBTI for any reason appear unaware that there have been many MBTI forms, with varying items and different scoring methods. To be fair, this might also be something lost on a proportion of its users, for various reasons. Isabel Myers used prediction ratio and a cluster analysis for instance, and the relevant forms (F and G) are the subject of critiques by Boyle (1995), Pittenger (1993) and others; Forms J and K, developed after Myers' death, utilised factor analysis; Forms M and Q item response theory and the recent Global MBTI latent class analysis. I'm no expert on these methods, but it's curious that little if any notice has been taken of such differences. This is where Manuals and other relevant texts come in, where research and sampling methods are explained. It's hard to criticise Bozarth for this lack of knowledge when it's almost universal, but nonetheless she does engage in a discussion of scoring methods, albeit briefly.

At any rate, she opens with a mixture of the usual historical statements regarding the status of its two developers as "housewives" – a pejorative and inaccurate label, particularly as both women were writers, one on parenting advice, the other producing crime novels and a play. They both possessed degrees and came from intellectual families. For instance, Myers' father was director of the National Bureau of Standards under Franklin Roosevelt,. So they're hardly the housewife in the street, not only in their time period, but also today. Junius Davis provides an interesting snapshot of Myers when they worked together at Educational Testing Service (ETS) including how she was perceived by his colleagues (2008).

At the time of the development of the MBTI, moves had begun within psychology to professionalise psychological research, including in measurement, due to various problems and failures. If you read journal articles of the 1920s and 1930s, you'll get an idea of what was going on. At the same time, there were fewer women involved in the field than in previous years. The key point in any case is whether the work undertaken was scientifically-based and that the questionnaire – "Indicator" – actually worked.

The MBTI was not acquired by Educational Testing Service ETS in 1962, which was the year of publication of the first MBTI Manual, which related to Form F. Myers and Briggs' first association with ETS was in the

mid-1950s and they never "acquired" it, but entered into a licensing agreement, as did Consulting Psychologists Press (CPP- now The Myers-Briggs Company) in 1975 after ETS decided not to renew their contract with Isabel Myers. It was copyrighted in 1943 to Myers and Briggs themselves, The article by Cunningham (2012), includes an interview with the then owners of the MBTI and its current owner is the Myers-Briggs Trust.

Bozarth quotes learning styles researchers Frank Coffield et al (2004) as saying "Jung's ideas around human personality were his own, with no basis in any theory." I couldn't locate this phrase in the referenced document, which has had some influence, notwithstanding very limited references: Jung's *Psychological Types* doesn't appear for instance, nor any Manual or applications text. There's a communication with type author Naomi Quenk, misspelling her name in the process – something about the MBTI seems to provoke proofreading and/or spell-checking to go awry in some fashion or other.

This kind of claim about Jung's theory, however made, avoids the fact that his was a theory of psychological types and in a book of that name, he provided historical and other examples leading up to his idea. It is possible for someone to come up with a theory by themselves, in any case; that's how many come about.

The author also contends Myers and Briggs thought everyone fitted into one of the 16 types "based on four factors with characteristics in opposition." This is inaccurate whichever way you look at it. There's no evidence Myers or Briggs thought that: Myers specifically denied that with regard to the MBTI. She called it an Indicator for specific reasons. The questionnaire does not create the type, notwithstanding what some materials imply. It's true that others contend that the MBTI presents a four-factor model of personality, and that this is plausible in context, but it wasn't a claim of its authors. Their term was "dichotomy" in preference to 'dimension" which is also not an MBTI term, although some use it.

"Characteristics" are a consequence of a particular preference, not the content that defines it. They do not form the basis of all an individual's behaviours. Jung's typology is not a theory of behaviour.

Bozarth notes there's no free version of the MBTI. I'm not sure of the relevance of this, other than a notion that everything should be free. Later on she mentions there's a free version of the FFM. I can't understand why people think this is a good idea, other than a complaint against possible price-gouging. The politics around this issue is complex.

Of course this wouldn't exactly help the MBTIs reputation. Many people used the Keirsey Temperament Sorter at one time, by photocopying it or retyping it, because it was free, being located in a book and having no legal caveats. But invariably the knowledge they brought to the training or counselling situation was circumscribed.

There are many MBTI-like inventories online, of course. A few years ago I presented at a Jungian event and spoke with a much younger person, a counsellor of some kind, who used the *Humanmetrics* questionnaire, a popular, free, but nonetheless dubious questionnaire, with his clients. For me, ethics of practice would lead to a conclusion that this shouldn't be used. Naturally, this would require knowledge. This person thought the MBTI should be free, without any indication that he might actually spend some time learning something about it.

Pittenger (here called "Robert") again gets a run with his concerns about the MBTI, this time regarding the possibility of a point difference between extraversion and introversion and the problems that follow, or at least those that would if that was the way things worked (1993). There's a distinction between "reported type" i.e. Pittenger's example, and "true type" which is the result of discussion, reflection and sometimes group exercises in a training context. Although this doesn't happen all the time, MBTI results cannot be given without some form of feedback, and a slight result is always part of that discussion, or at least should be. It's comments like this that undermine a researcher's credibility, where the proper material and/or an actual expert, aren't consulted.

He also appears unaware that type's not skill, presumably this is also the perspective of Bozarth, as she quotes his comment that "there's nothing to show that ESFPs are better or worse salespeople than INTJs are." That's true, because there are other factors like what's being sold, how, and to whom, and that different people like to be sold to in different ways, some not at all. A stroll into an Apple store can be instructive, as well as consulting specific material regarding selling. There is an abundance of data to show that particular types are over-represented in many occupations. It's not what you get to do, but how you get to do it.

As a type researcher and practitioner for nearly 30 years, I'm astounded that Pittenger is taken seriously, when he displays such little knowledge and understanding. Here he also claims that the theory associated

with the MBTI "predicts that non-pathological personality preferences should become and remain stable early in life" (2005) which isn't exactly what is claimed in type dynamics and type development areas.

There's a general derogation of the idea that the MBTI is suitable for management consulting work, yet that's where I encountered it and first used it, and where a large number of type practitioners use it and have presented and published on it.

Not all the references were locatable here, and one (McCrae and Costa 1989) doesn't appear in the Resources list. Presumably it's the one that compares the MBTI and the Five-Factor Model, which doesn't have anything to say about "organisationally-related criteria," whatever they may be for the author of the report.

She also suggests the cost of the MBTI Certification process creates "a personal franchise", and so those certified have "an incentive to sell it." Earlier I suggested this was poor logic. It's also a dubious link between cost and franchise as you have to pay for the inventory and any associated materials anyway. Not everybody manages to complete the course successfully either, at least in my time.

Perhaps she should have inquired of those who have been MBTI certified to see what they say. One or two type sessions may give the money back and, in this country at least, such a course can be tax-deductible depending on occupation. Many also have this fee paid for them by their organisation, as in my case.

It also doesn't appear to strike her that "selling" might not be what everyone does who is MBTI certified. There are many reasons for undertaking this process, notwithstanding its current corporatist bent.

Continued reference is made to MBTI and recruitment, which while it occurs, has never been a recommended use, and would be considered unethical practice. Once again, type's not skill. Unfortunately this isn"t well understood. Recently a friend of mine, applying for a job, was asked her type, which apparently excluded her immediately from consideration. No MBTI was involved and the person asking the question may have little knowledge in any case, relying on the less scholarly aspects of Google.

It's apparently not clear to quite a few people what the MBTI is supposed to measure even though any MBTI Manual and several books and articles will tell you that. Perhaps such people think "measure" means only one thing, so sorting or being an Indicator (a legitimate term for a particular kind of measurement strategy) isn't measurement. Isabel Myers didn't want people to know their scores.

Ruth Eveleth (represented here as "Evaleth") is one of the people who think the MBTI is meaningless, without presenting any logic, or indeed facts, in support (2013). Bozarth reproduces her comment that says the MBTI is an industry that "apparently makes \$20 million a year. When you've spent so much time and money on learning something of course you're going to have faith in it." This is an interesting opinion of her fellow human beings. It doesn't reflect the people I taught or those I know. It's legitimate to complete a course and be skeptical (I had such people sent to me) or even find the ideas behind the MBTI quite daunting and never use the questionnaire.

This statement exactly conflates the alleged earnings of the MBTI publisher (not exactly a corporate giant and within some criteria for a small business) with an individual's costs of learning, that effectively involves 3 or 4 days in a training room. There may be people who have "faith" and I know some, but research and experience demonstrates that inventories of any kind are tools for use and a large number of users don't really care about anything other than the MBTI, or anything else, works for them. This can be easily ascertained in public forums like LinkedIn, or random contact.

DISC

This is apparently still popular, although I have no current information on it. Certainly it was a competitor to the MBTI some years ago. Bozarth incorrectly attributes it to William Marston, rather than stating it's based on his work. John G. Geier (no relation) is the person who comes to mind in that regard. Linda Berens, a personality type author and practitioner, who comes from the Keirseyan Temperament and Beebeian 8-function schools, uses Marston's ideas in her Interaction Styles model, originally about leadership.

DiSC differs from the MBTI in that it offers a snapshot of particular personality behaviours, and has no notion of an unconscious. "Behavioral Style" is appropriate; Bozarth also mentions "personality type" as a label, a term that is sufficiently bowlderised these days to be almost meaningless. For some Five Factor researchers and users, this term also describes what they engage in.

Bozarth also references Will Thalheimer (2008), a blogger, for reasons unclear to me. He criticises the MBTI publisher for offering to fund research, thinking it must necessarily be biased. He must have Big Pharma in mind. Funding is not necessarily the same as determining an outcome, and my limited understanding of this

process (I am personally aware of applicants and presentations) is that there appear to have been no strings attached. It's obvious though that particular results can be and are used for promotion, including particular events where the speakers are selected i.e. there aren't proposals sought, and there's a kind of party line. From feedback I get, not all attendees are thrilled by this approach, which is really a sales meeting in style. There have been conferences and events held outside this closed loop over several decades with autonomy from publishers and others regarding presentations and content.

Big Five, FFM, NEO

The heading here is very confusing, given the first 2 began as jargon terms and the third is an actual assessment, which Bozarth describes as a three-factor instrument, an apparent reference to a 1985 paper by Paul Costa and Robert McCrae, its developers, which is mentioned in the text of the report, but not in the list of Resources. This paper needs to be more closely read in its historical context before making such a claim, in that the 1992 manual for this instrument concerns 5 Factors. It's a listed resource at the end of this report. An unlisted reference is something by Poropat from 2009. Michael (2013) is twice referenced misleadingly, in my view.

The history of traits and factors and facets is complicated, and here Bozarth appears to confuse a number of things. She refers to the Five Factor idea being introduced in 1961, presumably a US Air Force report by Tupes and Christal which derived 5 bipolar factors from research with Cattell's propositions; these researchers also produced an earlier report (1958). Cattell was the developer of the 16PF, so 16 factors. The Costa and McCrae 1985 article also begins with Cattell's work. These factors are lexically/language based, a presumption contested in some quarters.

It might have been useful to say something about the factor analysis method and the trait proposition, particularly as this section ends with the mentioning of the 6-Factor HEXACO model. As I mentioned earlier, MBTI Forms K and J used this method, and the research manual for the latter is worth a read. It can be downloaded online for free. Hans Eysenck considered there were three, some think there are 4. There's also a 15 factor model.

Bozarth provides some information about the successful use of the Big 5. It appears to be used by many more people than she contends, although there are many inventories claiming that label of varying lengths, which can be a confounding factor. It's also used in clinical settings and research on pathologies.

Emotional Intelligence Measures

Bozarth starts off badly by relating emotional intelligence with Howard Gardner's Multiple Intelligences. The term actually comes from Peter Salovey and John D. Mayer (1990) who referenced Thorndike's earlier idea of social intelligence. This is clearly stated in the fundamental literature. EQ is a label attached to a particular measurement and not the general term, although it is used by many. Usually the acronym is EI.

Sometimes emotional intelligence is presented as the idea of Daniel Goleman, a successful populariser which apparently didn't thrill Mayer who presented at a research symposium I attended in Kansas City on 1995, part of an Association for Psychological Type (now APTi) biennial conference. Identifying himself as an INFP, he also stated he wasn't happy with what had been said about his idea. I understand from other sources that Salovey is somewhat less sanguine about the MBTI.

The many inventories can use different words to describe the same construct.

Dark Side

This relatively new term is about dysfunctional behaviours (as defined) and there's a bit of literature around, mostly with the Five Factor Model. People aren't all sweetness and light, as Jung and others have pointed out. Isabel Myers commented that psychologists always wanted to tell people what was wrong with them, whereas her aim was to tell them what was right with them

For some reason Bozarth mentions the Hogan Development Survey and the Horney-Coolidge Type Indicator, neither of which are listed in the Resources. She describes Horney, a psychoanalyst who died well over 60 years ago, with having a taxonomy, which would be more than unusual for someone from that field in that era. I found Horney's work very readable a couple of decades ago. Frederick Coolidge, the relevant author, has published in the *Journal of Psychological Type* on Jung's types and personality disorder (2001)

There are 4 references provided in this section: two don't appear on the Resources list; one is inadequately labelled as the author is listed twice in the same year

Conclusions

There's much about this report that doesn't make sense to me, from the basics of research and writing to its selective reference content; some of the content being without reference. Many of the references are from people of standing, many are not. They all need to be examined and interrogated in the same way, because no-one has a mortgage on truth and everyone has their biases.

The report displays no deep knowledge of the topic as a whole, sometimes no knowledge at all, and ideas and people are routinely misrepresented. Perhaps the report had a deadline that meant a lack of proof-reading and editing?

This is disappointing, because a great opportunity has been lost to examine the presumptions, use and application of personality instruments, their regulation and training, and its impact. The author of this report appears unaware that there are guidelines for appropriate use of personality inventories. Professional associations and interest groups produce them; I used these documents about appropriate use plus quidelines from the MBTI publisher as part of my course materials.

The prolific Adrian Furnham, a researcher whose publications include work on the MBTI, Five Factor Model, Emotional Intelligence and the so-called Dark Side, supplied such a list in his *Personality at Work* (1992).

Perhaps inadvertently, Bozarth touches on this in a quote from a colleague, reproduced here:

"I once had a co-worker reach out to me literally on the verge of tears over her MBTI results. She can't square them with her DiSC profile, nor with her change management style. The new HR director is a cheerleader for all these ridiculous style inventories and this is the result. A very skilled and experienced A+ performer who is convinced she has no future at the company because some *Cosmo* quiz told her she's not assertive enough for the middle management role she's been working toward her entire career." (p17)

Now, it's easy to sit back from a distance in time and space and point out the litany of misunderstandings here and how this event might have come to pass. One can start with the HR director, or the colleague, or the co-worker, whose plight is unfortunate and touching, and shouldn't have happened.

The HR director who doesn't seem to have conducted whatever program it is with much thought. A perusal of Mats Alvesson and Andre Spicer's *The Stupidity Paradox* might be informative (2016) in that organisations can embark on all sorts of things because someone else is doing it, or they're fun, or something. I don't know what the change management style refers to, but the MBTI and DiSC have quite different presumptions about personality and behaviour.

Using the MBTI and an emotional intelligence instrument together can be beneficial for example, but the same words can have different meanings in these two inventories. This doesn't mean that one is right, the other wrong, but if you prefer one view to the other, you may have to question using them together, or be ready to explain the differences coherently. In any case, the differences have to be explained.

One would expect that the people exposed to a battery of inventories would have similarities and differences explained to them, as well as the proper and appropriate feedback facilities given by someone who knows what they're doing. An MBTI result, for instance, sets up a discussion; the profile or report is an indirect part of the discussion and a person using the MBTI shouldn't seek to defend the results. These are basic ethics of practice.

It may be that the results from this battery are incompatible: personally my DiSC results don't resonate with me at all, unless I take account of the quite different idea of personality it presents, which doesn't seem to be favourable to people like me. California Psychological Inventory (CPI) results aren't favourable to me either, but they describe me well if I take on board the instrument's presumptions about normal behaviour, which are clearly stated. I like the CPI results as a consequence because I know how to interpret them.

Bozarth's informant is also uninformed about the distinction between a personality inventory and a magazine test. It is valuable only because it's an expressed opinion.

Dean Burnett's Guardian piece (2013) is relevant here because he is genuinely startled by the comments about the MBTI. His data is valuable on that account.

Why do people have negative experiences with personality inventories? It's a given that not everybody will be satisfied of course and there are a range of reasons. A fundamental problem is the training, experience, competence and knowledge of the presenter/coach/counsellor/consultant etc.

The MBTI, for example, is actually very complex, notwithstanding some efforts to simplify various materials. A visit to any number of websites will demonstrate limitations of understanding and inappropriate statements

and judgements. That's without getting deep into psychometric territory. Merve Emre's less than positive recounting of an MBTI Certification program (2018) reflects some experiences of others.

As a former consultant in this area, I've experienced some interesting courses. People can be sent, without knowing what they're in for; some are sent to be "fixed" so that they might agree with a superior. Some people are dutiful and do what they're told during the session, without any real interest. Some find the session changes their lives, that it opens a door to self-understanding, and understanding of others. A course can be arranged so a manager can find out which people to let go in an imminent amalgamation or downsizing, which makes for some entertainment when the attendees are well aware of his desires. Ethical use of the MBTI meant he didn't get the information he wanted.

So all sorts of things can happen, depending on individuals, knowledge and circumstance. Personality might be fun, or treated trivially, but it's a serious business.

These final comments relate to where I thought Jane Bozarth might go and make a contribution to thought and action about people and organisations, but it didn't turn out that way.

Maybe next time.

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